NEGOTIATING INDIVIDUAL AND DISTRICT LEVEL CHANGE: A
SOCIOCULTURAL JOURNEY IN TEACHERS’ PROFESSIONAL DEVELOPMENT

Dissertation

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy
in the Graduate School of the Ohio State University

By

Dena A. Deglau, B.A., M.A.

The Ohio State University
2005

Dissertation Committee:

Professor Mary O’Sullivan, Adviser
Professor Phillip Ward
Professor Barbara Seidl

Approved by

Adviser
College of Education
ABSTRACT

Professional development that underlies education reform efforts carries the implicit assumption of teacher change (Fullan, 1992). Butler, Lauscher, Jarvis-Selinger and Beckingham (2004) suggest that regardless of the demand for professional development, “questions remain concerning how to conceptualize teacher learning and, correspondingly, about how to construct professional development so as to foster meaningful change” (p. 436). Questions also remain about how to achieve meaningful change beyond the level of the teacher. Richardson and Placier (2001) suggest that although both organizational, individual and small group change have been studied separately, change at all levels is necessary if systemic change is to be successful. This study is significant in that it is uniquely positioned to study changes in teachers and their practices while at the same time studying recursive relationships between teacher change and district level change.

The purpose of this study was to understand the long-term influences that resulted from teachers’ involvement in a community of practice underlying a 15 month professional development program. Specifically, the study sought to examine how participation influenced six teachers’ professional identities, created opportunities for contributions to physical education at the district level and the larger professional
community, and influenced teachers’ capacities to create learning opportunities for their students.

Twenty seven semi-structured interviews were conducted, audiotaped and transcribed. These included two interviews with each teacher, at the beginning and end of the data collection period in addition to an interview regarding classroom observations; interviews with three district representatives and each participant’s principal; and a focus interview with all six teachers. Data were also collected from 18 classroom observations, three questionnaires and documents related to the professional development intervention. Data were inductively analyzed from an interpretive practice perspective that considers both what and how reality is constructed (Gubrium & Holstein, 2000). The analysis was conducted with the assistance of the qualitative software Nud*ist.

Findings revealed that teachers shed their positional identities as an isolated and marginalized sector of the teaching force and assumed roles as collaborators, innovators, leaders, advocates and content experts. The teachers’ contribution to physical education in the district changed following the professional development intervention and, as a consequence of having a cadre of teachers willing and able to contribute their new expertise, the district provided more opportunities for participation as teacher leaders. Findings also revealed new learning opportunities for students resulted from specific aspects of the professional development program.
Dedicated to my nieces and nephews; pursue your dreams.
ACKNOWLEDGMENTS

I would like to thank Diane Barnes and the teachers who participated in this study. Each of you graciously gave of your time and yourselves and I am deeply appreciative. Your unwavering commitment to your students is inspirational.

I would also like to thank the members of my committee; Dr. Mary O’Sullivan, Dr. Phillip Ward and Dr. Barbara Seidl. Each of you has made a special and unique contribution and for that I will be eternally grateful. Although my debt is most certainly too large to pay back, I leave feeling deeply committed to paying forward the lessons I have learned from each of you. Mary, thank you for your help, guidance, support, and your unflinching commitment to both process and quality; I am privileged to have had the opportunity to learn from you. Phil, thank you for continuing to ask the hard questions and for challenging me to think differently; I’ve always admired your intensity and passion. Barbara, thank you for helping me to negotiate the difficult spaces that are created as we come to know and understand ourselves and our relationships with others; your commitment to developing critical consciousness through an ethos of caring is something most of us can only aspire to.

To my current colleagues and friends; Bomna and Seok your friendship and support have been a source of strength and I look forward to hearing about the exploits of Cherrie as the years pass. Both you and she will always have a special place in my heart.
Jackie and Chuck, thank you so much for providing an oasis – the conversation, the wine, and the support during the rough spots. Jackie, thank you for your support and guidance; your willingness to give so much to so many people is amazing and humbling. To Tim, Lisa and ‘the girls’; thank you also for providing an oasis. To my former colleagues Myung and Tristan thank you for your support and willingness to engage and to my newest colleagues Leah and Shiri, be strong and refuse to be silenced.

Finally, I would like to thank my two dear friends who have seen me through my greatest triumphs and my darkest hours, Kathy Wilson and Judy Ausherman. I carry both of you in my heart and I thank you for your laughter, your strength and your unconditional support during those times I needed it the most. I look forward to the years ahead and the next time I see you, it’s my turn to buy - cheers to you dear friends, you are with me always and I love you both dearly.
VITA

April 28, 1963 ........................................... Born – Ontario, Canada

1994 .......................................................... B.A., Psychology,
                                 Wilfrid Laurier University

2002 .......................................................... M.A., Sport Studies,
                                 Kent State University

2002-Present ............................................... Graduate Teaching Assistant,
                                 The Ohio State University

PUBLICATIONS


FIELDS OF STUDY

Major field: Education
Minor field: Sport and Exercise Education
TABLE OF CONTENTS

Abstract .......................................................................................................................... ii
Dedication .................................................................................................................... iv
Acknowledgments ......................................................................................................... v
Vita ............................................................................................................................... vii
List of Tables ................................................................................................................ xii
List of Figures ............................................................................................................... xiii

Chapters:

1. INTRODUCTION .................................................................................................. 1
   1.1. Teacher Change Underlying Professional Development ......................... 2
   1.2. Professional Development in Physical Education ................................. 6
   1.3. Statement of the Problem ........................................................................ 10
   1.4. Purpose of the Study ............................................................................... 10
   1.5. Research Questions ............................................................................... 11
   1.6. Significance of the Study ....................................................................... 11
   1.7. Limitations / Delimitations ..................................................................... 12
   1.8. Definition of Terms ............................................................................... 12

2. REVIEW OF LITERATURE ............................................................................... 14
   2.1. Understanding the Complexity ............................................................... 15
   2.2. Professional Development as Mediation ............................................... 18
   2.3. Beliefs as Factors that Mediate Change ............................................... 20
   2.4. Beliefs as Outcomes of Participation ..................................................... 22
   2.5. Mediating Influences During Participation in Professional Development
       Opportunities ..................................................................................................... 27
       2.5.1. Collaboration as a Mediating Influence ........................................... 29
       2.5.2. Collaboration in Physical Education: A Partnership Model .......... 39
       2.5.2.1. The Saber-Tooth Project ..................................................... 42
       2.5.2.2. The South Carolina Experience .......................................... 45
   2.6. Summary .................................................................................................. 48

3. METHODOLOGY ............................................................................................... 50
   3.1. Theoretical Frame .................................................................................. 50
   3.2. Study Design .......................................................................................... 55
3.3. Case Study ................................................................................................... 58
3.4. Professional Development Intervention....................................................... 60
3.5. Setting .......................................................................................................... 62
3.6. Participants................................................................................................... 63
3.7. Contributors ................................................................................................. 65
3.8. Data Collection ............................................................................................ 66
  3.8.1. Focus Group Interviews .................................................................... 69
   3.8.1.1. Group Activity 1 ................................................................. 72
   3.8.1.2. Group Activity 2 ................................................................. 72
   3.8.1.3. Group Activity 3 ................................................................. 72
  3.8.2. Value Orientation Index Questionnaires ........................................... 74
  3.8.3. Professional / Life History Information Form................................... 74
  3.8.4. Individual Interviews......................................................................... 75
  3.8.5. Observations...................................................................................... 76
  3.8.6. Post-Observation Interview............................................................... 77
  3.8.7. Principal Interviews........................................................................... 77
  3.8.8. Documents......................................................................................... 77
3.9. Data Analysis............................................................................................... 78
3.10. Validity and Trustworthiness....................................................................... 79
3.11. My lens......................................................................................................... 81

4. FINDINGS............................................................................................................ 83

  4.1. The Teachers ........................................................................................... 84
    4.1.1. Debbie (DR) ...................................................................................... 84
       4.1.1.1. School Context:................................................................... 86
    4.1.2. Jim (JT) ............................................................................................. 86
       4.1.2.1. School Context:................................................................... 88
    4.1.3. Crystal (CS)....................................................................................... 89
       4.1.3.1. School Context:................................................................... 91
    4.1.4. Susan (SP)......................................................................................... 92
       4.1.4.1. School Context:................................................................... 93
    4.1.5. Dan (DC)........................................................................................... 94
       4.1.5.1. School Context:................................................................... 96
    4.1.6. Karen (KM)....................................................................................... 96
       4.1.6.1. School Climate:................................................................... 98

  4.2. Research Question 1 .................................................................................... 99
    4.2.1. Positional Identities of Marginalization .......................................... 101
    4.2.2. Voices of Change ............................................................................ 106
       4.2.2.1. Voices of Collaboration .................................................... 107
       4.2.2.2. Voices of Leadership ........................................................ 110
       4.2.2.3. Voices of Experts and Innovators..................................... 114
       4.2.2.4. Voices of Advocacy.......................................................... 117

  4.3. Research Question 2 .................................................................................. 120
    4.3.1. Alignment With Innovations and Themes ........................................ 121
       4.3.1.1. Hellison’s model of Social Responsibility......................... 124
H. Group Interview Questions ................................................................. 219
I. Value Orientation Index Questionnaire .............................................. 221
J. Professional/Life History Information Form ....................................... 229
K. First Individual Interview Questions .................................................. 233
L. Final Interview Questions ................................................................. 235
M. Observational Protocol ................................................................. 237
N. Post Observation Interview ............................................................. 239
O. Principal Interviews ................................................................. 241
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Professional Development Program Interventions</td>
</tr>
<tr>
<td>3.2</td>
<td>Summary of Data Collection Methodologies and Sources</td>
</tr>
<tr>
<td>4.1</td>
<td>Provenience of the Data</td>
</tr>
<tr>
<td>4.2</td>
<td>Observation Data Related to Curricular Innovations and Themes</td>
</tr>
<tr>
<td>4.3</td>
<td>Opportunities to Contribute to the District</td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>1.1</td>
<td>Korthagen’s Onion Model of Change</td>
</tr>
<tr>
<td>2.1</td>
<td>Complexity of Change</td>
</tr>
<tr>
<td>4.1</td>
<td>Emergent Voices</td>
</tr>
<tr>
<td>4.2</td>
<td>Sustained Use of Innovations and Themes</td>
</tr>
<tr>
<td>5.1</td>
<td>The Influence of PEP on the Sites of Change</td>
</tr>
</tbody>
</table>
CHAPTER 1

INTRODUCTION

In 1996, the National Commission on Teaching and America’s Future (NCTAF) published *What Matters Most: Teaching for America’s Future* (NCTAF, 1996). This report recognized the central role of teachers in student learning and emphasized the importance of improving student outcomes through improving classroom teaching. In addition to recommending the hiring of high quality teachers, the report advocated for the provision of high quality professional development for teachers. Floden (2001) wrote that this report contributed to the standards, assessment and accountability reform movement centered around improving school effectiveness which in turn has been part of a long line of major reform and curriculum revisions following the publication of the National Commission on Excellence in Education’s *Nation at Risk* report in 1983. This focus on improving student outcomes and providing highly qualified teachers continues to be a priority within the most recent No Child Left Behind (NCLB) federal legislation (USDE, 2002). The legislation requires schools and districts to focus time and resources on developing teacher competencies in core academic subjects necessary to develop numeracy and literacy skills in children through the provision of high quality professional development.
The No Child Left Behind agenda has been particularly problematic for physical education given the lack of recognition for physical education (or any unified arts program) as a core subject. In their review of educational reform efforts, Ward and Doutis (1999) concluded that physical education has been ignored in education reform, in part because it was not considered a core academic subject. With the passage of NCLB, funding of professional development for physical education teachers has not been a priority in most school districts or at the state level. Ward and Doutis (1999) suggest:

Because of the limited number of studies on professional development in physical education, we know little about which processes, forms or components of inservice professional development projects in physical education are effective. Most of the available theories, knowledge and models about inservice professional development have originated in general education which, as this review has already made clear, is bereft of its own empirical evidence. (p. 395)

1.2. Teacher Change Underlying Professional Development

Regardless of its disciplinary roots, professional development that underlies educational reform efforts acknowledges teachers’ ability to influence the implementation of any reform effort and carries the implicit assumption of the need for teacher change as a key element of any innovation or educational reform agenda (Fullan, 1991, 1992). Teachers have thus been cast as change agents who mediate the space between proposed reform and its practice. This stands in sharp contrast to a view of teachers as delivery agents of ‘teacher-proof’ curricula that characterized earlier top-down reform efforts in general education and continue to characterize some international reform movements in physical education in France, England and Wales (Macdonald, 1993). Of the latter two Macdonald (1993) suggests their national curriculum approach “has also reflected a somewhat centralized approach to curriculum change with the
explicit aim of having a codified curriculum produce a new (and cohesive) social order reflective of a dominant group” (p. 141). The underlying assumption of these top-down efforts is that there exists a direct relationship between knowledge acquisition and change in practice.

Accepting the mediational role of teachers in reform, brings to the fore questions regarding when, where, and how teachers change. The processes of teacher change that have been studied include individual or small group, affective, cognitive and behavioral change, as well as organizational change that considers structural, cultural and political aspects that frame the organization of schools and impact the teaching learning process (Richardson & Placier, 2001).

The multiple levels of change that influence a shift in practice has been conceptualized by Korthagen (2004) with his ‘Onion Model’ levels of change and appears below in Figure 1.1. This model assumes people can be influenced to change at multiple levels including at the level of the environment (class, students, school), behavior that includes competencies (an integrated body of knowledge, skills and attitudes), beliefs (regarding learning and teaching), identity and mission which is at the center of his behavior change model. Although Korthagen (2004) acknowledges that no clear definition of professional identity seems to exist in the literature, he anchors the notion of identity in self-concept and uses a definition forwarded by Beijaard (1995): “Who or what someone is, the various meanings people attach to themselves, or the meanings attributed by others” (p. 82). The level of mission considers the “deeply felt, personal values that the person regards as inextricably bound up with his or her existence” (Korthagen, 2004, p. 85).
Korthagen (2004) suggests that although only the outer levels of environment and behavior can be directly observed, change can occur in either direction. Changes in beliefs might in some cases precede changes in teacher competencies and behaviors, while in other instances, changes in the environment, behavior or competencies (or a combination) might precede changes in beliefs. At a deeper level, one’s mission and sense of identity can influence beliefs and competencies while the reverse is also possible. The bi-directional nature of change in this model presents a particular version of the ongoing debate as to whether change in beliefs precedes changes in practice (Richardson & Hamilton, 1994; Richardson & Placier, 2001) or whether changes in practice that leads to success precede changes in beliefs (Guskey, 1986; Sparks, 1988). Although Korthagen’s (2000) Onion model of teacher change provides a useful heuristic to
envision multiple sites of teacher change, learning and knowledge acquisition is a complex undertaking given that each can be studied from different theoretical perspectives informed by cognitive, behavioral, constructivist, sociocultural, or situated learning theories, each of which has its own epistemological and ontological assumptions about how knowledge is constructed. Each of these processes of teacher change can take an inquiry stance derived from different disciplinary perspectives such as psychology, sociology, or anthropology (Barab & Duffy, 2000).

Uncovering the underlying mechanisms that mediate change, or shifts between the levels of potential change as articulated by Korthagen (2004) (and ultimately between competency and action) has been a goal of educational research reported in a variety of literature bases including teacher change, teacher beliefs, knowledge acquisition, educational reform and professional development. Some of this literature base will be elaborated on in Chapter 2. Butler, Lauscher, Jarvis-Selinger and Behkingham (2004) suggest that regardless of the demand for ongoing, dynamic professional development, “questions remain concerning how to conceptualize teacher learning and, correspondingly, about how to construct professional development so as to foster meaningful change” (p. 436).

Important questions also remain about how to achieve meaningful change beyond the level of the teacher. Following a comprehensive review of literature on teacher change Richardson and Placier (2001) suggest that although both organizational, individual and small group change have been studied separately, change at all levels is necessary if systemic change is to be successful.
1.2. Professional Development in Physical Education

Although the study of teacher change in physical education has mirrored and been informed by the myriad of literature underlying teacher change in general education, the opportunity to study professional development that underlies comprehensive and systemic reform in physical education is rare (Rink & Mitchell, 2003); partly because the subject has been excluded from major reform efforts in the United States (Ward & Doutis, 1999). Rink and Mitchell (2002) suggest that whereas comprehensive school reform has been attempted nationally, “the large majority of attempts at reform in physical education have not been comprehensive” (p. 207). As such, much of the research on inservice teacher change in physical education has emerged from the study of collaborative efforts between schools and universities (O’Sullivan, Tannehill, Knop, Pope & Henninger, 1999; Rovegno and Bandhauer, 1998) rather than large scale or federal efforts to improve career long professional development for physical educators.

The opportunity to create and study a long term professional development program for physical education teachers became available in 2001. The federal government provided money to initiate, expand and improve physical education programs from kindergarten through grade twelve through an initiative known as the Carol M. White Physical Education for Progress Grant (Stevens Legislation, 2002). The district within which this study takes place applied for and received a grant to fund a 15 month professional development program (intervention) for experienced physical education teachers. It was the first grant of its kind in the district and 24 physical educators participated. This program is detailed in Chapter 3.
Following completion of the intervention a pilot study was conducted to examine how these urban teachers’ experiences with the program influenced their beliefs about teaching and their teaching practices. A second purpose was to understand how the teachers’ experiences within a community of practice influenced their sense of themselves as professionals and their program over time. In addition to finding changes in the teachers’ practices, data showed they developed a sense of responsibility toward their professional community, and experienced a shift in their capacity to think differently about their role as physical educators and their responsibility to their profession. (Deglau & O’Sullivan, 2005, January).

This pilot study provided a unique opportunity to examine teacher level change as a consequence of their participation in a community of practice using a sociocultural theoretical lens. This approach to understanding teacher change has its roots in social constructivism and “the idea that to understand behavior means to understand the history/genesis of behavior” (Cole, 1995, p.191) and is considered a fundamental tenet of cultural-historic approaches to the study of human nature. Palincsar (1998) suggests how this theory might differ from other theories of learning:

The sociocultural context in which teaching and learning occur are considered critical to learning itself, and learning is viewed as culturally and contextually specific. Furthermore, cognition is not analyzed as separate from social, motivational, emotional, and identity processes, and the study of generalization is the study of processes rather than the study of personal or situational attributes. (p. 354)

One assumption of this position is that teachers bring different values, beliefs and identities, in addition to interests, motivation and action, to communities of practice (Levinson, 2000). A second assumption is that cultural tools or artifacts and historical,
institutional and structural constraints shape or produce teacher action. Such perspectives suggest that teacher change, in response to professional development, is a transactional process; culture has the potential to be both transmitted and acquired through the commingling of agency and structure (Wertsch, Del Rio & Alvarez, 1995; Levinson & Holland, 1996). Learning and participation in the group is therefore constrained or afforded through interaction among participants and involvement with artifacts and cultural tools that are both brought to the community and result from participation in the community.

Within this framework, the unit of analysis can include parts that make a whole activity or event, understanding that focusing on one part foregrounds it but does not remove it from the whole (Rogoff, 1995). Teachers who participate in a community of practice, for example, can learn individually while interacting within a group. When studying individual level change of a single group member, the researcher would also understand that individual change may not have been the same, were it not for the group interaction. This is an important assumption when conducting research in professional development that accepts there are underlying processes (beliefs, identity, mission, and competencies) that are changing as teachers interact within the cultural contexts of the intervention. Within a community of practice in particular, this framework allows for the examination of individual levels of change, group levels of change and organizational level change, using a unit of analysis that focuses on different levels of interaction. For example, in order to understand shifts in teachers’ identity, the unit of analysis foregrounded relates to the individual, whereas understanding how teachers contribute as
leaders at a district level necessarily requires the unit of analysis to foreground district level participation.

Although the pilot study examined individual change, the findings suggest that individual level changes have the potential to influence changes at the organizational or district level to the extent that teachers actually change their behaviors to align with their shifting beliefs, to the extent that teachers are provided spaces in which to engage in activities outside of the classroom, and to the extent that changes in beliefs and practices were sustained over time.

Although teachers can articulate their desire to act as role models and continue to implement curricular changes at their school site, a true shift in professional identity as a leader is only possible to the extent that teachers are provided participatory spaces within which to enact their vision (hooks, 1994). The creation of ‘participatory spaces’, or non-threatening places for sharing is an important component of teacher preparation when challenging students to confront their own world views and understand cultural differences (hooks, 1994). These spaces allow the implicit to be made explicit, and experience to become a way of knowing (hooks, 1994; Rosaen, 2003). Extending this concept to the training of experienced teachers suggests that sustaining curricular changes requires participatory space at the school level for both student and teachers, and that becoming a mentor or leader for other teachers requires a participatory space at the organizational level. This study is uniquely positioned to examine the potential for change at both the level of the individual and the district level.
1.3. Statement of the Problem

Within general education there exists a growing body of literature that examines multiple layers of teacher change in response to professional development initiatives. Due to physical education’s long term absence from most state and federal educational reform efforts culminating in its current exclusion from the No Child Left Behind legislation we know very little about teachers’ response to professional development in physical education at any level. Recent reform initiatives in physical education in the United States have highlighted changes in response to curricular improvements (Ward and Doutis, 1999) and inclusion in state level assessments (Rink and Mitchell, 2003). Beyond generalizing from studies of collaborative partnerships, occupational socialization, or workplace conditions there exists a dearth of research examining the impact of continuous professional development at the level of the individual or district within physical education. Armour and Yelling (2004) suggest “there is very little published research evidence available on professional development experiences of teachers in England or elsewhere” (p. 73); a comment paralleled by Ward & Doutis (1999) in referring to professional development in the United States.

1.4. Purpose of the Study

The purpose of this study was to understand the long-term changes that resulted from teachers’ involvement in a community of practice underlying a 15 month professional development program. Specifically, the study sought to examine how participation influenced six teachers’ professional identities, created opportunities for their contributions to physical education at the district level and the larger professional
community, and influenced the teachers’ capacities to create learning opportunities for their students.

1.5. Research Questions

1. How have the professional identities of the six PEP teachers changed as a result of interactions in the community of practice?

2. How did the teachers use the curricular innovations and themes infused throughout the professional development program 19 months following completion of the intervention?

3. In what ways have the six PEP teachers contributed to physical education in the district since their involvement with the professional development program and what has changed as a result?

4. What characteristics of the PEP program helped create and sustain changes at the level of the individual, school and district?

1.6. Significance of the Study

Based on a review of literature on teacher change, Richardson and Placier (2001) suggest that perhaps both individual and organization change are necessary in any systematic teacher change process. Findings from the pilot study for this research that examined teacher change in response to the PEP professional development showed that teachers who completed the long term PEP professional development program in the district under study experienced individual level changes. This study is significant because it represents a unique opportunity to extend these initial findings and study the recursive nature of teacher change at an individual and district level when teachers are provided, and / or feel equipped on multiple levels to contribute to district level initiatives and mission. The study is also significant for two other reasons; it represents one of the
few studies examining long term change in response to professional development and it includes both direct observation of the teachers in addition to interviews.

1.7. Limitations / Delimitations

Due to the longitudinal nature of this study and its emergence from findings based on an earlier study, there are several limitations.

1. Teachers were drawn from a sample of voluntary paid participants.

2. The professional development intervention had already occurred and therefore data sources documenting pre-post changes are limited by the nature and scope of the preliminary data already collected.

Given that the current study extends the findings from a previous pilot study, teachers in this study were drawn from a preexisting sample of 24 teachers who participated in a professional development program. The selection of teachers was delimited by their level of participation within the district since the end of the professional development intervention.

1.8. Definition of Terms

Professional Development: “the process by which, alone and with others, teachers review, renew and extend their commitment as change agents to the moral purposes of teaching; and by which they acquire and develop critically the knowledge, skills and intelligence essential to good professional thinking, planning and practice with their children, young people and colleagues through each phase of their teaching life” (Day, 1999, p. 4).

Community of Practice: “[where] their exists a sustainable community with a significant history to become enculturated into, including shared goals, beliefs, practices and a collection of experiences, [where] individuals and the community into which they are
becoming enculturated are a part of something larger; and [where] there is an opportunity to move along a trajectory in the presence of, and become a member alongside, near peers and exemplars of mature practice” (p. 40).

Participatory Spaces: Places that provide a non-threatening place within which to develop a deep, contextualized understanding of issues (hooks, 1994).
CHAPTER 2

REVIEW OF LITERATURE

Studying the professional development of in-service teachers is a challenging endeavor given that it lies at the intersection of literature examining teacher change, teacher beliefs, knowledge acquisition, educational reform and continuous professional development that often underlies reform efforts. In order to answer the research questions that guide this study and facilitate our understanding of teacher change at the level of the individual or group, school, district or state, literature has necessarily been drawn from across these areas. As well, given the sociocultural theoretical frame that guides this study and will be elaborated upon in Chapter 3, literature has also been selected to assist in understanding how teachers’ response to professional development is mediated in two ways; first prior to their experience of participation and then through their experience of participation in professional development studies and initiatives. The literature will be wide-ranging given that research specific to professional development in physical education is only beginning to emerge. Relative to professional development in physical education Armour and Yelling (2004) suggest “there is very little published research evidence available on professional development experiences of teachers in England or elsewhere” (p. 73).
The review will begin with a brief overview that helps in understanding the complexity of the research base that informs this study. The review will then provide a conceptual way of understanding how professional development initiatives can serve as sites of mediation that create spaces for change and agency. The review will then draw from literature across the five areas of confluence to examine factors that have been found to interact with the change process in physical education, as well as outcomes that result from the change process (accepting that in reality, these are mutually constituting).

Much of this early discussion will be focused on the individual level of beliefs; first how they mediate change and then how they are mediated by participation in schools that have particular workplace conditions and professional development opportunities with unique structures. Drawing upon the professional development literature, the review will then focus on the organizing features that have been shown to mediate teachers’ responses to professional development and will conclude with relevant findings from two professional development initiatives in physical education in the United States focused on educational reform.

2.1. Understanding the Complexity

The complexity of understanding change and its mediational influences across a spectrum of literature is challenging if we consider that each of the literature bases that will be drawn upon in this review are themselves messy. Richardson and Placier (2001) suggest the literature on teacher change is “vast and scattered” (p. 906) and has been described in terms of “learning, development, socialization, growth, improvement, implementation of something new or different, cognitive and affective change, and self study” (p. 905). Similarly Pajares (1992) suggests beliefs
travel in disguise and often under alias – attitudes, values, judgments, axioms, opinions, ideology, perceptions, conceptions, conceptual systems, preconceptions, dispositions, implicit theories, explicit theories, personal theories, internal mental processes, action strategies, rules of practice, practical principles, perspectives, repertories of understanding, and social strategy, to name but a few that can be found in the literature. (p. 309)

Knowledge acquisition can be studied from multiple perspectives categorized by Greeno, Collins and Resnick (1998) as behaviorist, cognitive or situative, each emerging from different epistemological assumptions about the nature of knowing, of learning and transfer, and of motivation. Finally educational reform and professional development processes that underlie reform can be studied from several perspectives that include but are not exclusive to the following:

- Models of teacher change characterized as top down, bottom up or a partnership of the two that might be viewed as systemic change (Fullan, 1991, 1999; Rink & Williams, 2003)
- Levels of change that include individual, small group and organizational change (Richardson & Placier, 2001); facilitators or constraints to reform that include a diversity of school contexts and norms (Rovegno & Bandhauer, 1997)
- Conceptions of professional development that include inspiration and goal setting, knowledge and skill development, inquiry, or collaboration and community (Warren-Little, 2001)
- Categories that include whole-school reform (Fullan, 2000), comprehensive school reforms, school-wide bounded reforms, subject-specific reforms and individual teacher reforms (Ward, 1999).
Additionally, the unit of analysis can change when measuring reform efficacy. Student response to reform can be measured through achievement or behavior and teacher response measured through changes in curriculum implementation (Ward, 1999), pedagogy (Rovegno, 1998), or beliefs (Richardson, 1996). Teacher response can also be studied at the level of the individual, community of practice, school, district or state.

Positioning professional development at the intersection of these complex underlying influences is to discard a linear model of change which assumes that improving teachers’ competencies through the acquisition of knowledge will directly result in a behavioral change. Although this perspective has characterized teacher change until quite recently (Richardson & Placier, 2001), it fails to consider that changing or increasing teacher competencies represents only one potential for change in teacher behavior (Korthagen, 2004). Visually, the complexity of understanding professional development is seen in Figure 2.1.
2.2. Professional Development as Mediation

Shifting away from a linear model also accepts the assumption that teachers’ response to reform is mediated by a variety of factors. Within the sociocultural theoretical lens that guides this study and will be elaborated on in Chapter 3, these factors include personal, professional, historical, cultural and structural factors, the combination of which afford or constrain action and therefore represent the interplay between agency and structure (Levinson & Holland, 1996). Holland et al. (1998) positions the dialectic it this way:

This vision emphasizes that identities are improvised – in the flow of activity within specific situations – from the cultural resources at hand. Thus persons, and to a lesser extent, groups are caught in the tensions between past histories that have settled in them and present discourses and images that attract them or somehow impinge upon them. In this continuous self-fashioning, identities are hard-won standpoints that, however dependent upon social support and however vulnerable to change, make at least a modicum of self-direction possible. They are possibilities for mediating agency. (p.4)
From this perspective, professional development interventions provide the opportunity or the space for teachers to engage in an experience that either nurtures and develops an internally persuasive discourse that positively affects teachers’ willingness to enact new identities and change their practice, or it does not. Just as Korthagen (2004) conceptualizes change as occurring at levels that include environment, behavior, competencies, beliefs, identities and mission, each of these levels similarly serve as sites of influence, or a lens through which teachers experience the professional development intervention. Teachers arrive with a constellation of both personal and teaching behaviors; competencies grounded in their professional preparation, their continuing professional development and their experience as teachers; beliefs about themselves, their students, and the value of engaging in professional development; personal and professional identities that have and will continue to shift over time and senses of mission that reflect their deeply held values. Each of these mediating lenses have been formed within and across each participant’s life history.

One of the best examples that explores the tension between past histories and present discourse is the study of beliefs. Richardson and Placier (2001) suggest that “beliefs are examined as factors that interact with the change process and affect outcomes and are also examined as outcomes that are affected by change processes” (p. 913). The first direction speaks to mediation prior to attendance at professional development experiences; the latter speaks to how change is mediated through participation. The literature on beliefs will be presented in these two directions.
2.3. Beliefs as Factors that Mediate Change

Just as pre-service teachers come to their teacher education experiences holding beliefs about their work, students and subject matter (Pajares, 1992), grounded in their history as students (Lortie, 1975) and resistant to change (Pajares, 1992), practicing teachers also come to professional development initiatives with beliefs that can shape their participation and the degree to which they respond.

Research on teaching beliefs suggests that sometimes beliefs and practices are aligned, but often they are not. In a study of experienced teachers’ educational theories and their influence on practice, Tsangaridou & O’Sullivan (2003) found that practicing teachers held strong beliefs about student learning and what constitutes a physically educated person. Teachers in this study could clearly articulate how they align their practice to achieve program objectives and enact their espoused theories based on their beliefs. In such cases, their theories in action and theories in use (Argyris & Schon, 1974) were aligned. Kulinna, Silverman and Keating (2000), on the other hand found that although the teachers in their study had strong beliefs toward physical activity and fitness, these teachers did not incorporate higher levels of moderate to vigorous physical activity, nor did they spend time in those activities. Ennis (1994) examined the influence of beliefs and knowledge on curricular practice and concluded that although teachers chose curriculum and instructional methods based on their beliefs, the strength of the belief determined the degree to which it could be influenced; the stronger the belief, the less it could be influenced. Teachers also held on to beliefs even when they were proven to be incorrect through the introduction of new knowledge. This incongruity that exists between beliefs and practice emphasizes the mediational effects of pre-existing beliefs.
and subsequently the limited effect formal knowledge acquired in preservice education or through professional development has on beliefs about teaching (Richardson & Placier, 2001). It has also led to theorizing and study with regard to the experiences that form and shape beliefs (Lortie, 1975; Richardson, 1996: Mantanin & Collier, 2003).

Richardson (1996) provides a useful way of conceptualizing how experiences mediate beliefs by categorizing the experiences that influence knowledge and beliefs about teaching as personal experience, experiences with schooling and experience with formal knowledge. Each of these can be individually influential, or they can work together as a constellation of experiences that mediate beliefs (Richardson, 1996). As early as 1975 Lortie began to recognize and examine the influences of schooling on the development of implicit models preservice teachers arrive with to their preparation programs. His finding that teacher candidates arrive with well developed beliefs that are resistant to change as a consequence of spending 13,000 hours in classroom observation as a form of apprenticeship continues to inform research on beliefs today.

An example of the influence of personal experience in physical education can be found in a longitudinal study of preservice teachers by Matanin & Collier (2003). They examined how the pre-service physical education teachers’ beliefs changed as they proceeded through their preparation program. Matanin & Collier (2003) found that personal biographies influenced the degree to which teacher candidates assimilated programmatic messages. The authors concluded that personal experience played a role in the formation of beliefs about teaching.
2.4. Beliefs as Outcomes of Participation

Sometimes teacher beliefs are not pre-existing but develop as a consequence of participation and therefore might be considered outcomes of participation. One example of research on teacher beliefs that holds particular relevance for professional development of physical education teachers is drawn from literature that considers the beliefs that teachers hold about their workplace formed through participation in their workplace. Given the central role of workplace conditions in reform efforts, Ward & Doutis (1999) suggest that “ignoring the impact of workplace conditions and focusing only on the act of teaching not only decontextualizes teaching from its milieu, it is a prescription for failure” (p. 396). Within Korthegan’s (2004) framework these would be considered environmental factors, or characteristics of the school with the potential to exert a strong influence on teachers’ ability to implement change (Korthegan, 2004).

In physical education, understanding how the workplace mediates beliefs has evolved from the study of contextual factors (Locke, 1975; Griffin, 1985) and teacher socialization research using an occupational socialization framework (Lawson, 1989). Occupational socialization focuses on studying the influences of the workplace on teachers entering the induction phase of their teaching experience (Stroot & Whipple, 2004). From this perspective the school context contributes to the school culture that, in turn, exerts a mediating influence on the beliefs of teachers:

Teachers receive messages from the context in which they work. How classes are scheduled, the ‘adequateness’ of equipment and facilities and the type and extent of interactions with peers, students and administrators all contribute to provide messages to teachers relative to their worth and extent to which they are valued and appreciated in the school culture. (Stroot, Collier, O’Sullivan & England, 1994, p. 433)
In a study examining the norms of school culture that influenced one teachers’ ability to adopt and learn a constructivist approach to teaching movement education, school culture was found to facilitate the teachers’ ability to enact change (Rovegno & Bandhauer, 1997). The authors identified five norms that enabled or facilitated the adoption of a new approach to teaching. These included:

- A school philosophy founded on the belief that “every child was a winner, a belief in the whole child; the principle that children come first; the commitment to help children solve problems, make decisions, and think critically and creatively through constructivist teaching techniques, and goals to facilitate children’s social development” (p. 407)
- The expectation for continued teacher learning
- Continual school improvement
- Teacher participatory power and responsibility
- A feeling of autonomy the authors described as the tendency to “feel that we could do anything” (p. 407).

In this example, school culture had a positive influence, in part because the teacher under study worked to align her practice with existing norms of the school (Rovegno & Bandhauer, 1997). Contributing to existing norms in a middle school or high school context might be less desirable given the prevailing view that existing norms in high school physical education have become dysfunctional (Siedentop & Locke, 1997). One of the underlying assumptions in a district reform effort that will be outlined later in this review was that middle school physical educators were using a dysfunctional curricula (multi-activity model) within a workplace that was also dysfunctional (Ward, 1999).
Rather than working within an existing culture, changing the culture became a specific target of the reform.

A “culture of learning” (WestEd., 2000, p. 11) has recently been identified as the key to effective professional development based on an extensive study of eight schools funded by the United States Department of Education in collaboration with WestEd, a research development and service agency. The report, Teachers Who Learn, Kids who Achieve, examined factors leading to successful professional development as manifested in student achievement. The schools had been selected because they had won the National Award for Model Professional Development. The study and its findings will be discussed in greater detail later in this review.

Findings from literature on occupational socialization in physical education suggests that in addition to working in school cultures in which the “community for teacher learning is found (if found at all) outside of the workplace” (Grossman, Wineburg & Woolworth, p. 948) as is the case with general education teachers, physical education teachers have an even greater challenge than their colleagues. Their work is affected by the low status of physical education which is experienced by teachers as marginalization.

Much of the work examining how teachers experience their work has come from case studies of both beginning and experienced teachers. O’Sullivan (1989) identified that beginning teachers under study experienced the low status of physical education in their schools, and found that teachers’ respect and legitimacy was granted for their management as opposed to instructional abilities. The struggle for legitimacy with parents, colleagues and students was shared by teachers in a study by Solomon, Worthy and Carter (1993). They studied the interaction of factors related to first year teachers’
role identity in different contexts with the goal of examining how “individual perceptions of the teaching role impacts professional development in the first year of teaching” (p. 313). The common themes that emerged were that teachers had concerns about class size, schedules and equipment; and two of the three teachers “voiced the desire to establish the legitimacy of their subject matter and to be viewed as professionals” (p. 325).

Experienced teachers also express feelings of marginalization. Sparkes, Templin & Schempp (1990) studied teachers at various stages of their careers in England. As the authors describe the findings in a subsequent paper (Sparkes, Templin and Schempp (1993), “there was an awareness across all generations among those interviewed that physical education had an anti-intellectual and non-academic image” (p. 388). The authors also indicated that teachers from different generations were aware that other staff did not see physical education as important, was seen as less important than other subjects and “on occasions in which it was granted some esteem, it was for reasons that are questionable, for example, providing a form of catharsis to tire less able or difficult to manage students…” (p. 390).

Feelings of marginalization were similarly found by Stroot, Collier, O’Sullivan and England, (1994) in a study of 11 physical education specialists and by Templin, Sparkes, Grant and Schempp (1994) in a study that examined the life history of a 32 year veteran high school teacher / coach. Dimensions of marginality included status as a physical educator versus a coach, limited interaction with the school principal, and both parent and students perceptions of physical education. By examining this teacher’s life history, the authors also concluded that although this teacher was forced to balance multiple roles as teacher, athletic administrator, assistant coach and varsity coach, the
multiple roles were not a source of dissonance because the teacher knew his strengths and received recognition for some of the roles for which he felt he was better suited (i.e. coaching). The authors concluded that multiple roles were not dissonant because they became “a good match in terms of his own sense of self-efficacy” (p. 290).

Templin et al. (1994) showed that although teachers do assume many roles within the school their roles are not always in conflict, as much of the early research on teacher / coach role conflict suggested. This also suggests that workplace factors external to the individual do not always limit their ability to exercise agency.

Recent findings related to teachers’ identities might also serve as an explanatory framework. Research on personal and professional identities in physical education is beginning to emerge, predominantly through the work of our international colleagues studying how teachers experience their work within particular contexts. O’Connor and Macdonald (2002), for example, studied whether or not there truly is role-conflict that arises between teaching and coaching for Australian physical educators / coaches using a postmodernist approach to identity from a sociological tradition that aligns with the approach taken in this study. Their approach assumed that teachers were active agents in the creation of identities, suggesting that “The idea that an individual’s identities are created and maintained through the reflexive monitoring of action which occurs in light of new information, experience and knowledge also acknowledges the place of negotiation internally and with others” (p. 42). The authors found that teachers “negotiated their work responsibilities to facilitate a coherent sense of self” (p. 47) and concluded that “The ability to capture contextual subtleties that impact on teachers’ work
and their identities is underdeveloped in the research literature especially in recent years” (p. 51).

2.5. Mediating Influences During Participation in Professional Development Opportunities

Learning and change are influenced by workplace conditions and the norms of school culture as well as the particular arrangements or organizing features that guide professional development programs. Understanding the mediational influences that result from particular organizing features of professional development is both necessary and important to understand how teachers are influenced by participation in those programs and also how the experience itself facilitates change.

Putnam and Borko (2000) suggest that learning experiences that underlie professional development efforts can be grounded in two primary ways. The first, learning grounded in practice, is characterized by programs that conduct their professional development at school sites with a large component taking place in teachers’ own classrooms. This arrangement would characterize school based curriculum reform efforts. Professional development can also be grounded in developmental activities that first bring teachers away from their classroom and then have teachers integrate their new ideas back into their practice with support that assists teachers in implementing new approaches (Putnam & Borko, 2000). Situating learning experiences outside of the classroom allow teachers to think in different ways because they “free teachers from the constraints of their own classroom situations and afford the luxury of exploring ideas without worrying about what they will do tomorrow” (Putnam & Borko, 2000, p. 6).
Although Putnam and Borko (2000) envision professional development opportunities in which participants are supported as they integrate new knowledge into their own classrooms, many professional development opportunities do not include the support component and are solely grounded in participation outside of the classroom. These would be characterized as workshops that are available at scheduled times and which involve leaders with particular expertise (Garet, Porter, Desimone, Birman & Yoon, 2001). These would also characterize many in-service experiences available to teachers.

In addition to Putnam and Borko’s (2000) framework of learning, learning can also be grounded in experiences that are designed to assist teachers with new pedagogies, curriculum or both (Ward, Doutis & Evans, 1999); programs that are of short or long duration and programs that foreground or background collaborative participation. For some reform efforts, learning is grounded in collaboration that underlies learning communities (Stein, Smith & Silver, 1999) or communities of practice (Gallucci, 2003) and for others collaboration exists in partnership models that advocate for collaboration between teachers, administrators, researchers, teacher educators and other stakeholders at various levels (Ward, 1999; Rink & Williams, 2003).

Barab and Duffy (2000) differentiate practice fields from communities of practice based upon three distinguishing characteristics:

whether their exists a sustainable community with a significant history to become enculturated into, including shared goals, beliefs, practices and a collection of experiences; whether individuals and the community into which they are becoming enculturated are a part of something larger; and whether there is an opportunity to move along a trajectory in the presence of, and become a member alongside, near peers and exemplars of mature practice. (p. 40)
2.5.1. *Collaboration as a Mediating Influence*

Regardless of the ways collaboration is labeled or conceptualized, it consistently emerges as an important organizing or structural feature of professional development opportunities and has been studied both as a mediating change in practice (Butler, Lauscher, Jarvis-Selinger, & Bechkingham, 2004) and as mediating change in individuals and schools (Borko, Davinroy, Bliem & Cumbo, 2000; Grossman, Wineburg & Woolworth, 2001).

One of the unintended consequences of not being included in reform effort is that professional development interventions for physical education are scarce and therefore continuous professional development has been limited. As a consequence, studying the influences that mediate participation in professional development opportunities necessitates a reliance on studies drawn from general education that consider long-term interventions similar to this study.

The studies that follow illustrate differences in the focus of collaboration that exists in the professional development literature. Butler, Lauscher, Jarvis-Selinger, and Bechkingham (2004) engaged teachers in a two year professional development initiative using a community of practice framework. The Lower Mainland Project was designed to assist teachers in co-constructing instructional strategies designed to promote self-regulated learning in students through an approach identified as ‘strategic content learning’ (SCL). The goal of SCL was to engage with students in interactive discussions designed to help them “reflectively guide their own learning activities” (p. 440). The goals of the project overall were to create a temporary (two year) learning group that would identify and enact principles underlying ‘best practices’, critically reflecting on
outcomes and, based on their new experiences, (re)construct knowledge about teaching and learning. The learning group was established within and across four schools and participants included district support personnel, classroom teachers and researchers. Teachers were assisted in delivering the new programming by research assistants who visited weekly during the first year to assist in implementation. They visited in the second to year to collect data.

Findings indicated that teachers shifted their interactions with students in ways that were sustained; teachers linked positive student outcomes to the use of SCL; and teachers also consistently emphasized the importance of:

- establishing a theoretical framework, seeing SCL in practice, trying SCL and reflecting on the success of their efforts, debriefing, problem-solving, and sharing ideas with other teachers, being observed and receiving feedback on their use of SCL, and interacting with someone expert and enthusiastic about SCL. (p. 451)

The authors concluded that although teachers did sustain their use of SCL in the second year, weekly research assistant visits continued during that year when support from the principle researcher faded. The authors suggested that this continued support might have influenced the sustained change. They identified the following two challenges to future research “(a) avoiding dependence on ‘outsiders’ for sustaining innovation and (b) fostering development of self-sustaining COP’s within schools rather than a ‘temporary’ learning community” (p. 453).

Grossman, Wineburg and Woolworth (2001) also studied the effects of a long term collaboration within a community of teacher learners. Twenty-two English and social studies teachers from an urban high school met twice per month for two and a half years in order to create an interdisciplinary curriculum in history and English. In an
examination of the community itself as it formed over the first 18 months, the authors describe their findings relative to their own experiences in the process, the “developmental trajectory of intellectual community among teachers” (p 944) and how the community manifested in speech and action. Unlike the Lower Mainland Project, this community was situated at the school level in order to “offer the possibility of individual transformation as well as the social settings in which individuals work” (p. 948). Rather than focus attention on just improvements in practice, the goal was also to highlight and provide space for teachers “continuing intellectual development in the subject matters of the school curriculum” (p. 951) [italics in original quote]. Grossman et al. (2001) contrast these two approaches:

At the heart of these two approaches is a contrast between the promise of direct applicability and the more distant goal of intellectual renewal. The challenge in creating workplace community is to heed both aims simultaneously: to maintain the focus on students while creating structures for teachers to engage as learners within the subject matters they teach….We contend that these two foci of teacher learning must be “brought into relation” in any successful attempt to create and sustain teacher intellectual community and workplace. Teacher community must be equally concerned with student learning and teacher learning”. (p. 952)

A commitment to creating this environment was built into the intervention through activities that included book club meetings in which teachers read and discussed short texts and books, time to reflect together, and time to plan curriculum together during day long meetings. Their in-depth examination led the researchers to suggest (among many others) that providing structural arrangements alone cannot teach people who have a history of working in isolation (inherent in teaching) to interact differently, although they suggest a community might work better if teachers “self-select into groups of like-minded colleagues” (p. 991). They also suggest that given the constant tension
that exists between the ‘centripetal force of community building’ and the ‘centrifugal force of diversity’, common experiences are necessary; and further that “as the group moved toward community, it also became aware of its responsibility to the larger group; having the luxury of time it felt a heightened sense of responsibility” (p. 997).

A third comparable long-term intervention can be found in the University of Colorado (UC) Assessment Project, a two-year mathematics and literacy staff development and research project designed to help teachers design and implement assessments (Borko, Davinroy, Bliem & Cumbo, 2000). The project included 14 third-grade teachers from three schools and included university faculty in teacher education, mathematics, literacy, as well as faculty specialists in assessment and doctoral students. During the first year, the UC team met at each school once a week and conducted an after-school workshop in which all participants engaged in a joint exploration of assessment activities and issues. During the second year faculty and research assistants observed teachers once per month and conducted informal workshops that took place immediately following the observations and focused on issues and questions that arose during the observations.

The findings reported in this study by Borko, et al. (2000) were drawn from case studies of two teachers (one in math and one in literacy) who were observed during the fall semester of the third year and interviewed the following semester. Based upon the cross-case analysis, the authors reported three changes that occurred; their instructional and assessment practices were characterized by greater emphasis on conceptual understanding, teachers had higher expectations for students and teachers began to facilitate active student learning by “letting go of control” (p. 295). The authors also
identified that an amalgam of collaboration, weekly meetings and resources were situational factors that contributed to teachers’ willingness to try out new activities, and also that personal factors, teachers’ beliefs about teaching, learning and themselves as well as the timing of the project within the context of their lives, also influenced their change.

Considering the relationship between both situational and personal factors across both participants, Borko et al. (2000) suggested the existence of a “dialectic relationship between beliefs and practices” (p. 300) that suggested a change in both is required in order for teachers to make lasting change. Finally, the authors offered recommendations for professional development that include the necessity for personal support that fosters collaboration, the provision of resources, the luxury of time that allows teachers to experiment prior to true integration, and a dual focus on changing beliefs and practices that includes multiple paths and resources in order to accommodate individual level differences” (p. 303).

The findings from the sample of longer term studies discussed above all share an emphasis on situating learning within collaborative efforts in which commitment and change develops over time; the inclusion of both resources and a variety of activities that engaged the teachers; and a commitment to improving student outcomes through increasing the knowledge and capacities of teachers. Two recent studies have attempted to examine the features of professional development that lead to specific outcomes, the first study focused on teacher knowledge, skills and practice (Garet, Porter, Desimone, Birman & Yoon, 2001), and the second addressed student achievement (USDE, 2002).
The first study (Garet, et al., 2001) attempted to tease out the influence of some of these organizing features on self-reported increases in teachers’ knowledge, skills and practice. Using data gathered from a national sample of 1,027 math and science teachers, the study examined the efficacy of both structural components and core features within professional development initiatives. The four core features identified as having an impact on the changes in teachers practice included the following:

1. The degree to which programs focused on content
2. The type of active learning opportunities that were provided
3. Teacher outcomes with regard to knowledge, skill and practice
4. The degree of coherence in terms of the “extent to which it builds on what teachers’ have already learned; emphasizes content and pedagogy aligned with national, state and local standards, frameworks, and assessments; and supports teachers in developing sustained, ongoing professional communities with other teachers who are trying to change in similar ways” (Garet et al., 2001, p. 927).

Data examining structural components showed that the quality of professional development interventions would be positively influenced by both time and contact hours, each of which also was shown to positively influence active learning and coherence. In addition to finding that “professional development is likely to be of higher quality if it is both sustained over times and involves a substantial number of hours” (p. 933), the authors also concluded that

[O]ur data provide empirical support that the collective participation of groups of teachers from the same school, subject or grade is related to both coherence and active learning opportunities, which in turn are related to improvements in teacher knowledge and skill and changes in classroom practice. (p. 936)
This supports the view articulated by Armour and Yelling (2004) that “[w]hat seems to be almost undisputed in the literature is the belief that a series of ‘one-shot’ professional development activities, undertaken away from the classroom without specific follow-up, are unlikely to have lasting impact on teacher practice” (p. 103). As well, it has implications for considering alternative ways of structuring professional development opportunities.

A second large scale study cited earlier as WestEd has similarly examined organizational features of professional development found to be effective in increasing student learning. The two questions that guided the study were the following: “What teacher learning opportunities are available in these schools? And how do teachers learn?” Data were collected from the eight schools during two day site visits that included interviews conducted with various individual teachers, groups of teachers and principals.

Two levels of findings have particular significance here, school level findings and findings related to organizing features that underlie the delivery of effective professional development initiatives. School level findings were generated from “lessons learned” (p. 12) that emerged from data across eight schools as researches began to understand what worked in each school and also what worked across schools. The lessons learned include the following:

- Use clear, agreed-upon student achievement goals to focus and shape teacher learning
- Provide an expanded array of professional development opportunities
- Embed ongoing, informal learning into school culture
• Build a highly collaborative school environment where working together to solve problems and learning from each other become cultural norms
• Find and use the time to allow teacher learning to happen
• Keep checking a broad range of student performance data citation here with author, year, and page number.

The authors noted that “When professional development is effective, a number of principles can be identified. In particular, it:

• Focuses on teachers as central to student learning, yet includes other members of the school community
• Focuses on individual, collegial and organizational improvement
• Respects and nurtures the intellectual and leadership capacity of teachers, principals, and others in the school community
• Reflects the best available research and practice in teaching, learning and leadership
• Enables teachers to develop further expertise in subject content, teaching strategies, uses of technology, and other essential elements in teaching to high standards
• Promotes continuous inquiry and improvement embedded in the daily life of schools
• Is planned collaboratively by those who will participate in and facilitate their development
• Requires substantial time and other resources
• Is driven by a coherent long-term plan
• Is evaluated ultimately on the basis of its impact on teacher effectiveness and student learning; and this assessment guides subsequent professional development studies” (p. 2).

The key finding from this study was that “The very nature of staff development shifted from isolated learning and the occasional workshop to focused, ongoing organizational learning built on collaborative reflection and joint action” (p. 11).

Both the school level and organizational level findings from the latter two studies are encouraging and lend support to the recommendations and findings that have emerged from other long-term professional development studies (Borko et al., 2000; Butler et al., 2004; Grossman et al., 2001). One of the caveats, however, is that due to physical education’s exclusion from major educational reforms as outlined earlier, and the subsequent dearth of studies specific to long term professional development situated within collaborative communities (of practice or of learners) we cannot simply assume that these principals apply directly to physical education. Each subject matter has its own context, and research is beginning to emerge that suggests teachers’ perceptions of their subject matter influence their willingness or ability to adapt instruction (Stodolsky & Grossman, 2000). A great deal more study specific to physical education is required.

In one of the few studies examining the professional development experiences of physical educators, Armour and Yelling (2004) undertook a two year project that involved 65 teachers in England. The study was designed to assist in understanding the issues physical educators face when accessing or engaging in continuing professional development, the factors that govern its effectiveness, and whether or not it impacts
teaching practice and enhances student learning. The profiles that were completed by the 65 teachers in this study asked participants to

list all the professional development they could recall since initial training, identify what had been effective / ineffective and explain why, outline any continuing professional development plans for the future, offer advice to physical education continuing professional development policy-makers and identify the outcome of physical education they considered to be most important in their school. (p. 75)

The authors reported that most continuing professional development consisted of a course outside of the school that lasted for one day and focused largely on individual or department development and progression or larger school topics that teachers were expected to apply to their own subject and there was little evidence of “progressive or coherent professional learning, except, perhaps, in staged coaching courses” (p. 77). Findings also revealed that although teachers identified specific outcomes for their physical education programs that included those related to health and fitness, sport competence and knowledge, and personal, social and emotional outcomes, a “gap existed between what PE teachers want / need to know and what was available” (p. 79). Data indicated that teachers themselves identified collaboration within professional development as desirable and believed that continuing professional development would be effective if it was:

- Practical
- Relevant and applicable
- Able to provide ideas and practices
- Delivered by a good presenter
- Challenging and thought provoking
• Able to offer time for reflection and collaboration. (p. 81)

The authors concluded that as professional development moves toward a wider and more comprehensive view, “broadening of the understandings and provision of professional development for physical education teachers would be a timely and welcome addition to the physical education-continuing professional development landscape (p. 87). Although two examples of professional development underlying curriculum reform (Ward, 1999) and state-level accountability reform (Rink & Mitchell, 2002) will be outlined at the end of this chapter, collaborative learning efforts within physical education that have taken place outside of a professional development context will be discussed.

2.5.2. Collaboration in Physical Education: A Partnership Model

Within the professional development literature communities of practice or learning communities serve as sites where learning is grounded in collaboration of members within these communities. Within physical education, teachers’ learning has continued to be grounded in school-university collaborative efforts that have a long history in physical education. There has been much writing on such efforts including the publication of a monograph entitled Collaboration for Instructional Improvement: Models for school- university partnerships (JTPE, 1988).

In a review of literature examining the dimensions and consequences of isolation and the effects of lack of collegiality (Sparks, et al.,1993), Templin (1988) suggested that for physical education, isolation results from being physically separated from other teachers, schools with infrastructures that neither support nor encourage collaboration,
teachers with insecure professional self-images and infrequent interaction with other teachers. As a solution, Templin (1988) suggested the following:

Theoretically, it appears that socialization toward the norm of collegiality depends on socializing agents committed to structuring the environments where by collegiality could be facilitated. Furthermore, it depends on a commitment to the norm of individualism within a cooperative and interactive teaching culture. Such a norm would not suggest autonomy in the guise of isolation, but would suggest autonomy reflective of one’s commitment to promoting collegiality through one’s professional interaction with others. In essence, the teacher, regardless of experience, becomes a socializing agent by interacting with colleagues and administrators in ways in which colleagueship becomes normative. (p. 203)

Since that early call for a ‘norm of collegiality’, collaborative efforts have included work with professional development schools (Sharp, Lounsbery, Golden & Diebler, 1999), collaborations at the classroom level with individual teachers (Rovegno & Baudhauer, 1998) and school-wide efforts (O’Sullivan, Tannehill, Knop, Pope, & Henninger, 1999). Sharp et al. (1999) found that preservice teachers were not the only ones to perceive the collaborative model that underlies the professional development school as beneficial. Experienced teachers and school administrators were similarly influenced. Findings showed that “involved teachers reported they increased their receptivity toward working with university programs, were professionally rejuvenated, and thought of themselves as valuable contributors to teacher education and the education research process” (p. 93). Although they were not necessarily the target of change, their experience within the collaborative effort mediated a change in the experienced teachers involved with the school.

At the classroom level, Rovegno and Bandhauer (1998) studied the influence of the long term collaboration that existed between a practicing teacher and researcher as the teacher attempted to adopt a constructivist approach to teaching (this study was detailed
earlier in this review). The authors indicated that both parties experienced a change in practice, not through specific action research, but through “critique from our shared perspective” (p. 370).

One long term example of a school-wide university partnership is found in a four year collaborative effort that sought to improve students’ physical education experiences in one urban high school (O’Sullivan et al., 1999). The impetus of the effort was a school-wide reform in which the school’s curricular emphasis became “Adventure Based Learning, Career Exploration & Training, and Education (ACE)” (p. 228). In order to align with the larger school-wide initiative, physical education was also re-designed and teachers were provided release time to engage with members of the university community as they worked through a four year process in which they developed and implemented two new curricular approaches. Reflecting on the process, the authors suggested that spending time as a collective had provided multiple opportunities for the group to meet, “build levels of trust, clarify the goals for ACE, establish ownership of the program among all staff members, engage in substantive discussion about what was and was not working, and determine realistic short-term goals” (p. 230). The efforts resulted in an increased commitment to the project for all but one staff member and findings showed that the collaboration resulted in improved teaching for underserved urban youth, curriculum content, assessment and ability to teach responsibility. The authors found that the need to care and the desire for change were themes that emerged through a demanding process that required careful negotiation and sensitivity.

Although there is also a “limited number of research efforts that have attempted to document systematically the processes and effectiveness” (Ward & Doutis, 1999, p. 395)
of school-university collaborative efforts, learning grounding in collective participation takes time and can result in individual level changes that influence student outcomes.

Recently collaborative efforts targeted specifically at physical education have emerged through two reform initiatives documented in the literature. These reforms will be discussed in terms of the process, delivery, content and implications drawn from these reform efforts.

2.5.2.1. *The Saber-Tooth Project*

The Saber-Tooth Project was described as “an ongoing reform effort involving a university and a district in a collaborative partnership designed to improve physical education for middle school students by improving workplace conditions and engaging teachers in professional development focused on curriculum improvement” (Ward, 1999, p. 380). The program was guided by the following four assumptions: (1) Improving physical education is the collective responsibility of all members of the profession; (2) Dysfunctional curricula (multi-activity model) and dysfunctional workplace conditions make them necessary targets of focus of reform; (3) Depth of curriculum was more important than breadth in secondary school; and, (4) Improvement in curriculum and instructional practices necessitates continuous formative assessment. The study included 10 teachers across three schools, one of which (the Saber-Tooth site) was the target of reform, and two of which served as comparison sites.

The program was implemented in three phases; the first included selecting the sites and gaining entry. The second phase required examination of the existing curriculum and planning for new curriculum at the Saber-Tooth school and during the final phase, the new curriculum was implemented in the Saber-Tooth school and data
were gathered from all three schools. There were three levels of analysis: the curriculum, measures of student involvement and teacher perceptions of workplace conditions.

In order to understand the factors that mediated the experiences of the seven teachers who participated in the reform initiative/effort at the Saber-Tooth school, we can look to the results of a study that examined teachers and administrators perceptions of the reform and their workplace conditions (Doutis & Ward, 1999). Findings revealed that during the first year, teachers experienced professional isolation as a consequence of lack of collaboration with each other and a subordinated role on inter-disciplinary teams. By the end of the first year, the program was in conflict due to circumstances that included conditions considered by the teachers to be status quo in spite of hopes to the contrary, personal ‘crisis’ of the teachers, one of whom found the “professional and personal isolation of Saber-Tooth intolerable” (p. 421), and functional problems that included over-crowed classes, noise and equipment theft. These problems, along with facilitator’s initial failure to help teachers implement the program, meant that “situational and personal-social contingencies at Saber-Tooth interacted created stress particularly during the first semester of implementation” (p. 423). This supports findings from Grossman, et al. (2001) that structural arrangements alone cannot teach people how to interact differently and that “reducing isolation can unleash workplace conflicts that were, ironically, kept in check by the very isolation in which teachers work” (Grossman, et al., p. 991). Professional isolation was reduced and collegiality did emerge as a consequence of improved professional collaboration during the planning phase. Findings also suggested that the professional collaboration that was developed during the planning phase carried over into school-based collegiality.
Evidence drawn from examination of the curricular effects of a lacrosse unit at Saber-Tooth and a comparison school also indicated that teachers’ practice changed as a result of the intervention. The authors found that “in addition to changing the role of the students, the curriculum at Saber-Tooth also changed the role of the teacher” (Ward, Barrett, Evans, Doutis, Nguyen & Johnson, 1999, p. 443) as self-assessment accountability strategies distributed responsibility to students.

Reflecting on the corpus of data obtained from several studies of the reform, Ward et al. (1998) found that in addition to planned change within the physical education department at Saber-Tooth school, change occurred by proxy within the school and the district as evidenced by increased support, and that teachers needed knowledge of “alternative pedagogical arrangements” (p. 457) in order to implement changes in their curricula. Ward, Doutis and Evans (1999) reached four conclusions with regard to reform. First, the shared vision of the teachers reinforced the importance of selecting the program as the unit of analysis. Second, that workplace conditions differentiated good school programs from dysfunctional ones. Third, assessment of learning must necessarily be connected to planning and teaching because teachers do not necessarily have the knowledge of curriculum models and curriculum planning required to engage in curriculum planning, and finally that absent one solution to reforming secondary physical education, reform efforts should at least require a shift from the business as usual as defined by Locke (1992). Locke includes the following practices in the dysfunctional nature of ‘business as usual’: (a) requiring attendance without choice of activity or instructor; (b) class assignment without consideration of student needs or achievement; (c) short classes with time eroded by management rituals and with low academic learning
time; (d) short units with only a brief introductory level of instruction; (e) evaluation based on rule compliance, participation and demeanor; and (f) program content based on instructor interest and convenience (p. 361).

2.5.2.2. The South Carolina Experience

The Saber-Tooth project was grounded in collaborative partnerships at the school level and to a degree the district level. This would also be considered a reform in practice as conceptualized by Putnam & Borko (2000) and outlined earlier. In contrast, South Carolina’s professional development initiative, known as the Physical Education Institute (PEI), was nested within statewide standards, assessment and accountability reform movement and focused on reforming physical education through state level change. Rink and Mitchell (2002) feel that “A key problem with the majority of reform efforts in physical education has been the level of intervention” (p. 220) and that reform needs to occur at the state level. The underlying assumption of the project was that it “was grounded in collaborative partnerships at all levels of the state including administrators, legislators and the State Department of Education” (Rink & Mitchell, 2002), all of whom are involved in policy making.

In their efforts to have physical education included in the statewide reform efforts Rink and her colleagues and collaborators “began by establishing [P.E.] standards and continued by developing assessment materials for those standards, establishing a state level assessment program and seeking accountability for school performance based on student achievement” (Rink & Mitchell, 2003, p. 472). The unit of analysis upon which to base this state level initiative was positioned as student achievement, but included program change.
In 1995 the South Carolina State Legislature passed a law requiring high school physical education to include one semester of personal fitness and wellness and a second semester that included a lifetime fitness component. Accompanying this legislation were four high school student performance indicators that were considered measurable and achievable by all students and designed to prescribe student outcomes rather than dictate curriculum (Rink & Williams, 2003). The four performance indicators outlined by Rink and Williams (2003) were the following:

1. Develop competency in two movement forms
2. Design and develop a personal fitness program to reach a desired level of health related fitness
3. Participate in regular physical activity outside of physical education class
4. Meet the NASPE gender and age health-related fitness standards as prescribe by Fitnessgram (p. 478).

Teacher development became an important component of the reform effort, and the Physical Education Institute was implemented with the purpose of helping teachers establish policy and curriculum to meet the state standards and the legislated performance objectives. The Institute held five sessions throughout the school year. Participants were required to attend five sessions, and submit implementation plans and at least one unit plan. Schools received $250 worth of books and materials during the first year of the institute as well as paid substitutes if they attended all five sessions, and submitted the two plans (Rink & Mitchell, 2002). During the second year of the intervention the focus became curricular planning and an “essential friend” (p. 218) visited schools to assist with curriculum changes; at the end of the second year, demonstration schools were
established. Rather than provide support at school sites, beginning the third year, teachers were required to visit one demonstration sites or schools. During the third and fourth years of the interventions “ in-service programs were designed to have one or two sessions that everyone was required to attend then a variety of sessions from which participants could choose” (Rink & Mitchell, 2002, p. 218).

Studying three of twelve schools that were accepted as demonstration schools, Wirszyla (2002) examined the extent to which physical educators were able to achieve the goals of the reform effort. Results showed teachers supported the PE performance indicators, although they were only partially successful in creating change aligned with the reform because only the lead teachers at each school delivered the intended curriculum. The four non-lead teachers “struggled to implement the indicators” (p. 12), and aside from lack of equipment, student discipline, and collaboration from other teachers in the building, implementation was hampered by the teacher/coaching role conflict. Enhancers included a supportive administrator, opportunities for on-site collaboration with other teachers and the strength and contribution of lead teachers.

Rink and Steward (2003) suggest that a shared vision of what children should know and be able to do is important for sustained physical education reform. They also suggested a significant finding was that teachers showed positive support for the newly created PE performance indicators for K-12 students. The reform also led to increased teachers’ planning, participation in training programs, and development of materials. Effective high schools had the ability to implement content from all four performance indicators. In terms of assessment, results showed that holding teachers accountable for the accuracy of their data influenced their reported accuracy.
Rink and Mitchell (2002) concluded that teachers were reporting more contacts regarding curricular issues with other physical education teachers across the state and over the past few years, more teachers at each meeting have described concrete ways in which their administration has supported their instructional and curriculum needs through better instructional space, funding for equipment purchases, and attention to class size and how students are scheduled into sections of physical education. (p. 220)

2.6. Summary

Based on this review, it is apparent that there continues to be dearth of literature specific to the professional development of physical education teachers. Ward and Doutis (1999) suggest that “[b]ecause of the limited number of studies on professional development in physical education, we know little about which processes, forms or components of inservice professional development projects in physical education are effective” (p. 395).

Drawing from an amalgam of studies across professional development in general education and a variety of literature bases in physical education, we do know that the experiences of participants are mediated by beliefs that interact with the change process and result from workplace conditions and school cultures that continue to be problematic for physical educators. We are also beginning to understand the organizing features that have been found to facilitate individual and school level change, most notably, teacher collaboration over time at the school level. Butler, Lauscher, Jarvis-Selinger and Bekingham (2004) suggest that regardless of the demand for professional development, “questions remain concerning how to conceptualize teacher learning and, correspondingly, about how to construct professional development so as to foster meaningful change” (p. 436). This is particularly true for physical education. Questions
also remain about how to achieve meaningful change beyond the level of the teacher and the school. Richardson and Placier (2001) suggest that although both organizational, individual and small group change have been studied separately, change at all levels is necessary if systemic change is to be successful. This study is significant in that it is uniquely positioned to study long-term changes in physical education teachers and their practices while at the same time studying recursive relationships between teacher change and district level change as a consequence of participation in a sustained, long-term professional development intervention.
CHAPTER 3

METHODOLOGY

The purpose of this study was to understand the long-term changes that resulted from teachers’ involvement in a community of practice underlying a 15 month professional development program. Specifically, the study sought to examine how participation influenced six teachers’ professional identities, created opportunities for their contributions to physical education at the district level and the larger professional community; and influenced the teachers’ capacities to create learning opportunities for their students. This chapter will begin by outlining the theoretical frame that guides this study as introduced in Chapter 1. It will then describe the study design, participants, data collection procedures, data analysis, validity and trustworthiness of the study. The chapter will conclude with a discussion of the lens through which I offer my interpretation of the data.

3.1. Theoretical Frame

This research on teachers’ professional development is positioned within a sociocultural theoretical frame that draws on theories of identity development and of practice (Holland et al. 1998). Embracing a sociocultural theoretical frame necessarily accepts the epistemological assumption that humans experience the world indirectly through mediational means or cultural tools (Wertsch, del Rio & Alvarez, 1995). These
“provide the line or bridge between the concrete actions carried out by individuals and groups, on the one hand, and cultural, institutional, and historical settings, on the other hand” (Wertsch, del Rio & Alvarez, 1995, p. 21). The sociocultural perspective accepts that teachers bring different values, beliefs and identities, interests, motivations and actions to communities of practice and that learning is both situated within and mediated by actions that includes involvement with cultural tools or artifacts and historical, institution and structural constraints that afford or constrain learning, individual participation, and images of self within a community (Holland, 1998; Levinson, 2000; Lave & Wenger, 1991).

Acknowledging the assumptions that human action and mediation are related regardless of the distinctions made by activity theorists, cultural-historical psychologists or anthropologists or sociologists Wertsch, del Rio and Alvarez (1995) suggest there exists four similarities in the way mediation is conceptualized within a sociocultural framework. The first is that mediation is an active process. Although cultural tools such as a new curriculum work to shape action, they do not determine action; they have an impact only when used. A new curriculum provides a teacher with only the potential of changing her/his practice.

Second, the introduction of cultural tools (like language and technical tools for example) inevitably transforms the process and allows movement and action in directions that would otherwise not occur. Without the introduction of a new curricular innovation (new knowledge) and the technical language that facilitates understanding and implementation, the new innovation might never happen. When considering this from an identity perspective grounded in Bakhtin’s notion of ideological becoming that underlies
the study of shifting identities, part of ones development includes the selective assimilation of the words of others, and therefore, the more words or discourses there are to choose from, the more opportunities there are to learn.

Third is the belief that mediation is both empowering and constraining and that any form of mediation inherently involves the introduction of some limitation. Teachers, who are provided with a new curriculum, might be limited to the extent the implementation of the curriculum constrains or facilitates what a teacher is able to do with his or her students.

The fourth similarity is the assumption that cultural tools are created for reasons other than to assist with the action they end up shaping. When tools are borrowed from other contexts, they might be misused and shape action in a direction that was not intended. “These accidental or unintentional effects are what might be called spin-offs” (Wertsch et. al, 1995, p. 26). Although teachers might learn of a new curricular innovation for example, the application in a particular classroom might well be different than what was intended given different cultural, institutional and historical factors that are unique to each setting and shape the action of the teacher.

Embracing the interplay of action and mediation within a sociocultural frame allows us to understand the relationships between mediation and action and their influence on teacher agency and ultimately teacher identity (Holland, Lachicotte Skinner, & Cain, 1998). To consider shifting identities within this framework is to accept that historical, institutional and structural constraints have the potential to shape or produce action through a commingling of agency and structure (Levinson & Holland, 1996; Wertsch, del Rio & Alvarez, 1995). The question would be one of action as a
consequence of social and or cultural reproduction or of cultural production (Levinson & Holland, 1996). The former assumes limited agency, the latter privileges agency, and thus as Wolcott (1982) might suggest, culture has the potential to be both transmitted and acquired. Teachers are not simply passive recipients of information; they actively participate in their own learning.

Using a holistic approach that moves away from the cultural reproduction perspective and toward a perspective that embraces individual agency is to move toward a notion of cultural production. Levinson and Holland (1996) suggest that it is “through the production of cultural forms created within structural constraints of sites such as schools, subjectivities for and agency develops” (p. 14). This is an important assumption because it allows us to understand culture as a form of practice that we create, rather than simply as values, beliefs and codes to be understood. Culture is the product of individuals attempting to make sense of their world, and although enabled and constrained by social structures, individuals do possess the ability to organize culture for themselves (Levinson, 2000, Ortner, 1984). Understanding culture as a form of practice is an important concept in educational reform if one accepts Fullan’s (1992) notion that cultural change underlies school change.

Holland et al. (1998) suggest that, by accepting that culture is a continual process of creating meaning in social contexts, subjectivity can be formed and identity altered. From a situated learning perspective (Lave and Wenger, 1991), “the cultural forms that come to inhabit the individual depend upon the place, the social position, from which the individual engages with others in activities, in practice” (Holland, et al., 1998, p. 176). From a cultural perspective, “one’s history-in-person is the sediment from past
experiences upon which one improvises, using cultural resources available, in response to subject positions afforded one in person. (Holland, et al., 1998, p. 18).

Holland et al’s (1998) practice theory of self and notion of ‘figured worlds’ provides a theoretical way of considering the interrelatedness of culture, self and identity. In order to conceptualize the connection, one must first accept discourses and practices of the self are living tools of the self that change; that the self is embedded within social practice and that individuals have plural and competing sites of self. Second, one must accept that individuals live in culturally defined worlds and understand themselves in relation to those worlds. Holland terms these ‘figured worlds and suggests they are “socially and culturally constructed realms of interpretation in which particular characters and actors are recognized, significance is assigned to certain acts, and particular outcomes are valued over others” (p. 52). This perspective moves away from one that assumes participation in a particular community transforms individual identity into collective identity, but rather assumes that individual identities are formed in spaces that are often conflictual and socially constructed.

Just as identities are formed in the process of participation in the theoretical sense, at the level of practice, identities are shaped through participation in communities of practice. Like Holland et al. (1998), Wenger (1998) suggests that identity in practice is produced as a “lived experience of participation in specific communities” (p. 151) and as a consequence of various and negotiated ways of being a person in that context. This is similar to Holland’s et al. (1998) notion of plural and competing senses of selves. Learning happens as individuals engage and contribute to communities and in so doing construct individual identities in relation to those communities. In order for learning to
occur, the community must create new ways for members to negotiate and create meaning within the community, thereby creating meaningful forms of identification and empowering ownership (Wenger, 1998). In so doing teachers not only learn, they create shifts in their own cultural understanding of what it means to be a member of that group, and therefore shifts in their own identity.

Identity from this perspective and within this study can be understood as a concept that “figuratively combines the intimate or personal world with the collective space of cultural forms and social relations” (Holland et al., 1998). In this way, identities are seen as both social products that develop in social practice, and psychohistorical formations that develop over a lifetime. Identities become “the key means through which people care about and care for what is going on around them” (Holland et al., 1998, p.5) and an important basis upon which people create new ways of being.

In selecting a sociocultural framework for this study, the unit of analysis moves away from the study of just individual experience and toward an analysis that includes the processes and contexts within which teacher learning takes place. As such, specific methodologies that align with this framework will be presented below.

3.2. Study Design

In order to more fully understand how individual and district level change can be occasioned through a recursive interaction between individual teacher change (as a consequence of participation in a long-term professional development intervention), and participatory spaces at the district level that are provided for teachers, a qualitative inquiry approach was used. This study attempted to understand these multiple levels of change by understanding the influences of teachers’ experiences with the professional
development intervention and its influence on these six teachers sustained change; their past and present experiences at the classroom and district levels, their professional histories, and for some, their on-going work within the district. The professional development intervention that situated learning in a community of practice ended 19 months prior to the beginning of this study. Consequently, this study provides an opportunity to understand the ways in which the intervention continues to influence practice, identities and the contribution of the teachers to the district and the larger professional community. Although it is difficult to reconstruct how reality was shaped for those teachers as they were experiencing the intervention, a great deal of data was collected as the teachers progressed through the 15 month intervention and the pilot study that informed this study provided a great deal of insight in terms of teachers’ experiences with the intervention itself.

Given that this study examines and accepts interaction between teacher and his / her environment an “interpretivist practice” position was taken. This view extends traditional interpretivism beyond the accepted view that social action can be understood by uncovering the meanings that constitute the action (Schwandt, 2000). Rather than consider only questions of ‘what’ social reality is constructed, interpretive practice considers both what and how social reality is constituted and is “centered both in how people methodically construct their experiences and their worlds and in the configurations of meaning and institutional life that inform and shape their reality-constituting activity” (Gubrium & Holstein, 2000, p. 488). Interpretive practice, then, becomes the “constellation of procedures, conditions, and resources through which reality
is apprehended, understood, organized and conveyed in everyday life” (Gubrium & Holstein, 2000, p. 488).

Interpretive practice is derived from both phenomenological and ethnomethodological perspectives. Phenomenologists assume that reality is a social construction that happens in context, and therefore educational research within this tradition is concerned with the ways in which people experience and interpret courses, programs and interventions (Sleeter, 2001). Holstein and Gubrium (1998) explain the ethnomethodology’s emphasis in this way:

If realities are produced “from within” by way of members’ interpretive procedures, members’ social circumstances are self-generating. This implicates two essential properties of meaning revealed by ethnomethodological analysis. First, meanings are essentially indexical, that is they depend on context. Objects and events have equivocal or indeterminate meanings without visible context. It is only through their situated use in talk and interaction that objects and events become concretely meaningful. Second, the circumstances that provide the context for meaning are themselves self-generating. Interpretive activities are simultaneously in and about the settings to which they orient, and they describe. Socially accomplished realities are thus reflexive: descriptive accounts of settings that give shape to those settings while simultaneously being shaped by the settings they constitute. (p. 138)

Through studying what is said (discourse-in-practice), how it is said in context (discursive practice) and how the two are mediated through action and interaction, interpretive practice considers both the processes and the conditions of meaning making. Within an educational reform context for example, teachers may leave a professional development opportunity with the knowledge and competencies to implement a curricular change. Understanding a teachers’ response at the school level, in either direction, requires a concomitant understanding of the institutional functioning; how a teacher’s experience with the institution at multiple levels might mediate her response, and also
how the teacher influences institutional functioning by virtue of his or her actions or decisions in responding to the curricular initiative. As such, the study of action and interaction requires the researcher to move back and forth between an examination of the processes and of the conditions of change during the interpretation. This process is referred to as analytic bracketing. In this way, “the observer intermittently orients to everyday realities as both the products of members’ reality-constructing procedures and the resources from which realities are constituted” (Gubrium & Holstein, 2000, p. 499).

From a sociocultural theoretical perspective, this allows a researcher to foreground and background particular units of analysis as the data analysis proceeds (Rogoff, 1995). In this study the focus shifted between the teachers and their experiences, the contexts within which they worked both from a micro level in the gymnasium and their school and at a macro level that included their involvement within the district.

Since interpretive practice calls for an understanding at the level of interaction (between process and condition) and the intent is to understand how the two are mutually constitutive, this study used a case study design and grounded theory analysis to analyze the data.

3.3. Case Study

Rather than use an intrinsic (or individual) case study approach, this study used a collective case study approach (Stake, 2000). Stake (1998) suggests that whereas intrinsic case studies are undertaken when a particular case is of interest and the purpose is not one of understanding abstract constructs or phenomenon. Instrumental case studies are used when the case is of secondary interest and “the case is examined to provide insight into an issue or refinement of a theory” (p. 88). Within an instrumental approach, the case
study is still looked at in depth and with scrutiny; however the choice of case is based on its ability to advance our understanding of something else. This study provided an opportunity to examine the sustained changes that resulted from a long-term professional development at multiple levels within a particular cohort of six teachers and therefore a collective case study that involves a number of instrumental cases together was selected.

Although thoroughly understanding a single intrinsic case through rich, thick description is important and arguably the norm in case study research, an instrumental approach, as advocated by Stake (2000), is more appropriate for two reasons. The first is that the research questions that guide this study have evolved from findings made in an earlier pilot study, and data collected during this study will be analyzed in concert with data already collected from participants. Stake (2000) suggests:

In contrast [to intrinsic studies], the methods of instrumental case study draw the researcher toward illustrating how the concerns of researchers and theorists are manifest in the case. Because the critical issues are more likely to be known in advance and following disciplinary expectations, such a design can take greater advantage of already developed instruments and preconceived coding schemas. (p. 439)

From the earlier pilot study, we found that teachers developed various levels of belonging to the community of practice and as a consequence of their involvement, they experienced shifts in their ability to see themselves as mentors and role models, and this hints at shifting identities. Based upon those findings, this study examined the issue of identity formation specifically, rather than wait for identity to emerge as a theme across participants and this was considered when making methodological decisions.

The second reason that a collective case study approach was appropriate lies in the unit of analysis for this study. In this context, learning, participation and individual
teacher change were studied by examining the recursive action and interaction of the
teacher, the PEP teachers community of practice and the school district, and the focus of
the analysis shifted accordingly.

3.4. Professional Development Intervention

The research questions that guided this study are based, in part, on findings from a
previous pilot study that examined how teachers’ experiences with a 15 month
professional development program (PEP) influenced their beliefs about teaching and their
teaching practice, and additionally, the ways in which the community of practice
influenced teachers’ sense of themselves as professionals and their programs over time.
The goals of the professional development program were to provide a cohort of urban
physical education teachers with opportunities to build their capacities as professionals,
including their knowledge, skills and dispositions; to increase students’ physical activity
levels through designing and implementing activity focused curricular programs; and to
establish a cohort of future teacher leaders for the district. Given that the current study
was informed by the pilot study and the corpus of data was collected during and after the
professional development intervention, an understanding of the breadth of the
professional development program is necessary. Table 3.1 provides a timeline for the
intervention, the beginning of this study and the workshops participants were required to
attend during the professional development program.
<table>
<thead>
<tr>
<th>Month</th>
<th>Professional Development Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2002</td>
<td>Orientation workshop (1-day)</td>
</tr>
<tr>
<td>May 2002</td>
<td>American Master Teacher Program (AMTP) Pedagogy workshop #1 (1 day)</td>
</tr>
<tr>
<td></td>
<td>AMTP Pedagogy workshop #2 (1 day)</td>
</tr>
<tr>
<td>June 2002</td>
<td>Tactical Games Workshop (5 days)</td>
</tr>
<tr>
<td>August 2002</td>
<td>Teaching responsibility workshop (2 days)</td>
</tr>
<tr>
<td></td>
<td>Inclusion in physical education workshop (1 day)</td>
</tr>
<tr>
<td></td>
<td>Promotion of physical activity workshop (1 day)</td>
</tr>
<tr>
<td>September 2002</td>
<td>In-school support visits</td>
</tr>
<tr>
<td>October 2002</td>
<td>In-school support visits</td>
</tr>
<tr>
<td>November 2002</td>
<td>In-school support visits</td>
</tr>
<tr>
<td>December 2002</td>
<td>AMTP Content workshop #1 (1-day)</td>
</tr>
<tr>
<td></td>
<td>In-school support visits</td>
</tr>
<tr>
<td></td>
<td>OAPHERD presentations</td>
</tr>
<tr>
<td></td>
<td>Tactical Games debrief (1-day)</td>
</tr>
<tr>
<td>January 2003</td>
<td>Sport Education workshop #1 (1-day)</td>
</tr>
<tr>
<td>February 2003</td>
<td>Sport Education workshop #2 (1-day)</td>
</tr>
<tr>
<td>March 2003</td>
<td>AMTP Content workshop #2 (1-day)</td>
</tr>
<tr>
<td></td>
<td>In-school support visits</td>
</tr>
<tr>
<td>April 2003</td>
<td>In-school support visits</td>
</tr>
<tr>
<td>May 2003</td>
<td>In-school support visits</td>
</tr>
<tr>
<td></td>
<td>Final debrief (1-day)</td>
</tr>
<tr>
<td>January 2005</td>
<td>Data collection for this study begins</td>
</tr>
</tbody>
</table>

Table 3.1: Professional Development Program Interventions
3.5. Setting

Participants in this study were six physical educators from a large urban school district. Data from the 2002-2003 Annual Report (2004) indicate the district has approximately 64,000 students attending 93 elementary, 26 middle and 18 high schools. Within the district, the per-pupil expenditure is $10,356, the average student / teacher ratio is 18:1, and the average number of years of teaching experience is 12.5 years.

Student demographics data drawn from the same report indicate that 48.8% of the students in this district are Female, 61.85% Black, 2.78% Hispanic, 2.16% Asian, 0.24% Native American, 51.20 % Male and 32.97 % White. The percentage of students receiving ESL services is 3.9%, and 64% of the students are eligible for free and reduced meals. (2002-2003 Annual Report, 2004). During the 2003-2004, the district was under what the NCLB legislation refers to as academic emergency (USDE, 2002) and the budget for physical education in the district was approximately $20,000 with $12,000 ear-marked for travel.

One of the six tenants that form the guiding principles for the district is a commitment to quality instruction through a commitment to professional development. Although the district is committed to identifying and funding professional development programs that improve academic achievement, physical education has received little support for professional development beyond the contracted time allotment. Elementary physical education teachers are provided professional development during in-service days only. Teachers remain in their schools and attend 90 minute general, non physical education specific sessions (pre-PEP) four times per year. Professional development opportunities for middle and high school teachers have changed over recent years and
currently teachers are allowed five days for professional development throughout the year. Teachers have autonomy to choose which sessions they attend. Prior to PEP, there were no out of school professional development opportunities available to physical education teachers in Columbus.

3.6. Participants

Participants for this study were purposefully selected from a sample of teachers who participated in the original PEP intervention. Rather than use an extreme or deviant case sampling strategy (Patton, 1990), or the criterion of representativeness of a population of cases (Miles & Huberman, 1994) teachers were selected based upon their utility in terms of offering “the opportunity to learn…or those from which we feel we can learn the most” (Stake, 2000, p. 446) in seeking answers to the research questions. The primacy of ‘opportunity to learn’ allows the selection of either typical or atypical cases, or a combination of both.

For purposes of this study, individual participation data were recorded for all 24 of the original PEP teachers. Participation data were gathered according to participation in the following activities either during or following the professional development program: state conventions; national conventions; workshop presentations (including inservice days or those conducted for the second PEP grant cohort); attendance at workshops after the initial professional development program and attendance at PEP-TALK meetings (a monthly informal discussion group made available to all district physical educators for six months during the year following the PEP intervention). Data were initially gathered and collated by the District Coordinator.
Drawing upon these participation data (interpreted as a proximeasure for involvement) and their potential to answer the research questions, six teachers were selected for this study. Four teachers considered highly involved and two teachers considered minimally involved in district level physical education activities following the PEP intervention were selected for further study. Prior to making a final decision with regard to which teachers to include, a discussion ensued with the District Coordinator, and my academic advisor, both of whom were involved with the teachers for the duration of the professional development intervention. The subjects were discussed and selected based upon these consultations. Given the nature of the research questions, the desire to understand behavior change in response to professional development, and the theoretical frame of this study it was considered more instructive to consider the cases of teachers who were highly to moderately involved, and therefore a greater number of those teachers were selected for participation. Two teachers who had not remained involved in the professional activities within the district and represented discrepant cases were selected in order to understand the similarities and differences in the patterns of interaction between teachers at each end of the participation spectrum.

Two of the four teachers considered highly involved by the researchers had also been selected in a separate process as facilitators for a second professional development program (funded through a second Physical Education for Progress grant) that began the year following completion of the first PEP intervention. Their selection as facilitators was based upon their level of participation in the first PEP professional development program and competencies demonstrated while in the program. Dan, an elementary school teacher and Debbie, a high school teacher traveled to district schools and assisted other physical
educators (who were participating in the second PEP grant program) with the implementation of the curricular innovations they had been taught a year earlier as participants in the first PEP. The two other highly involved teachers were Jim, an elementary school teacher and Crystal, a middle school teacher.

The two teachers who were selected based upon their lack of involvement in the district since the end of the intervention were two middle school teachers, Susan and Karen. A description of these teachers is presented in Chapter 4.

Following identification, participants were contacted by telephone and asked to consider participation in the study pending a brief meeting to explain the nature of the study. An initial meeting occurred at the school of each participant who subsequently agreed to participate and signed the consent forms (Appendix A) accordingly. At the conclusion of the initial meeting an individual interview was scheduled, as was the first of the three observations.

3.7. Contributors

Given the focus on both individual and district level analysis and the necessity of understanding the contexts within which teachers worked, it was necessary to hear the voices of other stakeholders within the change process. I consider these people to be ‘contributors’, and they include the District Physical Education and Health Coordinator (DPEH) (Appendix B), the Director of Grant Management in the district (Appendix C), the former Elementary Curriculum Director (Appendix D) and the current principal of each participant’s school. The later three were added after the study began in response to interview data from the teachers and DPEH Coordinator.
The District Coordinator has been integrally involved in the design and all aspects of the delivery of the professional development program, and provided opportunities for teachers to become involved in the delivery of workshops at the district, state and national levels during and after the PEP intervention. She was asked to participate by providing access to documents and district level data necessary in the analysis, assisting with the selection of participants (based upon the data) and completing an individual interview. The Director of Grant Management was the person with whom the DPEH Coordinator had worked in securing the initial grant for Columbus Public Schools as well as all subsequent grants. It was hoped he would provide insight as to district level perception of physical education.

3.8. Data Collection

The study was conducted during the 2004-2005 academic year and included multiple sources of data, each of which will be elaborated upon. The data sources included two sixty minute semi-structured individual interviews with each teacher conducted at the beginning and end of the data collection period; a two-hour focus group interview that included three specific learning activities; three lesson observations using an observation protocol to guide each observation as well as instructional artifacts obtained from the teachers; a document analysis of documents generated from the PEP professional development intervention; the first and second PEP grant proposals; two questionnaires (History of Teaching and the Value Orientation Index (Ennis & Chen, 1993); and individual 15 minute semi-structured interviews specifically related to the questions that had been generated during the teaching observations. Prior to explaining
each more fully, Table 3.2 summarizes the data sources and methods used to answer each of the four research questions.

As illustrated in Table 3.2, four data collection methodologies and multiple data sources were used to gather data relevant to each of the research questions. In order to answer the first research question: How have the professional identities of the PEP teachers changed as a result of interactions in the community of practice?, data were gathered from a focus group interview during which teachers completed two questionnaires and engaged in three group activities, each designed to illuminate issues of identity formation both on an individual level and in relation to the community of practice. Additional data sources included transcripts of individual interviews, and a document analysis that examined the questionnaires completed by participants during the PEP professional development intervention, the PEP grant proposals, the program evaluation report and instructional artifacts. Data sources used to examine changes in practice underlying research question two included the observation protocol form, transcripts from the teachers and contributors, instructional artifacts, the professional history information form, and the group interview activities. Research question three examined the ways the PEP teachers contributed to physical education in the district since their involvement with the professional development program and data sources included the levels of district participation documentation and data collected during interviews with the teachers, and district coordinator, as well as data from the focus group interviews. Finally, in addition to the transcript and questionnaire data from the focus groups, data collected to answer research question four included the transcripts generated from the individual interview with both teachers and collaborators.
<table>
<thead>
<tr>
<th>Research Question</th>
<th>Methodology</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How have the professional identities of the PEP teachers changed as a result of interactions in the community of practice?</td>
<td>Individual Interviews (teachers, contributors)</td>
<td>Transcriptions</td>
</tr>
<tr>
<td></td>
<td>Focus Group Interviews</td>
<td>Group Activity 1,2,3 Transcript</td>
</tr>
<tr>
<td></td>
<td>Questionnaires</td>
<td>Professional History Information Form</td>
</tr>
<tr>
<td></td>
<td>Document Analysis</td>
<td>Value Orientation Index (VOI2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PEP Grant Proposal 1 &amp; 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PEP Program Evaluation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pre-existing Documents</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Instructional Artifacts</td>
</tr>
<tr>
<td>2. How did the teachers continue to use the curricular innovations and themes infused throughout the professional development program 19 months following completion of the intervention?</td>
<td>Observations</td>
<td>Observation Protocol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Field notes</td>
</tr>
<tr>
<td></td>
<td>Individual Interviews (teachers)</td>
<td>Transcriptions</td>
</tr>
<tr>
<td></td>
<td>Document Analysis</td>
<td>Instructional Artifacts</td>
</tr>
<tr>
<td></td>
<td>Questionnaires</td>
<td>Professional History Information Form</td>
</tr>
<tr>
<td></td>
<td>Focus Group Interviews</td>
<td>Group Activity 1,2,3 Transcript</td>
</tr>
</tbody>
</table>
Table 3.2 (continued)

<table>
<thead>
<tr>
<th>3. In what ways have the PEP teachers contributed to physical education in the district since their involvement with the professional development program and what has changed as a result?</th>
<th>Individual Interviews (teachers, contributors)</th>
<th>Transcriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Focus Group Interviews</td>
<td>Group Activity 1,2,3 Transcript</td>
</tr>
<tr>
<td></td>
<td>Document Analysis</td>
<td>Levels of Participation Document</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-mail correspondence (principals and Program Coordinator)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. What characteristics of the PEP program helped create and sustain changes at the level of the individual, school and district?</th>
<th>Individual Interviews (teachers, contributors)</th>
<th>Transcriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Focus Group Interviews</td>
<td>Group Activity 1,2,3 Transcript</td>
</tr>
</tbody>
</table>

3.8.1. **Focus Group Interviews**

Given both the theoretical frame of this study and the need to understand individual teacher changes achieved in the community of practice occasioned by the first research question, the focus group interview was structured based on the principles that guide cultural interviewing as suggested by Rubin and Rubin (1995). The authors suggest that “cultural interviews are about learning how people see, understand and interpret their world” (Rubin & Rubin, 1995, p. 195) and therefore necessitate getting people to talk about these things rather than focus on asking detailed and focused questions. Within this
interviewing framework researchers asked about culture to learn how the rules within a group guide choices, and how behavior in a group is governed by what the groups teach their members. The authors suggest that cultural interviews are based upon common and ordinary behaviors that serve to display the rules of how people act.

In order to achieve this focus on the ordinary, Rubin and Rubin (1995) suggest it is important to convince people it is acceptable to talk about what seems ordinary and suggests three questioning strategies; asking about funny, difficult, poignant or successful things a participant does, asking about choices participants routinely make, and asking participants to think comparatively about specific instances in their contexts. Additionally, the authors suggest eliciting illustrative stories, narratives and examples to infer taken for granted rules, and eliciting descriptions of cultural icons that serve to represent core values, norms, themes or expectations. Within this context, a cultural icon might include an idealized version of the attributes of a successful and effective teacher.

Within cultural interviews, personal and social histories are also used to discover the kinds of experiences that occasion changes in values and norms. Tesch (1990) suggests that one of the most distinctive ethnomethodological techniques used to study how people achieve shared agreement, is to first shatter that agreement and observe how participants repair the incongruity. Although not all of these strategies could be used during a two hour interview, they were used as a guiding framework to develop activities that were included in the focus group interview.

The primary purpose of this focus group interview was to assist in understanding how the professional identities of these teachers have changed, accepting that identity development is an active process that occurs over time and across multiple contexts.
Group interviews have advantages over individual interviews in that they “often produce rich data that are cumulative and elaborative; they can be stimulating for respondents, aiding recall; and the format is flexible” (Fontana & Frey, 2000, p. 652). Therefore, the scope of this culturally situated focus group interview included activities thought to best help teachers express these shifts where possible, and illuminate these shifts where they are implicit. This focus group interview used activities that by design required interaction among members of the community of practice, and therefore moved away from methodological and ideological individualism and toward the study of the relational process (Gergen & Gergen, 2000). This is an important consideration given the epistemological assumptions of socio-cultural theory.

Several underlying assumptions guided the creation of these activities. The first assumption was that teachers can have multiple identities each situated in a particular context, and therefore the public nature of the focus group might elicit only a small portion of the teachers underlying beliefs and opinions as their response is mediated by the group discourse. As a result, we asked teachers to complete their learning activity questionnaires individually prior to discussing these questions publicly. The second assumption was that teacher discourse should be contextualized and therefore teachers were asked about their experiences within their school contexts. The third assumption was that the group interview would provide a basis upon which to create questions for the final individual interview.

The focus group interview was divided into four sections: three learning activities (see Appendices E through G) that required individuals to write their private opinions prior to discussing them with the larger group, and a group interview (see Appendix H) in
which teachers were asked direct questions related to their experiences with the program and since the end of the intervention. Each of these will be discussed in turn.

3.8.1.1. Group Activity 1

The first activity (Appendix E) was designed to help teachers articulate their successes and disappointments with PEP, and how they believed their programs were valued by important others; parents, other teachers in the building and principals. It was anticipated that asking teachers to position themselves relative to others might assist in understanding their subject position in terms of identity.

3.8.1.2. Group Activity 2

The second activity (Appendix F) was designed to illicit positive images of physical education teachers within participants’ school contexts and district thereby allowing insight into participant’s core values, norms and expectations.

3.8.1.3. Group Activity 3

The third activity (Appendix G) was designed to challenge participants to justify their physical education programs should they feel a sense of responsibility to do so. It was hoped that in providing a justificatory argument for either assuming or not assuming a role as advocate, teachers would allow us to glimpse how they envision their role as a professional. Following time for individual reflection, response and group dialogue, teachers were asked to engage in creating a presentation to a parent group on this topic. Group activity three was designed to increase our understanding of how teachers envision themselves, and to simulate a scenario that might cause disagreement with regard to an appropriate response.
The focus group took place after school on the university campus in a building the teachers had visited many times throughout the PEP professional development program. Although all teachers confirmed their attendance, one participant chose not to attend. My advisor was also present and assisted in facilitating the discussion. The focus group was audio-taped in its entirety, and transcribed verbatim. The following protocol guided the focus group interview:

4:30-4:40 Informal re-acquaint time…
4:40-4:50 Activity 1: Teachers complete questionnaire individually1
4:50-5:00 Activity 1: Teachers discuss their answers to Q1, 2, 3, only
5:00-5:15 Activity 2: Teachers complete questionnaire individually2
5:15-5:25 Activity 2: Teachers discuss Q3 & 4 only
5:25-5:40 Activity 3: Teachers complete questionnaire individually
5:40-6:10 Activity 3: Teachers collaboratively design the presentation to the school board
6:10-6:15 Activity 3: Teachers present their ideas
6:15-6:30 Activity 4: Group interview questions (Appendix H)

During the interview it became apparent that it would be impossible to complete all three activities within the two hour time frame given we had focused a great deal of time on the first activity and began to intersperse questions intended for later in the focus group throughout the dialogue. Given the interactive nature of the third activity relative to the second activity, I made the decision to forego the second activity in favor of the completing the third one. At the end of the focus group, teachers were given the second
activity and asked to complete and return it to me during my final observation. All were completed and returned.

3.8.2. **Value Orientation Index Questionnaires**

In physical education, the Value Orientation Index (VOI) (Appendix I) has been useful in determining the influence of teachers’ educational values and beliefs on their goals and objectives for physical education (Ennis, 1994; Ennis & Hooper, 1998). Value orientations in physical education represent the relative priority that teachers place on “teaching the disciplinary body of knowledge, accommodating student interests and needs in curriculum selection, and responding to or shaping the teaching environment in which the teacher works” (Ennis, 1994, p.170). Five different value orientations each describe a different philosophy or ideology for constructing curriculum and therefore their relative selection and emphasis offers an insight into understanding teachers and their practice. The VOI was initially completed by all teachers prior to the PEP professional development intervention and immediately following completion of the intervention. Two of the six teachers in this study did not complete this post-intervention questionnaire and one completed it incorrectly which rendered it invalid. In order to consider if some of the pre-post changes had been sustained, and might be reflected in their practice, the VOI was completed for a third time prior to beginning the first interview.

3.8.3. **Professional / Life History Information Form**

The form (see Appendix J) was designed to gather information regarding teachers’ history with teaching, professional development, and their perceptions of how they have changed as teachers in terms of their beliefs, practices and sense of their role as
physical education teachers. This questionnaire was sent electronically to participants to complete following the first interview.

3.8.4. Individual Interviews

Whereas the group interview was concerned with understanding how people see and interpret their world in relation to others, the individual interviews were topical and were used to explore what, when, how and why teachers changed, to test emerging themes, clarify emerging ideas and themes and to solicit different perspectives (Rubin & Rubin, 1995). Data collection began with individual interviews at each participant’s school (Appendix K). Sixty minutes was allocated for the first interview that was designed to provide a sense of the professional life histories of each participant. The interview was conducted using a semi-structured approach with open ended questions designed to allow participants to fully elaborate on their responses. All interviews were audiotaped and transcribed verbatim. Data from these interviews were used to inform the creation of questions for the focus group following a peer debrief between myself and my advisor.

A second (final) individual interview (Appendix L) with each teacher was conducted at the end of the school year. The one early interview was necessitated because Karen was leaving the State for the summer and would be unavailable at a later date. This 90 minute interview was conducted after all other data had been collected and an initial analysis was underway with emergent themes conceptualized. The questions were based upon that ongoing analysis and provided an opportunity to discuss the emerging themes with the participants, ask any questions that arose from the analysis and helped to triangulate the data. It was audio-taped and transcribed verbatim.
3.8.5. Observations

Observations were used to “discover complex interactions in natural social settings (Marshall & Rossman, 1989, p. 80) and as such were necessary to understand the interaction of the teachers, students and the observable changes in teachers’ practice. At the conclusion of the initial meeting to secure informed consent, teachers were asked to choose a class they would prefer me to observe during the first of three visits to their school. Following each observation, an appointment was made for a subsequent visit. Three visits per participant allowed me, as a non-participant observer, to see both individual events unique to each lesson and trends that appeared across lessons, units and grade level. Each teacher was observed once a month for three consecutive months at prearranged times. Two of the three observations took place prior to the focus group interview.

Each observation was guided by the Observation Protocol (see Appendix M) upon which I recorded instances of alignment or non-alignment with the curricular innovations and the key themes introduced throughout the PEP professional development program. In addition, I recorded field notes and completed a time line of the lesson that included a description of what happened instructionally and managerially throughout the lesson. I also recorded questions to ask the participants at a later date. Scheduling did not allow time to ask these questions immediately following each lesson and the decision was made to include a 15 minute interview with each participant after all three observations had been completed.
3.8.6. Post-Observation Interview

Following completion of all three observations, each participant was scheduled for a 15 minute post-observation interview (Appendix N) in order to answer the questions I had generated from the observations. In order to assist with lesson recall, the interviews were completed before the final interview. Four of the interviews occurred within 5 days of the final observation, two of them within two weeks of the final observation. Interviews were audio-taped and transcribed verbatim. Although the time between the observations and interviews might be considered limiting, the teachers were able to recall most of the details, although there were a few exceptions that required a more detailed description of what I had observed. Given that this data source is part of a very large corpus of other data, its contribution is valuable regardless of temporal proximity.

3.8.7. Principal Interviews

During the interview with the District Health and Physical Education Coordinator and the initial interviews with the teachers, it became clear that the principals’ support for physical education was perceived slightly differently by the six teachers and the DHEC. In order to understand the role of the principal in the lives of these teachers, and also in an attempt to triangulate the emerging data, I decided to interview the principals. A 30 minute semi-structured interview was scheduled with each principal. Interviews were audio-taped and fully transcribed verbatim (Appendix O).

3.8.8. Documents

Document analysis, as included in Table 3.2, was ongoing throughout the study and was used to confirm or disconfirm emerging themes and to assist in developing a robust understanding of the findings. The documents used in the analysis included: the
PEP grant proposals, the PEP program evaluation report, the Unit / Lesson plan booklets created by the cohort, documentation from the district level outlining participation patterns, instructional artifacts created by the teachers and, pre-existing questionnaires completed by the teachers and a e-mail between the district coordinator a principal in the district.

3.9. Data Analysis

Given the focus on understanding both what and how social reality is constructed by a group of teachers learning together in a community of practice, data from this study were analyzed using an inductive analysis process. Inductive analysis builds theoretical categories by first looking for topics, regularities and themes that emerge from an initial reading of the data and then coding the data into categories (Tesch, 1990). The analysis, as conducted, used the following six grounded theory strategies as outlined by Charmaz (2000, p. 510):

a. Simultaneous collection and analysis of data: achieved through constant comparison between data analysis and collection.

b. A two-step data coding process: achieved by coding first for emergent conceptual themes and ideas, and then recoding to ensure the fit and alignment

c. Comparative methods: achieved by comparing multiple data sources to confirm or disconfirm emergent themes (i.e. different people, same people at different points in time, comparing categories)

d. Demo writing aimed at the construction of a conceptual analysis: Achieved through creating notes regarding the conceptual processing, assumptions and actions as data were being analyzed
e. Sampling to refine the researchers emerging theoretical ideas: achieved by returning to people and documents if more information was necessary (i.e. adding the principal interviews)

f. A careful alignment and interpret data with the theoretical frame: achieved through consistent attention to integration of the theoretical frame and through peer debrief

The underlying assumption in employing these strategies was my adherence to a constructivist approach to grounded theory. Charmaz (2000) suggests that rather than assume we gather data “unfettered by bias or biography […] a constructivist approach recognizes that the categories, concepts and theoretical level of an analysis emerge from the researcher’s interactions within the field and questions about the data” (p. 522). The chapter will conclude with the lens through which the data was interpreted. All data were organized and coded within the qualitative software program Nud*ist (N6) (QSR, N6, 2002).

3.10. Validity and Trustworthiness

Trustworthiness, or the ability to establish that findings are valid for this particular context (Patton, 1990) was achieved though data and methodological triangulation (Denzin, 1978) as well as peer debriefing (Patton, 1990), member checks (Glesne, 1999), discriminant case analysis (Glesne, 1999; Kirsch, 1999), and an examination of researcher bias (Glesne, 1999). Each of these will be discussed in turn.

Denzin (1978) suggests that triangulation can be achieved through the use of both a variety of data sources and multiple methods. This study used data collected from questionnaires, individual and group interviews, individual observations, document
analysis and focus groups that included read-and-comment activities, as well as written responses and brainstorming activities.

The process of peer debriefing in which a peer reviews the data in order to confirm the researchers’ findings (Patton, 1990) was conducted primarily by my advisor. This process occurred periodically throughout the data collection and analysis, and began with the selection of the participants.

Member checking is another way to ensure trustworthiness of the data and is an important consideration given that all research is inherently interpreted through the lens of the researcher. The goal of the member check is to ensure the researcher accurately represents the participant (Glesne, 1999). In order to accurately represent how the professional identities of the teachers in this study have changed and whether I have correctly interpreted their involvement within the school, the communities of practice, the district and with other professionals, participants in this study were provided copies of individual interview transcripts and case stories. Teachers were asked to identify any discrepancies, misinterpretations and clarifications they would like to make. Transcripts were e-mailed to participants. None of the participants requested changes.

Although the cases were selected based upon their instructive ability and interpreted from an instrumental and collective case study perspective, the need to look for discriminant or outlier data within the cases is important. Kirsch (1999) suggests the purpose is to add depth to our interpretation, and as such a conscious effort was made to search for and use discriminant data to inform the overall findings.

Finally, in order to fully acknowledge, reflect upon and understand my subjective bias, I kept a reflective journal throughout the study. This served to expose the biases I
brought to the interpretation (Glesne, 1999), and provided a point of discussion during the peer debrief sessions.

3.11. My lens

I had been working with many of the PEP teachers in some capacity since the first PEP professional development introductory session in March of 2002, and additionally as a university supervisor when student teachers were placed in their schools. Throughout my time as a grant facilitator, I developed relationships with many of the teachers and became a part of the community of practice that was formed during the program.

Teachers had come to know me and to accept my presence within their classroom as non-evaluative and non-threatening. They also knew I had developed a deep understanding of the contexts within which they work, and I believe it provided them the space to share their frustrations and present a realistic version of their practices.

Given my background as a teaching assistant throughout my masters and doctoral programs, I also had excellent content knowledge with regard to understanding the curricular innovations that were introduced to the teachers. I had myself learned and used these innovations both in teaching college students and during my public school student teaching semester. This enabled me to clearly and easily identify and sort what I was seeing during the observations.

One of my biases that I worked hard to minimize was related to my interpretation of teacher effectiveness as I observed the lessons. As a trained teacher educator and university supervisor for six years it was very difficult not to focus on those behaviors. The guiding questions that I took with me to each observation assisted with keeping me focused on specific indicators relative to the goals of the project. As well, I continually
worked to understand teachers and their practices based upon their individual histories and their teaching contexts.
CHAPTER 4

FINDINGS

Prior to examining the findings relative to each research question a brief description of each participant’s entry into teaching, their experiences with other professional development interventions, and the contexts within which they currently teach will be provided in order to assist the reader in understanding the individual teachers who contributed to the large community of practice.

Given the theoretical frame of this study and the methodological decisions that have been made regarding a collective case study approach, findings will not be presented in a case by case format beyond the initial introduction to the teachers. Instead, each question will be answered drawing from what we have learned from these teachers collectively. Sometimes all voices will be heard, and on other occasions several will be highlighted. Where discrepant findings do emerge, these will be acknowledged and discussed.

The provenience of each quote is based upon the following table which presents a summary of the data sources in the order they were collected (see Chapter 3 for full details pertaining to each):
<table>
<thead>
<tr>
<th>Provenience</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>I1</td>
<td>First Interview conducted with each participant</td>
</tr>
<tr>
<td>LH</td>
<td>Professional / Life History Information Form</td>
</tr>
<tr>
<td>OB1</td>
<td>First teaching observation of each participant</td>
</tr>
<tr>
<td>OB2</td>
<td>Second teaching observation of each participant</td>
</tr>
<tr>
<td>GI or</td>
<td>Group Interview with participants</td>
</tr>
<tr>
<td>G - initials</td>
<td></td>
</tr>
<tr>
<td>LA1 or</td>
<td>First learning activity (provided in group interview)</td>
</tr>
<tr>
<td>Initials 1</td>
<td></td>
</tr>
<tr>
<td>LA2 or</td>
<td>Second learning activity (provided in group interview)</td>
</tr>
<tr>
<td>Initials 2</td>
<td></td>
</tr>
<tr>
<td>LA3 or</td>
<td>Third learning activity (provided in group interview)</td>
</tr>
<tr>
<td>Initials 3</td>
<td></td>
</tr>
<tr>
<td>OB3</td>
<td>Third teaching observation of each participant</td>
</tr>
<tr>
<td>OI</td>
<td>Individual Interview based on classroom observations of participants</td>
</tr>
<tr>
<td>I2</td>
<td>Final interview with each participant</td>
</tr>
<tr>
<td>I</td>
<td>Interview with district representative</td>
</tr>
</tbody>
</table>

Table 4.1 Provenience of the Data

4.1. The Teachers

4.1.1. Debbie (DR)

Debbie is a high school teacher with 20 years of teaching experience. Following eight years as a middle school teacher and one year at the elementary level, Debbie has spent the last 11 years at her current high school. Debbie had wanted to become a physical education teacher since her own high school experience. As a student, she had both experienced and observed positive interactions between the physical educator and students that she believed resulted in a fun learning environment. Attending a college in her home state, Debbie graduated after taking two years off early in her program when she found herself tired of school and disinterested in the content of the freshman courses.
Following time off, she was more certain than ever that she wanted to teach physical education.

Although Debbie described her preparation program as “excellent” (I1, p.1) and felt very well prepared, she also believed herself ill-prepared to teach in an urban school believing that “no college could prepare you for an urban school setting, truly; it’s a whole different world” (I1, p. 1). Debbie described her experience of being a young white teacher within an urban setting with predominantly African American students and explained that it took a couple of years to understand what the kids were saying and the meaning behind what they were saying. Debbie felt she truly began to understand her students when she stopped focusing on management and began to understand that students had their own needs that had little to do with whether or not she completed her lesson. Debbie accepted her position at the high school at a point in her career where she felt comfortable with her “ability to teach activities, sport skills and that” (I1, p. 5). She has remained at the same high school since that that time. Debbie was selected to the study as a highly involved participant.

Prior to the PEP intervention, Debbie’s professional development was limited to in-service workshops, and as she stated, the “brain” (LH, p.1). She explained her perception of professional development prior to PEP:

I don’t know, maybe it’s also the way the district runs our professional days too because there’s very little for phys-ed people and it’s been that way. I mean I’ve been in the district since ’89 so, you know, professional days are blow-off days for your phys-ed people…. There was not phys-ed stuff going on. Very little and unappealing and most of it was elementary geared…. (I2, p. 13)
4.1.1.1. School Context:

During the PEP intervention, Debbie was one of two full time physical educators in her building. Although she has always had a co-teacher, the two have continued to teach their classes separately; sharing a gym divided by a movable curtain. Debbie never talked about her co-teacher.

During the PEP intervention Debbie’s school was on block scheduling. The first year following PEP her school made the decision to re-align and move to a small school model, and consequently Debbie was forced to re-apply and interview for her own position at end of that academic year. This year, her school implemented the small school model, creating three distinct schools within the same building. Rather than continue to teach physical education full time, Debbie was hired to teach health and physical education. She teaches the former all day excepting one physical education class in the afternoon that was to be for 10th grade students from one of the small schools and a few juniors and seniors until they had graduated. Instead, the reality of her afternoon class is that she teachers “anybody and everybody…it doesn’t matter which school it is” (I1, p.9). She teaches 38 students from grades 10, 11 and 12; a number she has never had in 10 years of teaching at the school, and one she feels is dangerous and has limited the quality of her program this year.

4.1.2. Jim (JT)

Jim became interested in teaching physical education following completion of an undergraduate degree in Sport Management, after which his intention was to accept a position with a professional sports team. Instead Jim met his wife, and decided to continue coaching rather than leave the area. Jim believed the coaching internship he had
completed during his preparation program initially tweaked his interest in moving from coaching to teaching. As Jim describes it,

> it wasn’t really as if I wanted to teach and the more that I was coaching and the more I was around the school during the day, and the relationship you start to develop with the kids, it kinda put me into that route of wanting to teach. (I1, p. 1)

Jim accepted his first teaching position at a Children’s Center located in a large urban district that teaches children with severe discipline problems. During that time he began the process of earning his physical education teaching certification through a Masters program in physical education and athletic administration; his health certification; and also his special education certification. During his four years at the center Jim obtained all three.

Following his four years at the Center, Jim accepted a position teaching special education at a high school, but left after one year in order to accept a head coaching position at a new high school that required him to teach inclusion as well as math, history, English and English literature. After two years at his school Jim was offered a position in a middle school that “guaranteed me I would get to teach phys-ed” (I1, p. 3) after two years of teaching special education. Jim did not receive the job teaching physical education when it became available two years later and resigned from his position feeling frustrated and burned out. As he describes it “when you don’t really want to go to school anymore you don’t have a purpose; and for the kids and for myself I decided to get out” (I1, p. 3). One month after leaving Jim was offered a position at an elementary school teaching physical education in an urban district near his home. Jim accepted the position and has now been at the school for six years.
Since his undergraduate degree was not in physical education and he had completed neither education courses nor student teaching prior to his first teaching job, Jim felt that he was prepared to plan and organize but was not prepared to deal with the children and the behavior management aspect of teaching. Jim described being thrown into his first teaching experience: “So I had basically, basically had a lab to myself to fall flat on my face and make the mistakes you’re going to make” (I1, p. 5). During his subsequent certification program, Jim felt he learned the skill of lesson planning, and also learned the importance of getting to know the students beyond viewing them simply as class members. Jim was selected to the study as a highly involved participant.

Prior to the PEP intervention, Jim’s professional development consisted of in-service workshops in reading and math and one on ‘finding your passion’. Other than the seminar on finding your passion, Jim indicated his other inservice workshops were “ineffective [and] not related to me” (LH, p.1).

4.1.2.1. School Context:

During the PEP intervention Jim saw his students once per week and was teaching four classes per day. After initially feeling he had to “fight” to gain respect from his peers, he felt that he had finally achieved his goal after three years at the school. Jim credits this to the fact that his peers had seen that he was not “just rolling the ball out” and that he was incorporating writing, math and reading into his lessons. Jim felt that he had a strong and supportive relationship with his principal as they had developed a mutually trusting relationship; consequently Jim believed he received whatever he requested. This year, Jim had a new principal and described his initial experience as “starting at ground zero” (I1, p. 11). As a result, he also described himself as more
aggressive in terms of demonstrating how he was integrating writing and math and also talking about his experiences presenting at the national conference while in the PEP grant. Jim took this approach because he believes his “program’s in line and I don’t want anything to change” (I1, p. 12). As well, due to a change in the reading blocks, Jim has doubled the number of classes he teaches each day. He now teaches seven thirty minute classes daily and every child has physical education twice per week. Jim is extremely pleased with the change because he had earlier been forced to teach reading rather than physical education.

4.1.3. Crystal (CS)

Crystal has been an elementary school teacher for seven years and remains at her first school, an alternative school whose mission includes educating both mind and body and therefore explicitly values both academics and physical fitness. It is one of two such alternative schools in the district. Like Jim, Crystal’s undergraduate education was not in physical education, but rather deaf education. Not knowing where her passion lay when completing high school and applying for college, Crystal chose deaf education following a meeting with a school counselor and recollection of the close relationships she had formed with her deaf peers and friends in elementary school. Accepting a partial scholarship to play volleyball at the Alma matter of her parents, Crystal graduated with a teaching certification in deaf education.

Following completion of her undergraduate degree, Crystal began coaching gymnastics and accepted a position as a Gymnastics and Adult Sports Director at a local YMCA where she remained and built the program for six years. During her time there, Crystal began to teach aquatics to children with special needs and developed an interest
in special education, thinking she might teach physical education to deaf students. Finding one of the few programs offering adapted physical education, Crystal left her home state and enrolled in a one year Masters of Education program in physical education which she completed along with her Masters of Arts in adapted physical education. Prior to beginning her Masters degree, Crystal was required to complete pre-requisites in physical education and therefore spent two years completing her education. After completing her advanced degrees, Crystal accepted a position as the director of a camp that was a national training center for children and adults with disabilities. Frustrated with the administration and living in a camp setting that required a twenty four hour commitment, Crystal applied to teach physical education and accepted a position in her current school.

Crystal felt both her Masters program and her experience teaching children in other contexts left her well prepared for her first teaching experience; although she felt anxious about being one teacher with a class of 30 students. Her difficulties lay mostly with the principal she had in her first year at the school who Crystal believed perceived her as not being a team player due to her expressed resistance to teaching reading. Crystal was selected to the study as a highly involved participant.

Prior to attending the PEP intervention, Crystal attended numerous technology courses, and since her attendance at PEP, she has attended Physical Best and Best Practice workshops, and has recently completed her National Boards for Professional Teaching Standards Candidacy exam.
4.1.3.1. School Context:

Crystal has remained in her school during her entire tenure as a teacher. She has a co-teacher who teaches in a gymnasium at the other end of the building. Given Crystal’s interest and comfort in teaching the older children, her classes are exclusively grades three to five. She teaches six thirty-minute classes daily and this past year saw each class three times per week. Since her gymnasium doubles as a cafeteria and a latch-key room, she has no available teaching space for two and a half hours in the middle of the day. She therefore assumes the role as a technology resource person, a role given to her this year since she no longer teaches reading.

During the PEP intervention she was teaching reading for 90 minutes in the morning and physical education for 90 minutes in the afternoon, in spite of her public desire to teach only physical education. During her first year in the school, her opposition to teaching reading affected the relationship she had with her principal and since that time, the support she has felt from the administration has been her biggest challenge. As she states “In five years time we had four administrators; and just trying to figure out, ok, where are the boundaries for this one” (I1, p. 6). Like Jim, Crystal has been forced to spend part of her day teaching reading due to the reform agenda, and her early resistance to doing so was a source of friction between herself and her first principal.

After suggesting in her first interview that she would prefer to teach at middle school, she was provided the opportunity when staff reduced at the end of this year. She applied for and received a job teaching middle school physical education, and then was recalled to her school due to complaints from the parents. When forced to choose
between the two, Crystal chose her old school since she felt extremely supported and planned to begin a family.

4.1.4. Susan (SP)

Susan comes from a family of teachers that includes her mother and two aunts. She enrolled in a university close to where she attended high school when her parents moved to another state as a consequence of a military transfer; she wanted to remain near people she knew. Following completion of three years toward an undergraduate degree in Sports Medicine, Susan realized she no longer wished to pursue a career in athletic training but recognized a desire to “do something that involved sports and kids, because that was still my focus” (I1, p. 1). Susan switched her major to health and physical education, completed that program in two years and received her certification. Susan has been a middle school teacher for six years and like Crystal, remains at the school in which she began her career.

When asked how prepared she felt for her first teaching experience, Susan’s immediate response was “I didn’t feel prepared at all” (I1, p. 3). She went on to explain that her preparation program had focused on elementary content and although it had left her well prepared to teach elementary school, “middle school, I kinda had to just really go on my own” (I1, p. 3). As well, Susan felt ill-prepared to teach the large population of Somali students enrolled in her school. Susan explained her first experience:

And I walked in there and there were these strange people with head gear on, you know like with their heads covered and I thought what are all these people doing in [this city and state]...’cause number one I had no clue they were here, I didn’t know where they’d come from. I mean that was the biggest shock to me...I didn’t know how to teach these kids”. (I1, p. 3)
She described going home and crying every day during her first year, receiving no support from her co-teacher who simply had his students play basketball. She also did not feel supported by her administration because “I just wasn’t a big concern to anybody so it didn’t really matter what I was doing in there” (I1, p.4). Susan learned what worked in her context by trying different things and learning what was effective and what “just flat out didn’t work” (I1, p. 4). Susan was selected to the study as a participant who did not remain involved at the district.

Prior to her participation in the PEP intervention Susan had attended no professional development beyond mandatory in-service workshops unrelated to physical education and since has attended a Physical Best workshop. She describes her experience with inservice workshops like this:

…I haven’t even gone to all the PE workshops when they’ve been given because sometimes’ there’s something else that I want to go to. And this year, a lot of the professional development workshops were things that I had already done in PEP which is great because then they’re, you know, exposing other people to it. But I just didn’t go because there’d be something else I was kind of interested in and I want to go to there. (I2, p. 14)

4.1.4.1. School Context:

Prior to this year, Susan had been teaching with the same co-teacher since she began at the school. Although both classes share one gymnasium with no divider, Susan would not engage in a co-teaching model because she and her co-teacher had “totally separate philosophies” (I1, p. 9). With a new teacher in place this year (as second PEP grant participant), Susan and her teaching partner now co-teach every class and most often arrange this by offering two levels of each activity; a rookie level and veteran level. Each teacher then takes a group.
Susan teaches two classes in the morning and two to three in afternoon. Her class ranges from 15 to 37 students with an average class size ranging from 25 to 30 students. Her co-teacher has the same numbers. In addition to teaching students enrolled in her school officially, the school site houses a Welcome Center in the basement and therefore Susan also teaches students who have very little English.

In addition to a new co-teacher, the school principal has also changed since the PEP intervention. Susan indicated that her old principal “never came in the gym, never worried about what we were doing” (I1, p.10). This past year her school was reconstituted and like Debbie a year earlier, she had to re-apply for her position. Susan was one 13 teachers who was rehired; thirty one teachers in her school were not. She believes she was retained because “my principal knows that I am willing to do what it takes to make things better” (p. I1, p.11).

4.1.5. Dan (DC)

Dan came to teaching following a long term career in the Marine Core, first in active duty and then within the National Guard Reserve. Following his time on active duty, Dan enrolled in an Associates program in law enforcement since that was “the only thing I related to at the time when I got off active duty; enforcing the law or whatever, firing weapons, I didn’t have any transferable skills” (I1, p. 1). Realizing he did not want to pursue a career in law enforcement after all, and with the National Guard willing to pay 100% tuition, Dan enrolled in physical education at a local university. During his time in the program, Dan had a bad experience with student teaching and decided he did not want to teach. He explained “I just didn’t like the undisciplined kids in middle school; that just turned me off totally” (I1, p.2), and he went on to say: “That middle school that
did it to me. I thought, I don’t want to do this for a living. It was hard…it wasn’t worth it” (II, p.3).

Following one year at a transportation company, a job he took upon completion of his degree, Dan became certified as a health care provider and opened a child care facility for pre-school boys out of his home. It provided him an opportunity to be home with his two young sons, a job he did for three years. Given that Dan’s role in the military had evolved to teaching leadership development, Dan next ventured into corporate training, something he felt was aligned with the skills for training and teaching he had developed and was currently using in the military.

After five years with a large department store that included a relocation first out of state and then back into state, Dan felt he no longer wished to work in the corporate world. With encouragement from others who insisted he would be a good teacher, Dan enrolled in a Masters program to become certified to teach pre-K to Seven students in the classroom, and also investigated his options of renewing his physical education teaching license through the Troops for Teachers program. Dan recalled,

And I started thinking why not? Let me see if I can get my license renewed just as a back-up, even though I didn’t want to teach phys-ed…I wanted to be, I thought I wanted to be a classroom teacher. (II, p. 6)

After being grandfathered into his certification for physical education and submitting resumes, Dan was approached with a position that would have him travel to teach in different elementary schools as well as assist with the PEP grant as a part time assistant to the District Coordinator. Dan was selected to the study as a highly involved participant. Prior to the PEP intervention, Dan had attended no professional development
in physical education although he had attended a number through his previous military and civilian careers.

4.1.5.1. School Context:

Given the unique dual role Dan occupied since he began teaching physical education in this district, his context continued to change. In his first year, he began teaching at two schools and felt he was not prepared at all; as Dan tells it, “I had nothing to draw on” (I1, p.7). Dan worked for two weeks with the teacher he was to replace and then took over the class; he found the experience “very challenging” (I1, p.7). For the next two years, Dan divided his time between the district office and five schools.

This past year marked Dan’s first year as a full time teacher in one school, having replaced a teacher who moved to the high school. He teaches three one-hour classes each day and his class size ranges from 18 to 27 students. Dan’s largest barrier this year has been overcoming the animosity that had developed between the previous physical educator and other teachers in the building. He believed that his principal, who was also new to the school this year, was very supportive. As a consequence he finds the school climate very good. Like Crystal, Dan also completed his National Boards for Professional Teaching Standards Candidacy exam.

4.1.6. Karen (KM)

Karen first became interested in teaching while working at a summer camp as a lifeguard and swimming instructor while in her undergraduate program in Electrical Engineering. Karen felt she was pushed into engineering given her abilities in math and science and her strong college entrance exam scores. During her initial year in the program she felt a sense of dissatisfaction,
and when I started working with kids I was like, you know what, this is what I want to do and I realized I’m more of a service oriented person…in engineering I could not find where I was ever going to be doing that. (I1, p. 1)

Finding resistance to the idea of switching to an education major from her advisor and parents, Karen switched to computer management in her second year before finally making the move to the Physical, Health and Safety Education major offered at the same university in her third year of college. Given her interest in health, she went into the program more interested in health education than physical education. She developed an interest in the latter once “I realized how closely the two were tied together” (I1, p. 2). Karen realized this following an experience with a teacher she describes as one of the best she’s ever had. Karen completed all of her education requirements in two years and graduated with her teaching certification.

Karen describes her undergraduate preparation as “horrible…probably the worst thing I could have ever done as far as a program for physical education” (I1, p. 2). She went so far as to write a letter outlining her difficulties with the program following her graduation, and the program was dropped the year after her departure. Karen believes it was because “they realized that they were not giving the kids the education they deserved” (I1, p. 3).

Prior to accepting her current position as a middle school teacher, one she has held for six years, Karen worked as a substitute teacher in her home state for 10 years. Personal commitments prevented her from leaving the state earlier and she was not able to find a full time physical education position. During her time as a substitute, Karen felt she had management skills gained through her experiences as a lifeguard, but also felt she never really had control of the children in spite of the fact she was considered an
excellent substitute because there were never any problems in her classroom. Karen suggested in the early days that she focused on skills and “I never really focused on the student” (I1, p. 6). Upon arriving at her first full time teaching position, Karen explained that “my first month of teaching was horrible because I tried to implement my plan, my way, and wasn’t going to deviate at all; and they had to conform to me” (I1, p. 7). As well, she described her co-teacher upon her arrival as disgruntled and offering little content beyond supervised basketball. Susan was selected to the study as a participant who had not remained involved at the district.

Prior to her participation in the PEP intervention, Karen had attended a professional development summit in her home state, a one day workshop on teaching dance, and an in-service seminar on writing to the proficiency in Physical Education. Like the both Jim and Debbie, Karen was explicit in describing her feelings about her in-service experiences in suggesting they were “multiple professional development seminars which in no way involved physical education but we were forced to go and listen to” (LH, p.1).

4.1.6.1. School Climate:

Karen has been at the same school since she began teaching in the district. She has also had the same co-teacher. In her early days of teaching, Karen was extremely frustrated with her co-teacher who preferred to let his students play baseball. Karen preferred to “work on my half of the gym, doing things my way and trying to make something happen” (I1, p. 5). Karen describes a slow process of trust building between the two of them over the last four years as Timothy first watched and then “just started to jump in” (I1, p. 5) after observing the programming that Karen was doing. The two began
co-teaching their classes, and with Karen’s push Tim joined the second grant. They both completed their Masters Degree this past year.

Karen has also struggled with her principal, who has also remained the same since PEP began. Karen believes her principal blocks some of her initiatives and refuses to make physical education a priority in terms of scheduling. Currently Karen’s classes range from 20 to 51 students and this is how she describes her schedule:

Well, we go as low as 20 and as high as 51, and there is no reason, there is no reason for the imbalance. We have some students that we get every single day for a semester, we have some students who we get every single day for nine weeks, we have some students that we get Monday, Wednesday, Friday in with the same students. We have some students that we only see on Tuesday, Thursday. Some of the Monday, Wednesday, Friday students we have for nine weeks, some of ‘em we have for an entire semester. One of them we’ve had every day for a year, it’ll be three 9 weeks total so far and we may end up having them the fourth nine weeks if they don’t do a health program. (I1, p.11)

4.2. Research Question 1

Research Question 1: How were teachers’ professional identities changed as a result of interactions within a community of practice?

In answering this question, the findings will be presented to help develop an understanding not only of how the identities of these teachers have changed, but also how these identities have been self-authored by the participants, their interaction within the communities and their positional identities as physical educators. In so doing, it allows us to understand identity as occurring ‘in practice’ as suggested by Holland et al. (1998), drawing upon the work of both Bakhtin and Vygotsky. As Holland et al. (1998) suggests,

Identities have, to our minds, principally this import: they are social forms of organization, public and intimate, that mediate this development of human agency. It is a process of personal formation that occurs via cultural resources enacted in a social context. The person “makes” herself over into an actor in a cultural world…. (p. 282)
How teachers author these identities is reflected in the voices they assume as they talk about their experiences and their practices. Each person has multiple voices that are sometimes in conflict with each other, sometimes intertwined, but always orchestrated and put together in way that allows individuals to self-author their story. Like a novel these voices articulate an authors’ position, less through explicit statements and more through juxtaposition and orchestration of these voices (Holland et al, 1998). This study will present a combination of both explicit statements and those that emerged as teachers engaged in interviews and activities designed to “elicit accounts and that might retrieve the process of authorship” (p. 179) as detailed in Chapter 3.

Teachers assumed voices of collaborators, leaders, experts and innovators and advocates as seen in Figure 4.1. They assumed these voices while shedding, and sometimes defying their positional or relational identities as a marginalized, disrespected and isolated sector of the teaching core. Holland et al. (1998) describes relational or positional identities as having “to do with behavior as indexical of claims to social relationships with others” (p. 127), or as “a person’s apprehension of her social position in the lived world: that is, depending on the others present, of her greater or lesser access to spaces, activities, genres, and through those genres, authoritative voices, or any voice at all” (p. 128).
4.2.1. Positional Identities of Marginalization

The feelings of marginalization and disrespect were directly evident and peppered throughout the discourses of the teachers. The voices appeared as they talked about their experiences with other teachers in their buildings or within the district, their principals, parents and in some cases, as they reflected on the support they felt from the district. The data that will be presented here shows that some teachers still feel marginalized at different levels, including the district level, even after the end of PEP. The data that will be presented later with respect to the other voices that also emerged will show how teachers felt empowered to shed these positional identities by assuming other roles.
Taken together, it is less surprising that teachers expressed feelings of marginalization at the district level two years after the intervention, because teachers (three in particular) felt that things would change for them; they were disappointed they had not.

The exception was Dan. Although he never spoke about feeling marginalized or disrespected directly, when asked about his current context, he compared it to his previous ones:

I’ve got a very supportive principal for sure. She’s very supportive and she’s the only one I’ve had out of 11 schools I’ve been in over the years that does an evaluation frankly; where she actually goes and observes, writes and puts down and gives you feedback on what you should be doing. (I2, p. 8)

Although Dan didn’t perceive himself as marginalized, the positions he willingly assumed within his school would have been considered evidence of marginalization to other teachers in the study, particularly Jim whose principal insists he is unwilling to engage in any activities outside of the gym for which he not getting paid. Dan’s view of his position became evident when he talked about the ways he was participating in the school in order to overcome some of the negative things he had heard about the physical educator he had replaced this year.

I came into the school, all they did was, all I heard was how much they hated the previous PE teacher … What she did, [what] she didn’t do enough; you know she wasn’t busy enough. So my goal is an attempt to change all that; not have any down time. I had, I have downtime but I was going to make sure…they were going to not see me not working.

*1: So how do you arrange that?

Duties. I have breakfast duty in the morning and I basically volunteered to do that. Then I help clean the gym after breakfast and that ties me up until I start teaching. If I don’t have anything, like if I don’t have a first class at 9:15, it’s not started until 10:30, I help out in the office or I just inventory or get things ready for the upcoming classes. I never sit around and do nothing…. and I have lunch duty too. And I help take all the tables up, put all the tables down, I help him clean the gym
at lunch time so all that time, and I take care of all the playground equipment, all except for the recesses. And then I have bus duty at night time. (I1, p. 12)

Dan willingly cast himself in roles not expected of other teachers and valued by his principal. When asked what Dan does well, his principal began by talking about his flexibility and continued:

He is also familiar with a PO…when we need something we have to purchase it with a purchase order, he can go online and do that in the event that our secretary is out or what have you, he can do that within a heartbeat. So he’s almost like a renaissance man, I mean he can do everything and when we need something he’s always there… he’s very, very good in terms of just helping out all around within the school. (PI, p. 2)

Arguably this issue was not centered on asking Dan to complete these tasks during time that would otherwise be spent teaching physical education, as is the case below. However, it is to suggest the lengths Dan has gone, as a first year full time teacher, to overcome perceptions of ‘how busy’ he ought to be from a justificatory perspective.

In stark contrast, Jim believes that setting boundaries is an important part of gaining respect. After fighting for respect when he first arrived at his school feeling his peers viewed him as “just a babysitter” and his program as “play time for a grade” (I1, p. 10), Jim described what happened this year when a new principal arrived:

Yeah, the new principals’[here] this year and teachers would bring their kids down early and pick them up late, so you really had to fight that battle, you know. If they brought them down early, I would literally go hide in the teachers lounge until class time started, and they would get mad. I’m like, you know what, so it ticked some people off, but you had to fight for your respect…and for your program. You had to do that. If you didn’t do it, they were going to walk all over you and I think a lot of phys-ed teachers fight that…(I1, p. 10)

Jim fought a similar battle when he was asked to teach reading in his school. His principal explained:
What I learned about [Jim] is that he is very passionate about phys-ed. When I first came here he was scheduled to do tutoring for the Success for All Reading Program. The feedback I got from our reading specialist was don’t bother because it’s basically either my way or no way. I mean it’s just basically arms folded not really doing anything. But I actually changed the master schedule with [Jim]…to allow him to teach nothing but gym…And you know he’s a lot happier since that change because he just doesn’t want to teach anything but gym. And he only wants to teach it in the gym. And he will go outside occasionally. (PI, p. 5)

Jim’s resistance to teaching outside of his specialty was shared by Crystal, who expressed her position in this way:

…you know at one point I got called into my own equipment room and told I wasn’t being a team player …and got accused of not being a team player because somebody has asked me my opinion of the reading program and I gave my opinion….Somebody said well, what do you think? Do you think as a specialist you would want to teach in the reading program? And, not knowing that the principal had since walked in and was standing behind me I said… you know if I had wanted to be in a classroom, I’d still be in Alabama at a deaf school. I said I didn’t come here to teach reading, I came here to teach PE…. (I1, p. 5)

Issues of marginalization and respect appeared consistently throughout Crystal’s discourse. She listed “fighting for support and respect in my building” (LA1, p.1) as one of her biggest disappointments since the end of PEP and when asked about the kind of support she felt from the district, Crystal and I had the following exchange:

At the district level, we’re still combating the ideology that it’s just gym. And we still have PE teachers who are calling it gym and so trying to get that focus away from rolling out the ball to actually what we are doing in the district, I don’t think people get it. And so it’s hard for us to get the support.

*I2: And so what does that, I am trying to sort out what that looks like for you. I mean what experiences do you have that make you feel that way?

CSI2: Just from other teachers not in my building…When we go to workshops, or when you go, I take classes all the time, and you know I’m sitting in class and other teachers will be like well what are you doing in gym or whatever. I’m like, well right now I am not in the gym, but when I teach PE… You know it’s just re-educating and I know that sometimes I come off kind of snotty about that with them, but I don’t want to be marginalized by them or by anybody else in the district. So it’s more just that broad umbrella of people don’t, other teachers don’t
understand what we’re doing…It’s just that general feeling. I don’t know, you know, at the high level of the district, it’s just like anywhere else… (I2, p. 3)

Debbie expressed similar feelings when considering district level support:

Well, even right now with trying to implement the fitness for life into our program now, you know, [Denise], they’ll only give her a classroom set of books. Now, I piloted the program, I know what the need is. The district doesn’t care. You know, we have to go through a whole lot more hoops to prove the value of the program before they’ll allot us money for books; which is just beyond my comprehension. It’s an educational system and you don’t want to supply books? So it’s that type of stuff….I just don’t think that there’s value; I don’t think the district values physical education. (I2, p. 5)

Debbie assumed a marginalized voice frequently. In answering the question, what might a new physical education teacher expect from other teachers in your building she gave the following two answers: “little appreciation for your subject area” and “viewed as a training ground for the athletes in the building” (LA2, p. 3).

Like the other teachers, Susan also felt marginalized. Her feelings emerged during a discussion about the ways she currently contributes to the district, and her motivation for doing so: “I want people to respect physical educators as educators. And I want people to not only respect me, but I want them to respect the other educators if they deserve that respect, if they’re good enough to deserve it” (GI, p. 7). Although she actually had more contact in the gymnasium with a district representative than any of the other teachers and also expressed that she felt honored to be asked to participate in a symposium during the PEP intervention, she believed even her participation in PEP was not as valued as it should have been:

As far as district level nothing. That’s why I asked you what does the district think about what we have been doing because I’ve never seen anything in print about what we’re doing. I’ve never heard anybody say we’re doing a good job. Now [Joe] was in my building, and he never came out and said hey good job with PEP but he said a couple things to me like, you know oh you’re part of PEP,
that's really great, you know, general. But district wide I don’t even know if they know what we have been doing because I have never seen anything. I haven’t seen any more money I haven’t seen anything. I haven’t seen anything at all. (I2, p. 5)

Karen also assumes a marginalized voice frequently when talking about other people's perceptions of her program. After talking about a school wide initiative that was supposed to have resulted in funding for her physical education program, Karen concluded “…when it's not supported by your administration, it just makes you feel your job is worthless. We feel like second and third class citizens…” (I1, p.12). Karen listed “a thick skin because many do not view your position as important” (LA2, p. 2) as an attribute a physical education teacher might need to be successful in her building. In Jim’s answer, he included “the ability to defend stereotypes” (LA2, p. 2).

4.2.2. Voices of Change

Different voices emerged as teachers talked about and reflected on their experiences during PEP, the ways they had changed, and their experiences since the end of PEP program. The feelings of marginalization and lack of respect seemed to fuel their commitment to change. They began to occupy positions in defiance of their positional identities as marginalized and isolated teachers. When asked if her responsibility to physical education had changed for example, Debbie said this:

…I’m feeling more of a responsibility district wide than just to my school. But again, it’s because in my mind, my journey’s taken me to another level and I would like to see that responsibility or that feeling of responsibility to be shared, ideally [to] all phys-ed teachers in the district. Because I think when more physical education programs become educational and not [about] control, I think then the outside people will place more of a value on what we’re doing. And currently they’re not showing themselves as that….And so what I’m saying is, I think if we can take that, have most of the people in the district showing that, then it will gain respect. (I1, p. 13)
Four voices emerged in the data as teachers reflected on their participation in the PEP grant, and their current experiences within their schools and district. Teachers began to author identities as collaborators, leaders, experts and innovators and advocates.

4.2.2.1. **Voices of Collaboration**

Teachers shifted from feeling professionally isolated to valuing collaboration, its influence on their experience as teachers, and its potential to contribute to the experience of others within the district. Crystal perhaps said it the best when she answered a question about what she was most proud of in terms of her professional accomplishments:

I think that just being involved with both the PEP grants was a huge thing, I know every chance I get I’m telling people about that process, and you know, just the comradery it built and the strengthening its’ giving our department in the district. I don’t know if everybody agrees with that but I think the ones of us that actually went through that whole process and are still connected you know, would have to agree with that. (I2, p. 1)

Jim agreed with the influence of this collaboration on the district:

…it’s not like I just have my equipment. I know for the most part, of the people I really became close with, seven, eight of us, that you’ve got more than just your equipment. I think the phys-ed programs are set up better in [this district], with that core group and the support you have, than in any suburban district. (GI, p. 8)

In one of the learning activities teachers were asked to complete the sentence: I wish that PEP had: Debbie responded “gone on forever” (LA1, p. 1). When asked for clarification of this response in her final interview Debbie said this:

Gone on forever because I would like to have those energizing moments. I mean to me, because I’m a people person, being around other people is very energizing to me, you know, and I pick up on their energy and stuff…And I just liked the opportunities for getting together; and there were relationships developed. And now, we’re willing to share equipment with each other. That wouldn’t have occurred before, so I guess to have it go on forever, to have the willingness for sharing of equipment, sharing of ideas. I just would like to see those opportunities. (I2, p. 13)
The influence and commitment to collaboration was also evidenced by two teachers, Karen and Susan who were initially selected for this study based upon their low post-intervention involvement. Both of these teachers expressed that a lack of collaboration following the end of PEP had been a disappointment because it prevented opportunities to share their knowledge with other teachers in the district. Below is an excerpt of a conversation that took place during the group interview:

*I: So there’s some similarities and there’s some differences. And so from things that you’ve heard around the table, are there any things that you would share. I mean Crystal was mentioning networking and everybody was shaking their heads. And is that something that most other people feel is a success?

*G-KM: I didn’t think networking was a huge success. I think, well it may be just my end of it or something, I may have missed out on something, but I just, networking was one of my disappointments because it doesn’t feel like. I mean I figured it would be a stronger networking and we would start incorporating people that never went to PEP. And that’s what I was hoping for and that didn’t happen. And like I’ve missed several first year teachers that are struggling and we’ve been working with one across the street from us, and we went to him. We saw he was outside doing a great job with the kids, we went over and we said hey, we got all this PEP equipment. I don’t know if you know anything about what went on, but come over here, let us help you out because you are doing a wonderful job. And I just, that was a disappointment with me because I don’t think we have it, I don’t think it’s been communicated to other PE teachers in our district.

*I: How do other people feel about that?

*G-SP: I’ve had, well I put that down as a disappointment also, not staying in contact with people. I just wish we had more, I wish PEP had given us like, a couple of weeks ago I was looking for lacrosse sticks and I have no idea who has lacrosse sticks. And it’d be nice if we have a list of like people who we know have all these wonderful things and things we would like to share. I was hoping PEP would do that and it didn’t. And I put down workshops too because, like I kinda wanted to share more of what we did and I think there’s still a lot of PE teachers who are struggling, but I can’t go out and find ‘em. (GI, p. 3)
Although neither felt they had the opportunity to continue collaborating and sharing, they responded to this quite differently. Susan did not reach out to other teachers, and described her experience with in-service days like this:

I don’t really have any experiences now. I mean I see them at work shops, I say hi, we ask what’s going on you know, how’s everything going in your class but other than that I don’t see people, unfortunately. I wish I did but we just don’t, we don’t have, elementary has meetings, but middle and high don’t have meetings so I don’t see the other teachers. (I2, p. 14)

Not having more formal opportunities to collaborate, Karen’s commitment to reaching out was evident in the informal ways she chose to do this. She explained the value of attending in-service workshops beyond seeing her PEP cohort

… but we get to see other people that are involved in physical education and we can…And we’re more willing to share, and hoping that they’ll open up and share back. And a lot of them do…(I2, p.7)

Dan also valued the collaboration and although he did collaborate with Jim on designing a conference presentation his collaborative voice was less resonant overall than for other teachers. All of the five other teachers listed their fellow PEP participants among those people they would consider working with if asked to present to the district; Dan’s answer included his “principal, other teachers in his building, the PE coordinator and other professionals if needed (with college professors listed in parenthesis) (LA3, p. 1). Given his dual role in doing some administrative work for the District Coordinator related to the grant, this finding is not entirely surprising.

Interestingly, although the teachers assumed voices as collaborators, their voices often spoke about collaboration with each other more than with other teachers who had not completed the intervention. This might have been the result of the affiliation that was formed while working together in the community of practice that underpinned the
intervention. This was perhaps most obvious in the focus group. When asked if PEP had influenced anything within or between buildings the following exchange took place:

*G-JT: If they went through with it [PEP] and followed through. Within my situation, yes, it’s way better than what it was.

*I: And what about you Susan?

*G-SP: My school’s better, but um it’s certainly not where I want it to be District wide, I agree with everybody else. I mean I don’t see it in between buildings so much, unless you’re looking at just PEP teachers in general. But everybody else, if they didn’t want to be in PEP then they’re probably not interesting in changing anyway.

*I: What about you Crystal, between buildings?

*G-CS: I think it’s the people, again like Susan said. It’s the people who want to be involved are involved. I think one way though that we could maybe impact that is, trying to get things where it’s collaborative so that we do get information out to everybody. (GI, p. 34)

The data show this narrow vision of collaboration was most resonant for Jim and Sue, less resonant for Crystal and least resonant for Karen. Crystal tended to feel a sense of collaboration with her colleagues at her school and envisioned reaching out to others. In the focus group interview she suggested there ought to be collaboration within a small geographic area so “you can have a core group of teaches on your side of town” (GI, p. 35). Karen felt a strong sense of collaboration with other teachers and had a consistent focus on branching out to non-PEP participants both in her discourse and her actions, some of which are threaded through other findings.

4.2.2.2. Voices of Leadership

Perhaps one of reasons that collaboration was not a resonant voice for Dan, and particularly Debbie, was that these two teachers saw themselves more as leaders than collaborators (or as advocates as presented later). Leadership seemed to be differentiated
from collaboration because it focused on training, mentoring and guiding teachers rather than working with them.

Debbie is a good example because her leadership voice resonated much louder than either her collaborative or advocacy voice. The same was true for Dan. Although one might argue that both of these teachers worked as grant facilitators and were therefore cast into leadership roles, these roles were temporary and simply provided the opportunity for these two individuals to function as leaders for a short period of time. The leadership voices that emerged were authored from within (as explained earlier) rather than ascribed. Debbie’s leadership voice grew from respect and interactions with her peers; Dan’s from the breadth of knowledge he obtained while working with both grants and the experiences he had access to as a result.

Debbie’s vision of herself as a leader was extremely explicit. When asked what professional accomplishments she was most proud of, this was her initial response:

I would say probably the presentations that I’ve made which has been, you know, presenting about the PEP grant at the national convention, at the OAHPERD Convention. I’ve done presentations for professional days for the district. I’ve done presentations within my own school. So, that’s probably the biggest accomplishment is, you know, being able to pass on the knowledge that I’ve gained from the PEP grant.

*I2: And you hadn’t done that before, you hadn’t done any of those presentations?

No, I hadn’t done any of that, had no desire.

*I2: So then how did your desire change?

I gained knowledge and I thought what I had learned was good and so I wanted to share and I like when I have things that are workable to share with other colleagues, you know, to make their programs better, supply them with the information. (I2, p. 1)
In her initial interview, Debbie said this when reflecting on her future in the district:

I have to say that at this point in my career, my life, I just see my role is different or that I’m ready for a different role. I enjoyed the role of facilitator, I enjoyed, much like the PAR\(^{1}\), that’s, really where I feel I’m headed; that’s where my heart is going right now. It’s not so much in the classroom anymore. What I want to do is to give what I’ve learned over the years, to give that information to the younger teachers and I guess that’s, maybe that’s part of why I feel how I feel…I’m, I’m ready to move out of the classroom and I see myself more in a consultant role. (I1, p. 11)

When discussing the professional accomplishments she was most proud of, she said this:

Working with the people that I did and proud of the fact that I really felt I had the respect of my peers and that they listened to me when I was talking, and I mean they heard what I was saying; not just letting someone stand up and talk. (I2, p. 1)

Evidence of Dan’s leadership voice is apparent in how he positions himself in the district. Although he believed it was impossible for him to be a mentor or leader during just four professional development days “because you don’t have the environment to do some of that” (I2, p.18), he did envision himself in a more formal leadership role. When talking about being one of four teachers involved in writing a new curriculum, Dan said this.

We initiated, the PEP writing, I was on that writing team...[Dr. Pete] guided us through that process. I took that knowledge, what he did there with us and I used the same knowledge for the health curriculum. I guided them through the same thing and came out with an almost identical product as the PE 1 and PE 2 [the new curriculum guides]. (I2, p. 4)

After describing different interactions with other teachers who “contact him when they need something” (p. 19), Dan was asked if his sense of responsibility to physical education had changed. He responded:

\(^{1}\) This a district program in which experienced teachers are selected to mentor and guide beginning teachers
I believe I have a lot of knowledge at this point from working with the grants and my responsibility is to help the teachers in the district which ultimately also affects the kids in the district any way I can. And that’s my responsibility that I have to do, and working with Denise with that, whether it’s [the] Virtual High school, PD’s or whatever within the district. And there’s something that I did learn also I didn’t mention. My personal fitness books that I have, I’m in the process of getting those published in a different format and those will affect, if they’re published, those will affect a lot of teachers. (I2, p. 19)

Dan also said this when asked to discuss the accomplishments he is most proud of:

I guess a fourth accomplishment is, um, being able to use technology, implementing technology in my own program and then being able to help other teachers involved in it and get them, and not just PE teachers because I deal with classroom teachers too, with technology. (I2, p. 3)

Karen, who had not been active within the district since PEP, also assumed a leadership voice. Karen’s voice however was very much about leadership within her school and with other teachers who had not been in PEP. She took a very proactive approach to reaching out to other teachers when the opportunity arose. In the final interview, Karen described her interaction with another teacher at a nearby school that she had consistently observed while teaching her class on the outdoor field. She recounted how she was “impressed with what he was doing” and how she telephoned the other school in hopes of offering help or advice. After leaving a message and not receiving a return call, Karen and her co-teacher walked over to the other school, met the teacher and in addition to offering equipment asked “is there any way we can help?” (I2, p. 10)

Although Karen feels she has always been a leader, she explained,

Would I have been willing to assist other teachers with my program? No ‘cause I was kind of embarrassed of it. I wasn’t proud of what I was doing, I wasn’t sure of myself, I realized that I always wanted to teach but I just didn’t like where things were going. I had witnessed that wonderful program at that summit in West Virginia and I was like, man, I want to teach like this, but it was weekend event
and shortly after that I moved to Ohio. I didn’t find that same commradary anywhere; I didn’t know how to get back to that. I knew how I wanted my program to be, but it wasn’t there. Through PEP, I know how to make my program that way and now I’m not afraid to go share what I’ve done with these other teachers. And share how I’ve fallen on my face, I mean I’m not afraid to share that either, and I think that’s something that people should know. Yes, you can have a successful program, but yes, you’re going to fall down bunch. And don’t be afraid to fall down, and there’s people here, that they’ll help you pick yourself up. (I2, p. 9)

In spite of Susan’s lack of continued involvement in the district, she felt very proud to have participated in a leadership capacity during the PEP intervention and also having been called upon to recruit teachers to the second PEP grant. During PEP she had presented at the State conference, and nearing the end had been asked to present at the Wolfe Symposium. When asked to describe her greatest accomplishments, Susan recalled her feelings while presenting at the state conference:

So when I got a chance to present in front of all these people from affluent [Cloverville] and [Cityville], and you know all these great places and they came to listen to a bunch of teachers [from this district] talk; like that was big to me so that was, that was really cool. Diane had chosen me to do some things that are really cool…. (I2, p. 2)

She felt very similar about her experience when asked to recruit teachers to PEP 2 and also said this about her role in the school: “I’m pretty proud that my principal has chosen, has kind of asked me to step up more in like a leadership role in my building. And I think that’s pretty cool” (I2, p. 2).

4.2.2.3. Voices of Experts and Innovators

These voices emerged not only as teachers talked about how much they had learned specifically, but also when they talked about what they were doing in their classes, its influence on their students and also how they modified what they had learned to fit their particular contexts. Data that are interwoven across the presentation of findings
suggests that for at least four of these teachers the content presented in the PEP intervention was completely new. Only Crystal expressed any prior knowledge of the components presented (as a result of her MEd. program), and although Debbie was not explicit in suggesting much of the content was new, she had completed her preparation 20 years earlier and had attended no professional development initiatives prior to this one. Although we have no pre-PEP data from which to demonstrate changes in their discourse, the fact that these teachers had never before heard of the curricular models and now use the shared technical language (Lawson, 1989) that is embedded in these models stands as evidence. This is important because teachers talked about the implementation of these programs and the changes they’ve made with a degree of authority, having internalized the material and given themselves permission to modify what they had learned.

A good example of this would be Karen. Throughout the entire intervention, Karen was explicit in term of expressing what she knew and was very good at, and also about her desire to learn. The final interview was no exception. Prior to PEP Karen suggested her only contribution would have been showing a good model for classroom management, but that otherwise it was “ugly” (I2, p.4). When asked what she sees herself contributing now, an amalgam of new knowledge she had acquired during the intervention was evident in her response:

Well now, if somebody were to ask me, now I can go in and say look, depending on what level you want to go. If I’m talking middle school level, but what level? Like fitness, do you want to go team sports? Where are you wanting to go with your program? I’ve got so much to contribute. It’s like if we’re doing games, how we modify games, how we break things down, how we keep the kids interested and moving; how we give them choices. You know, I can, if they’re more focused into fitness I have the tools for that now, I know how to do that now, I can show somebody and make it simple. (I2, p. 5)
She concluded with this statement that explains how she has become an innovator in the sense that she is both willing to try new things and modify what she has learned:

There’s so much. And it was a direct result of being involved in PEP. I saw myself as a teacher and how I wanted to go, but my background in teaching was not, it was like holding me back. And I think now, you know, that I’ve gone through PEP, now it’s like I’m going to experiment with this because I’m not afraid. (I2, p. 5)

Dan similarly demonstrated the expertise he had acquired over the course of the intervention. Throughout his interviews, he talks about the curricular innovations, how he has implemented them, the changes he has made, the influences on students; the list could go on. Compared to Dan’s early days as a teacher when he described himself as searching for things to teach, trying to come up activities, using “recipe books” (I1, p. 8) and basically just hanging on. When asked how he sees himself now relative to then, Dan said:

I know what is right and what is wrong with teaching. Even if I do it an incorrect way [myself], I know that I should not be doing that. So, I mean I walk into anybody’s facility and I can immediately observe what they’re doing. If it’s current ideas, are they best practices or are they just going out there winging it? I mean I can see that. (I2, p.10)

A second example is drawn from a point in the first interview when Dan is talking about how he uses the Hellison model for a component of the assessments and how he has modified it; in spite of knowing the model’s creator disagrees. Dan says this:

I attempt to integrate all of Hellison’s ideas. And people that have worked with them through his books, I try to implement those into all of my lessons. I try to have them do self-assessment before class, at the end of class, sometimes through the class, depending. Sometimes I don’t have them do it at all, you know just depending on what the unit is, or it just may fly by, but they know all of the levels of responsibility. I grade them on the levels of responsibility. And I know Don doesn’t like that idea a 100% but I use that as a grading mechanism, one of ‘em, and it helps me, just using those four levels or if it’s the younger kids three levels as a rubric, I have that. (I1, p. 9)
Jim also talked about the ways in which he had modified what he had learned in PEP. During the observation interview he was asked if his intent was to use sport education after portions of the model had been observed.

Well, yes and no, I mean I used a lot of the, again, when we did the PEP grant and everything, you know, take bits and pieces and kind of make it your own, that’s what I kinda tried to do with the dance lesson. To take, I took pieces of that, you know, pieces of the writing things that we learned, the social responsibility, I just kind of put it all together and kinda made it my own. So if you did see some of the sport-ed, that’s good because that was, kinda the focus that I was trying to use... (OI, p.1)

4.2.2.4. Voices of Advocacy

Advocacy was differentiated from leadership in the data because rather than focusing on training other teachers, the focus became one of fighting for or attempting to dislodge negative perceptions of the discipline. By assuming positions as advocates, teachers were empowered to defy their positional identities as marginalized teachers and were no longer confined to a position that required them to silently struggle against other people’s versions of their work. This was the space where agency was the most resonant, particularly for Jim, Crystal, Karen and Susan.

Perhaps the best single example of the advocacy voices that emerged throughout the data are found in the teachers’ responses to one of the learning activities completed first individually and then discussed collectively during the focus group interview. Teachers were given a scenario in which they were asked to do a presentation to parents that explains what physical education is about and its value to the mission of the school. In one of a series of questions they were asked to explain under the circumstances under which they would feel this an appropriate task for a teacher. Below are the written...
responses teachers included on their questionnaire completed prior to a group discussion.

Debbie’s response, although an outlier’ in this particular example has been left in.

CA3: Needing to generate understanding / respect; I need to advocate for my program and profession.

JA3: My principal has been supportive and even if not it gives the opportunity to showcase the things you feel are needed in PE curriculum.

DR3: Conducted near the end of the school year to ‘attract’ new students to high school.

DC3: This is very appropriate for me. We as PE teachers need to share with others on the benefits of a good PE program for students.

SA3: This is definitely and appropriate task because I feel I have an obligation to share what I do and why I value it. I also thing people need the information in order to respect PE programs.

KA3: I feel it is appropriate in an effort to make my profession a respectable, meaningful and needed part of a child’s education. (LA3, p. 2)

In this one example, three teachers also talked about generating respect for their profession. These sentiments were reiterated within the interviews. When asked how her responsibility to physical education had changed since her involvement with PEP, Crystal responded in one sentence: “I think I have to be an advocate, regardless” (I2, p.11). When asked in the initial interview how she had become the person who now steps up and speaks her mind as she described herself now, Crystal said this:

Just being more confident in, you know, yeah I am doing good things in this building and yes I am, I do have a lot of knowledge that, you know, people don’t realize that, you know I’m not some 21 year old first year out of school, doesn’t know squat about life, you know. And also having that support structure from the cohort, from the PEP group, and here are all these strong people and they’re not backing down, and they’re taking crap from their principals and they’re not letting their program suffer because they’re too afraid to say what they think. And, I’ve just really kind of adopted a lot of that…(I1, p. 14)
When asked about the things he was most proud of, Jim said it was his involvement in PEP that resulted in the fact that he was “a totally different teacher over the last three years than I was my first two years (I2, p. 1). When asked to provide examples, one of them was this:

I would say the confidence and the passion that I’ve got for phys-ed and implementing it within the district. Like being a real advocate for it as opposed to, yeah this is what we need to do, but not really getting off your butt and doing it. And the way I look at things now, if you’re going to complain, do something about it. If you don’t want to do anything about it, get out of my way. (I2, p. 1)

These comments continue as teachers assume these voices in answer to a variety of different questions. Once again, both Karen and Susan assumed advocacy voices even though they were selected to the study based upon low involvement in the district since the end of PEP. Karen was asked how she changed as a teacher and in addition to saying she was “proud of what my program has become” (LH, p. 2) she noted: “I am more outspoken on issues that involve my profession and I fight others who try to disregard my class as not relevant and significant to a child’s education” (LH, p. 2).

When asked about her contribution to the district, Susan said she felt she could make a “big contribution to physical education” (I2, p. 7) due to her feeling that she has “a lot of ideas and practical solutions; solutions that actually work” (I2, p.7). When asked to elaborate with examples Susan responded:

But I think that PE needs people who are going to advocate for them, who really feel strongly in the profession and wants to see it go to the next level and I do. And I don’t see PE as just this person in the gym who sort of referees a game and doesn’t do much else. Like I see it as more of a learning atmosphere where you can bring in writing, you can bring in math, you can bring in social studies or history; all those things, it’s not just, it’s not just about sports, that’s how I feel about it. (I2, p. 7)
Earlier in the interview Susan said that prior to PEP, she “would not have felt
comfortable going in front of teachers” (I2, p. 6).

As stated earlier, in the case of Debbie and Dan their leadership voice resonated
the loudest, although Debbie did have small instances in which she assumed the voice of
an advocate. When talking about the impact of a workshop she had been involved in
delivering, Debbie said this “So you know, right there, that’s what I want; I want the
word to get out that what we are teaching is legitimate” (p. 13). Dan did not emerge with
a strong advocacy voice although his involvement in the district on multiple levels might
indicate his commitment to advocacy.

4.3. Research Question 2

Research Question 2: How did teachers continue to use the curricular innovations and
themes infused throughout the professional development program 19 months following
completing of the intervention?

As outlined in Chapter 3, there were three curricular innovations introduced
during the grant and four themes that were consistently reinforced throughout the grant.
Curricular innovations included the Sport Education and Tactical models of teaching as
well as Hellison’s Model of Social Responsibility. Themes included student choice,
assessment, inclusion strategies and technology. Each of these innovations and themes
were presented at workshops of varying length and therefore each had a different priority.
The tactical approach for example included 35 contact hours over the course of one week;
sport education occurred over two weekends and consisted of 14 contact hours whereas
inclusion was a four hour workshop. A summary of contact hours can be seen in table 3.1.
These curricular innovations and themes were presented and modeled using particular physical activities. The sport education model was presented using rugby. Similarly, the tactical workshop used a variety of different sports to demonstrate how to implement the tactical approach across different categories of sport, and assessment with teachers learning how to integrate pedometers into assessment tasks to show the teachers how these elements could be integrated. As a result many new opportunities and spaces were created for students in the classes as teachers used not only the curricular models, and some ‘new aspects’ of the content regardless of whether they adopted the curricular model or instructional strategies. Findings related to the opportunities these innovations created for students will be embedded within the discussion.

4.3.1. Alignment With Innovations and Themes

Findings revealed that in the second full year following the end of the first PEP intervention teachers in this study infused many of the curricular innovations and themes from the professional development program. Figure 4.2 shows the innovations that were both directly observed and discussed by the teachers. During the 18 classroom observations it became apparent that teachers continued to implement aspects of the curricular innovations and themes they had learned during the intervention. The light blue squares indicate the innovations and themes that were directly observed in addition to being discussed by the teachers. The yellow squares indicate the innovations and themes reportedly used by the teachers and present in their discourse.
The following table (4.2) provides an outline of the innovations and themes observed across the 18 observations. The table includes both the content of the lessons observed and the innovations and themes observed during each of the observations for each of the participants.
<table>
<thead>
<tr>
<th>Lesson Content</th>
<th>Hellison</th>
<th>Tactical</th>
<th>Sport Education</th>
<th>Technology</th>
<th>Assessment</th>
<th>Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Debbie</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Badminton</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Badminton</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Volleyball</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Crystal</strong></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>1 Jump Rope</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>2 Cooperatives</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>3 Throwing</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dan</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Parachute</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Fitness</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3 Golf</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Susan</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Handball</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Lacrosse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Orienteering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Karen</strong></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>1 Basketball</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>2 Gatorball</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Lacrosse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Jim</strong></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>1 Dance</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Dance</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3 Golf</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 4.2 Observation Data related to Curricular Innovations and Themes
4.3.1.1. Hellison’s model of Social Responsibility

In the case of social responsibility, students were provided the opportunity to engage in responsible behaviors when working with other children and take personal ownership for their own behavior and work ethic. The assumption that underlies this model is that developing responsible behavior is something that must be explicitly taught to children.

Three teachers were observed implementing the Social Responsibility model, each using a different version discussed during the PEP grant workshop presented by the models’ creator. Crystal had her students tap in (either green, orange or red) to indicate their level of expected behavior upon arrival in class and tap out as a self evaluation of their behavior. As well, she was observed asking a student if he had made a good, responsible choice; and during another instance asking students if anyone had seen a ‘level one’ behavior and subsequently debriefing about ‘cheating’. Crystal was unique in that she had been introduced to social responsibility model during her graduate school education. She commented that although she had been using it since her first teaching experience, “

The part that came from PEP was, at the beginning of the year, one part that he [Don Hellison] really said was, you know, lets only do a couple of levels at a time to begin with and it made a whole lot more sense And so at the beginning of the year, even if it took …the last 10 minutes of class, we all sat down and had a class meeting and talked about what the kids saw each other doing…and really think it got them thinking, it’s a nice way to do that (OI, p.2).

Jim was observed dealing with two students who had been involved in a disagreement during the lesson. After directing the students to the Levels of Responsibility chart which had been provided to each teacher as part of the grant, Jim
asked the students to consider their current level, the level they wished to work at, and how there were going to get there. Earlier he had prompted the class to remember that the days’ activity, (creating their dances in their teams) would require level four and five behavior from their teammates. Jim implemented the model immediately after receiving the workshop, suggesting “when we were able to get Hellison, I tried it. I was one that always tried to take it, if we learned it that weekend I tried to put it in on Monday” (OI, p. 2). He went on to say

I didn’t know how I was going to do it, didn’t know where I was going to do it, sometimes it was just a mess, but as you go through it, you find out what works for you, you find out how the kids respond and you just go. So I did use Hellison…(OI, p. 2).

Jim also implemented responsibility in the use of a ‘sport court’ in which behavioral issues were dealt with by a group of a student’s peers rather than the teacher.

Like Crystal and Jim, Dan directed his students on multiple occasions to show him, with their fingers (representing levels), what level they wanted to work at in class that day, how they have cooperated or had worked as a team. For Dan this model became embedded within his classroom and intersected with both assessments and technology, two of themes that ran through the program. Dan was observed monitoring his class while imputing something into his palm pilot while he moved around the room. When asked afterward what had been happening, Dan indicated that he assigns his students a level 5 behavior each day (recorded in his palm pilot), and each day adjusts the individual levels according to student’s behavior. This grade contributes to their overall grade.

Although the three other teachers were not observed using Hellison’s Social Responsibility model directly, the model has been and continues to be implemented
within their classrooms in various ways. In Debbie’s case, she has not only used the model within her class, she has presented it to all teachers in the school. Debbie’s principal described her as “having a passion about the PEP grant and personal responsibility and kids taking responsibility for the consequences of their own behavior” (PI, p. 3) and explained how Debbie has shared this passion: “we actually created posters...and everybody has one of those for their classroom” (PI, p. 2). When asked what students learn in her class during the interview that was based on the observations Debbie replied:

They learn how to, they learn how to work with each other, how to cooperate with each other, how to show respect towards each other. Probably they learn more of the responsibility behaviors than, I guess I put more focus or emphasis, I put more emphasis on behavior and working with others and how you treat others rather than becoming a great athlete. (OI, p. 1)

Susan suggested that had I observed the end of a unit, I would have seen the model because

we give a test or a quiz type of thing and that’s were I bring in Hellison…they have all the questions about whatever the sport is and at the end I talk about, ok, how do you feel you did in this sport, what level did you work at the majority of the time and why. That’s when I do that. (OI, p. 3)

During the final interview Susan told me that she is currently crafting a school wide responsibility model but remains apprehensive about it working on a larger scale. Susan did have the Levels of Responsibility poster that was given out during PEP on the wall in the gymnasium (OB1).

Karen does not use the Hellison model directly, nor does she conceptualize it as a specific model to be implemented in terms of referring to levels. When asked about the model specifically, Karen suggested there was other content offered within the
intervention that “grabbed a hold of her” (II, p. 10) in ways this not model did not; particularly given her background in responsibility and classroom management. Instead of using a particular model, Karen conceptualizes responsibility as an overall outcome of her program and uses different strategies to model that in her classroom. When asked if students had always followed the observed routine of reading the board as they arrived from the locker room and beginning the stated activity, Karen replied:

Well, we’ve added a lot to it through the PEP program, making them responsible. We always put the information on the board, but now it’s their responsibility to read the board. And, you know, before, we’d put the information up, then we’d, you know, sit down here and we’d go through all the information. And now we can put stuff up there…and they just come in and do it…(OI, p. 2)

As well, Karen has implemented “responsibility points” (II, p. 2) for teams when using the sport education.

4.3.1.2. Sport Education

None of the teachers in this study were observed using a fully articulated version of the Sport Education model as presented in each of the two workshops, but they were observed using particular parts of the model as well as teaching rugby as part of the program. As a result of this implementation, students were provided the opportunity to engage in an authentic sporting experience (or parts of an experience) they might otherwise not receive, and also they had the opportunity learn new learn alternative content areas. Children who never play a team sport for example, would otherwise not have the opportunity to work with team-members or assume any of the roles that are inherent in the model (i.e. coach, trainer)
Five of the teachers used at least some components of sport education. Susan was the exception and did not use any part of the model, explaining that after she had tried the initial unit:

I tried to add in the 7th and 8th grade it just fell apart, I think I tried to add them in too quickly and I think that was the problem. I think I should have waited and really perfected it more with one group and then moved on to another group. (I2, p. 3)

When asked earlier in the interview if she would have changed anything in the implementation she said this:

I feel like I kind of jumped around a bit. Like I tried some things then I quit and then I went to something else then I quit, and I wish I would have stuck with a couple of them longer and then been able to build upon them. (Gl, p. 2)

Karen was observed during a culminating event of a basketball unit where teams were competing in four minute games during which time the gymnasium’s large scoreboard was used for authenticity. During the observation interview she explained the parts of the model I had not seen:

We took the teams and we let them pick the teams and we based the team on levels and kids got to practice so they knew their own level, then they rated themselves and then from that rating we had captains pick the teams and then they worked with those teams through the end. So it was kind of the sport ed model (OI, p. 1)

Both Crystal and Dan were observed using the model as an organizational tool for first distributing and then gathering the pedometers and belts that students were using in class. Both classes had prearranged teams and members of those teams who were assigned that specific duty. Beyond using the model as an organizational tool, Crystal uses it most often when teaching invasion games, adding that with 30 minute classes that
run concurrently throughout the day, “logistically it’s hard to get that all in” (OI, p.2).

Dan said that he uses some ideas from the model;

I don’t think I teach sports or anything, you just don’t have enough time. Team handball, I did have the nets out and we were playing back and forth to a certain extent. Not all classes. Some classes couldn’t handle it because of behavior issues, just too out of control. (I1, p.13)

During my observations of Jim’s class I watched as students arrived in the gym, some holding posters with team names. Following the lesson introduction, Jim directed his teachers to move to their ‘dance studios’ and begin working on the dances they were creating which were to be presented on the final day of the unit. Each team had previously been assigned a section of they gym that became their dance studio. One month later I watched the final day of the unit. Each team presented Jim with a sheet that identified their dance sequence and also identified the specific components of their routine that aligned with the dances they had been taught earlier in the unit. Jim videotaped each team and allowed students to view their performances at a later date.

During these observations it was clear Jim had adopted aspects of the sport education approach. He used specific teams that remained intact during the unit; dance studios that became a teams regular home court; posters that bore team names derived by team members themselves; and a culminating event that was authentic in terms of having a dance performance and having that performance videotaped and available.

When asked about the use of sport education in the observation interview, Jim said this:

So if you did see some of the sport-ed, that’s good because that was kinda the focus that I was trying to use with the different responsibilities and, you know, the choreographer, the person that’s in charge of music and things like that. So yes it
was part of that, and that’s something that I’m starting to use more and more in all the activities. (OI, p.1)

During the final interview Jim articulated how the opportunities he provided his students had changed since his participation in PEP:

I mean as far as technology wise and equipment wise, we’ve gotten more opportunities with pedometers, the compasses that we have, even the videotaping, the music. Those are things I didn’t use. I didn’t use music my first two years.

*I: The videotape that you took and showed them [after the dance unit], you didn’t use that?

I didn’t use that until the PEP grant, once we learned about the sport ed model, is when I used that. And we had our workshop in the computer lab where we did the little, with the clapping of the guy doing the long jump, things like that. I was like, I can do this, and was able to incorporate that. And I mean, just the video, those type of opportunities…. (I2, p.5)

Jim’s experience is very typical of the conversations I had with teachers and illustrates how all the teachers chose to use bits and pieces of what they had learned from the collective experience in order to provide new opportunities for their students. Dan, using his palm pilot to grade social responsibility, is another good example.

In addition to providing students the opportunity for authentic experiences, inclusion of sport education allowed teachers to provide new learning opportunities in the form of content to their students. Dan recalled: We did lacrosse…and team handball, that was the first part of the year. They’re on net games right now…, I have rugby and orienteering towards the end of the year…(I1, p.9). Each of those was presented during the intervention. Crystal explained: “I wouldn’t have taught lacrosse or rugby before… I just wouldn’t have done [it], I would have used something else (I1, p. 7.). Karen’s comments were similar: “But a lot of the kids have told me they’ve taken several of the
games we’ve taught them in class like rugby and try to play at home, and I think that’s cool” (I1, p. 8).

4.3.1.3. Tactical Approach

Observation data show that components of the tactical approach to teaching were observed in two of 18 classes, both or which were in Karen’s class. During two observations Karen was seen implementing an introductory game and then following that game with questions related to tactics. She was also seen engaging in strategies that would be considered ‘teaching within the game’ and aligned with that approach. During the third lesson she allowed her co-teacher to take the lead given his content expertise in lacrosse. Although no evidence of tactical was apparent, she did tell me after class that they had introduced a ‘modification’ to the game the day earlier. Although the use of modified games is also foundational to the model, the particular modification to the rule mentioned by Karen was a rule change and did not qualify as a component of the tactical approach.

Findings also indicate that although there were only two observations in which I observed part of the tactical model being implemented, teachers talked about its implementation and influence in the interviews related to this study and the ones conducted in the pilot study. The use of the tactical approach provided students the opportunity to both learn the game tactically, and experience an alternative instructional strategy that teachers consistently reported their students enjoyed. When asked about the ways she uses tactical that I may not have observed, Karen responded:
We did net games tactically and the kids loved it. And using the tactical, is, you know, just using the question and answer format and you know, having them go out there and ok, hit the ball there; hit the ball with your hand not using an implement to start out in a game and just try to keep it inbounds and make your partner go to anywhere on the court. ‘Cause I use the same concept as Jane [the workshop leader] taught us with the cones and the jump-ropes to start out the kids and stuff. But the kid’s had never seen anything like that. (I2, p. 3)

Debbie articulated an example of how this particular model changed her instructional approach:

I use a lot of the tactical teaching, the tactical approach. The kids enjoy getting right into activity and they’re learning while their doing the activity. Whereas in the good old days, you know, I’d teach a sport skill and we’d break down the skill and uh, teach all the different cues and then you would put it together and have a little tournament, and then it was over. Give the test and you’re done. And now, their active and their learning with each lesson, so that probably was one of the best parts of PEP for my own teaching. (I1, p. 6)

In the final interview Debbie discussed the fact that she was proud of the changes she had made in her classroom as a result of PEP:

And I think that I’ve gotten the content, taught it to my students in a manner in which; it was more exciting to them to learn.

*I: And so, can you give me an example?

Well, I’ll have to come back to that tactical unit, I loved that. And I just think that with the tactical unit, that the kids were so much more involved physically from start to finish.

*I2: You mean more of them participated or they participated more fully or…?

I think they participated more fully. I think you had, you know, you’re top athletes participating and you had your not as skilled athletes, er not as skilled students participating but everyone was participating at their own level and enjoying it. And they, I think they also enjoyed learning things without it being said to them. Do this, do this you know. You ask those probing questions and they’re like, oh yeah, I did blah blah blah blah. So, so in one sense they have a little more ownership for what they’re doing. (I2, p. 2)

Susan was not as optimistic about the effect the model on her students:
Tactical I tried and it was really hard for my kids when they would start, they loved starting with the games, but then when we got the practice part, number one it was really hard for them to switch and stay on task. When I would give ‘em the practice activity they would just kind of slide back into the game. So that did not work for my kids at all. So I dropped that. Now, I have done kind of a modified, like I’ll stop a game and I’ll do like a demonstration and I’ll have them do, like if I’m in a game, I’ll have ‘em do like a drill in the game. But, it’s you know, it’s not tactical in the sense of the way it’s supposed to be used, but it kinda works for my kids. (OI, p.2)

4.3.2. Themes Infused

Data pertaining to the themes will be presented individually. The notion of infusion suggests that each theme continued to be discussed and was embedded in the discourse of the presenters throughout the intervention. For example, in addition to presenting the tactical model, the workshop facilitators showed teacher how to use digital cameras, create movies and PowerPoints and include student assessments.

4.3.2.1. Inclusion

During the PEP intervention, an inclusion workshop was presented by a university faculty member and several graduate students completing advanced degrees in adapted Physical education. Of the four themes that were infused within the grant, the data showed that inclusion was absent in the discourse with the exception of one mention by Jim. Teachers never talked about inclusion beyond discussing it in terms of their teaching backgrounds as was the case with both Crystal and Jim. The reason for this is not clear, although none of the classes I observed would be considered an inclusion class, the one PEP teacher who taught inclusion exclusively was not selected as a participant for the study.
4.3.2.2. Student Choice

The value of giving students choice was embedded throughout the intervention and was fore-grounded during the delivery of the social responsibility model and the concept of students making responsible choices. Crystal articulated it in this way:

And so it’s a motivator for them to do the right thing, to make the responsible choices, to be respectful of one another. You know, it just gives us an opportunity to impact the school climate at a whole. (GI, p. 26)

There was also very limited visual evidence regarding teachers giving students choices of activities, although Dan did give his students the option of choosing their locomotor skill during his fitness lesson and students in Jim’s class were free to choose the dance steps they included in their dances. When connected with the responsibility model as articulated by Crystal, one would argue there were multiple uses of student choice (particularly for Crystal, Dan and Jim) as evidenced earlier when discussing data specific to that model. Although Debbie did not talk specifically about student choice Susan, Jim and Kathy talked about student choice specifically. Susan believes her students

have a little bit more choice in what they’re going to do and what we’re going to do. I mean I don’t come in and say, what do you want to do today, but they just have, you know, more options. (I2, p. 10)

Both Susan and Jim felt they had seen changes in their students as a result of offering more choices. Their comments are embedded within data answering research question four that discusses the changes teachers have seen in their students. The reader is referred to that section of the findings.

Karen referred to the impact of choices when answering a question regarding the accomplishments she is most proud of:

134
The first one I think would be innovations in physical education. I am not teaching your traditional basketball, softball or volleyball kind of middle school regiment. I give my kids a lot of non-traditional games and choices. (I2, p. 1)

4.3.2.3. Technology

Technology was also embedded and introduced repeatedly during the grant intervention. During the tactical workshop, the facilitators showed teachers how take digital pictures and videos and then how to create small movies and PowerPoint presentations. This was done both in the classroom and the computer laboratory on the university campus. Teachers also learned how to use and implement pedometers during a session on orienteering, and how to use palm pilots that many of them ordered. The observation data showed that both Dan and Crystal used pedometers extensively within the classroom, and interview data also showed that teachers used technology in ways that I did not observe.

Although Crystal, and to a lesser degree Dan, had a particular interest in technology prior to the grant neither had ever purchased pedometers; as Dan says it, “implementing pedometers was huge too. Before PEP there were no PEP pedometers” (I2, p.10). Currently, students arrive in Crystal’s gymnasium and read the warm-up instructions that appear on PowerPoint as they put on their pedometers. Dan’s entering routine also included pedometers, although he managed their dissemination differently as described in the findings related to the sport education model.

Both of these teachers use assessments that are tied to this technology. Crystal explained the routine she followed this year:

…at the end of class they had their own journal and they had to go and write down their steps, their level of responsibility and their level of activity from the
Sofit levels. So you know, that was a change for this year. I am still trying to refine that so it does take up as much time. (I2, p. 7)

In Dan’s class, students were seen recording their steps in the quarterly log books, and then calculating how many total steps they had taken. Each student who reached a total of 5000 steps received a footprint token they could attach to their belongings. This token system, (and the exact tokens) was an idea shared by another teacher during the intervention when they were asked to talk about what they were implementing in their classrooms.

Although pedometer use was not observed in any of the other classes, Karen reported she had used them in her “dance unit… recreation units… and basketball lead up stuff” (OI, p.3). She does not use them with any programming that takes place outdoors since students begin to loose them as they participate more aggressively given a larger space. Karen’s principal also talked about how she had see Karen use pedometers to help her students and as a consequence, had fulfilled Karen’s request for heart rate monitors. Karen principal said this

…how she knew that the students with the pedometers, how she knew that they were really getting the fitness that they should be getting … because they kept track. They recorded their steps. So that’s how the students knew, and she told them this many steps means that you are here, here, and here. She had it leveled off. And that was great. So I think with the heart monitors she is just going to also have them record from the start of the lesson to the end of the lesson and I know she is going to have something, have them do something with it. She never ordered something that she does not use, so I found here the heart monitors. (PI, p. 4)

Jim also talked about using pedometers and listed the implementation of a “walking program with pedometers” (GI, p. 1) as one of his biggest successes since the end of PEP. Similarly, when asked if there was anything about the content that had
helped her become a better teacher, Susan said this: I mean that’s the one thing I can pin point, like pedometers; I would have never used pedometers with my kids I wouldn’t have even thought about it” (I2, p. 9). Susan also explained that her transition to teaching fitness every Wednesday began with “having her students go around the gym, and they’d wear their pedometers and try to get as many steps as they could” (I1, p. 5). Debbie talked about their benefits but it was not clear if she was continuing to use them this year.

In addition to pedometers, Jim was observed using his digital camera to film the performances of his students in the dance unit as discussed earlier; Dan was seen using his palm pilot to assess responsible behavior (again as discussed earlier), and Crystal was observed using her PowerPoint set up. Dan and Jim both said that these opportunities would not have been available to their students prior to PEP.

Although Debbie was not observed using any type of technology during the intervention she had created a PowerPoint presentation on bowling that she presented to her class and demonstrated to other teachers, and other evidence indicated she had been using pedometers; she recalled:

I had a student, after she had taken my phys-ed class and the next year she came up to me and she wanted to borrow a pedometer for a while because she wanted to get into a walking program and you know, wanted to get all the information from the pedometers and so that was really quite exciting because that’s definite carry-over which is what we want. (I2, p. 9)

Given Debbie’s context this year and her admission (as presented earlier) that she is not offering the same quality program she has in the past, the absence of technology might be, for her, contextual.
4.3.2.4. Assessment

Examples of assessments were provided throughout the intervention, and modeled during the workshops. The orienteering workshop in particular modeled an assessment designed to align with content related to health and fitness. As well, teachers were given a needs assessment regarding their particular expertise and knowledge of assessments prior to the beginning of the intervention. The needs assessment showed that the majority of teachers indicated they always graded students on participation and behavior and the top three strategies the teachers wanted to learn about were portfolios, peer assessments and peers observations.

Two of the teachers were observed using assessments that directly aligned with those presented in the intervention; Dan with his personal fitness books, and Jim with his culminating dance event during the sport education unit. Both of these were detailed earlier and both are good examples as both of these teachers had relied on PEP for introducing many of the innovations that appeared in their practice. Similarly, data for Crystal was also presented earlier as she talked about using journals for assessment.

Assessment was also important for other teachers, in spite of not seeing use during my observations. This was particularly true for Karen. The following exchange occurred during the final interview:

*I: In know that when we first talked way back before PEP and we filled out that assessment questionnaire, one of the things that you indicated was that you didn’t use much assessment, and in one of our conversations you said, well, part of it’s because I didn’t know about a lot of assessments. And so the grading portion, am I wrong to think that that might be also another piece that has come to you....

That is a PEP entirely. I did not do well with assessments because I was always taught skills assessments, and you know, pretty much you tested their knowledge of a particular sport, or you tested how they, you know performed skill wise; and I
just wasn’t happy with that. To me there was more to my program than that. And so I wasn’t comfortable with the assessment tools that we had. Through PEP we were getting a lot of new assessment tools, and that’s what I love. That’s more me, that’s more my program. I’m interested in what the kids think, feel, appreciate because I have found that if you can make a program exciting to the kids, they’re going to be more willing to participate…. (I2, p. 1)

Although Karen was not observed using assessments, she had been observed using portfolios the previous year.

Although I did not see evidence of Susan assessing her students, she talked about ways she was using assessment and how she had experienced a shift in thinking about how to assess students:

… I changed the fact that, and I know a lot of teachers still do this, but I don’t count off for them necessarily not being dressed. Because I started thinking about it and I was like what am I really grading on? Am I grading on whether or they can change clothes, no, not really I’m grading them on what they’re doing in class and if they don’t bring their clothes yeah that’s a problem but they better find a way to participate. And that’s their responsibility. (I2, p. 10)

This stands in contrast to data from her first assessment questionnaire that indicated she always graded on participation and dressing. Interestingly, she believed this shift was “not something that was necessarily addressed in PEP, that was just my thinking changed, my philosophy about it changed” (I2, p. 10). This stands as a great example of how individuals learn from others in the sense that they integrate the discourses of others into their own.

Susan also talked about the fitness-gram tests that students were now taking every nine weeks, with the reports being included in student’s report cards. She explained that having a new co-teacher to help input the data made the difference:

I just needed someone to say, you can do this or we can do this. And plus I wanted something to go home to the, for the parents and the kids to see where
they started and where they’re going and where they’re ending. And I wanted it to go home with the report cards because I think the phys-ed grades’ looked over a lot of times…So I really wanted this fitness gram to go home to parents to see where their kids should be, where they’re what they’re doing. (I2, p. 4)

She had learned the fitness-gram by taking a Physical Best workshop she had heard about through some of here PEP colleagues.

4.4. Research Question 3

Research Question 3: Since their involvement with the PEP professional development program, in what ways have teachers contributed to physical education in the district and how have their opportunities and capacities to contribute changed?

4.4.1. Contributions to the District Post PEP

During the year two years since the cessation of the professional development intervention, the participants in this study have made numerous contributions to physical education in the district that they were not making prior to the intervention. For the purposes of this analysis these contributions will be considered either direct or indirect in nature; both of which are valued equivalently. Direct contributions will be considered those initiated by the District Coordinator and aligned with a ‘training of trainers model’ that underlies the Department of Curriculum and Staff Development’s mission for professional development in this district. Direct opportunities will therefore include instances where teachers are specifically drawn upon to present content to other teachers in the district. These opportunities will include in-service workshops, grant workshops and curriculum writing each of which will be discussed below. Indirect contributions will be those either not initiated by the District Coordinator or that include involvement in opportunities unrelated to formally sharing expertise with colleagues specifically within
this district. Conference presentations, although a forum for sharing knowledge, would be considered by definition indirect.

4.4.1.1. Direct Contributions

The expressed purpose of a training of trainers model is to “build the capacity to sustain staff training in numerous areas after initial funding of a project” (GP1, p. 8). The training of trainers model was specified in the grant proposal as one of intended outcomes of the intervention:

A cadre of 24 physical education teachers will be supported in the design and delivery of curricular units and, through a training of trainers model, share their expertise with their colleagues in the process of redesigning the [district] physical education curriculum. (Grant Proposal1, p. i)

This model provided the district physical and health education coordinator Denise, with teachers to assist in the delivery of in-service workshops. Reflecting back on how this worked, Denise explained:

And in physical education what I’ve done for the last two or three years was take everything from PEP grant 1 and offer it again so that was a way of doing a teacher of teachers training model so the people who did not go to the grant could get a taste of it, at least for seven hours. And on those days PEP grant 1 teachers would come and facilitate along with me, or, I would bring in people from [the university] or other places, but those teachers were always a part of it. And that’s one way I will continue to do that to try to keep spreading that information out, through the professional development days. (I, p. 4)

When asked to describe professional development opportunities for physical education in the district prior to PEP we had this exchange:

At that time it was very distressed. There had been no professional development. I had taught in the district before PEP for 13 years and during that time professional development was basically, the district provided very little.

*I. Was there anything offered to the [physical education] teachers during the in-service days or outside of the inservice days, because you know how sometimes physical education teachers have to attend other types of sessions?
Yes, it was all other types of sessions. We basically stayed in the school and did what the school was doing. We had early release … but those were pretty much, sometimes they were speakers from the outside…different speakers and different things but it was only an hour and a half so it was very hit and miss, you know it was nothing concrete. Occasionally, it would be mostly presented by people in the district who had a little expertise; maybe dancers would come, the dance folks would come in and put something on for us, or something like that; but never to the level of pedagogy or anything like that. (I. p. 1)

There has been a marked increase in the number of workshops that have been provided to teachers. The following table represents the opportunities that were provided to teachers in the district prior to PEP and since PEP.

<table>
<thead>
<tr>
<th>Type of Opportunities</th>
<th>Prior to PEP</th>
<th>Since PEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle / High School Inservice Presentations</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Elementary Inservice Presentations</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Best Practices Presentations</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>PEP Grant 2: PEPSTARS</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>21st Century Grant</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>PEPTALK</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>HOOPS After-school Grant</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 4.3 Opportunities to Contribute to the District Pre and Post PEP

Since the grant Dan has been involved in the delivery of five of these in-service workshops, Crystal in three, Debbie in two, Jim in one and Susan in one related to recruiting new teachers to the second PEP grant. Karen did not participate in any of these opportunities.
A second direct opportunity for participation in the district arose in the second year following the professional development program. The district applied for and received a second Physical Education for Progress Grant with a proposal that was also explicit in terms of drawing on the expertise of the cadre of teachers trained in the first grant. This was outlined in the proposal:

Central to the issue of sustainability of the changes is the selection of trainers who will teach the teachers participating in this project. In this proposal, teachers who participated in the first PEP grant awarded to CPS will be used to train teachers in this project. The trainers will receive specialized training and prepare workshops on the use of technology, the use of physical best, Fitness for Life curriculum, and inclusive physical education. The training will be provided by University faculty with expertise in these areas. (Grant Proposal 2, p. 9)

The teachers from the first PEP grant were solicited to assist with the delivery of the workshops cited in the grant proposal as well as additional ones not cited. Crystal assisted with the delivery of three workshops, and both Debbie and Dan with the delivery of one of these workshops. Additionally, two teachers who were not selected for this study were also used by grant facilitators.

This second PEP grant provided a unique opportunity for two teachers in particular, Debbie and Dan to act as ‘grant facilitators’. In this capacity, both teachers were given release time, with the grant providing funding for substitute teachers. Additionally, Dan who had assisted Denise in the administrative duties surrounding the first grant, continued to work one day a week at the district office performing a similar function for the second grant. In addition to having the option of attending the workshops that were provided through the second grant and assisting in ways they felt comfortable, the facilitators were trained by a PETE professor who co-wrote the grant and their principal function was to provide support for teachers during the implementation of their
new units of instruction. When teachers were asked in the group interview to talk about some of their success since the end of PEP, Debbie said that her success was “being able to participate in the second PEP grant as a facilitator” (GI, p.2).

Dan has also contributed to the district directly this year as part of a curriculum writing team that included two other teachers as well as the district coordinator and PETE faculty from the university.

4.4.1.2. Indirect Contributions

Both highly involved and low involved participants in this study have made indirect contributions to physical education. These contributions have included reaching out to other teachers directly or through presentations in order to share their expertise and have also included a contribution in terms of raising the profile of physical education within the district. In Dan’s case his contribution included assisting with writing a new curriculum for the district.

Karen, one of the teachers who was selected to the study because she had not remained highly involved with the district after PEP did find ways to make indirect contributions that were not reflected in the district level data. This was in spite of the fact that she felt there were no contributions being made to physical education by PEP participants since the intervention ended. Karen said that networking was one of her disappointments and went on to say, “I mean I figured it would be a stronger networking and we would start incorporating people that never went to PEP. And that’s what I was hoping for and that didn’t happen” (GI, p. 3).

Regardless of her feelings Karen has been committed to making a contribution through her commitment to reach out to other teachers at the school level. She explained:
But [we] looked across the street and for years we’ve watched program after program that seemed to stink. And now there’s a guy over there, hey, he’s doing stuff with those kids. So we look out and we see this person over there actually doing something with his students. We were so excited, we went over to him, well first we called, and we didn’t get a call back to we went over to him and said, hey, we have got this extra equipment. We see that you’re doing things over here, would you like to borrow something, is there any way we can help you… And those are the kinds of things we’re looking at all the time; we’re listening for all the time. (I2, p. 9)

Her commitment to reaching out was also evident when trying to ensure Peer Assistance Review representatives would learn the important pieces of her program they would need to be passed on to others:

We’ve got PAR people calling us saying hey, we understand you have half-way decent programs, can we come over and look at it. And we’re like yeah, come on over… So that gives us a chance to showcase what we’re doing, and that’s what I thought we were supposed to be doing as we got out of PEP. I thought we were going to be communicating more, showcasing more, um, you know, getting people to understand physical education is a respectable profession. (KM GI)

Karen has also made a contribution that has contributed to the profile of physical education at the district level. The district had been awarded an after-school grant called Jumps that the Physical education coordinator described as “an absolute disaster last year and didn’t work for a lot of reasons” (I, p.12). Denise went on to explain how Karen and her co-teacher Todd got involved with the project and their positive influence on the program:

…but this year I said in order to make this grant work, we need two physical educators there on site working with the people from hoops and our teachers that come from these other middle schools and those kids. And this year we have [Karen and Toby] out there running the show, training these kids from other middle schools; working with kids from other middle schools…[and they] are out there doing everything that they’ve learned with kids from other schools and they’re lead teacher, and these kids don’t even know them; and that’s amazing in middle school… that grant is now successful where last year is was a disaster because we didn’t have somebody in place, and that’s the only thing I did to
change it. I said we have to put two people in and it has to be two PEP grant
people and they listened and now they know, you know. (I, p.12)

Jim has also contributed to the district by continuing to find ways to contribute his
expertise. He was one of four teachers (including Debbie and Dan) who volunteered to
present at the National Conference the year after PEP as part of a symposium that
included other districts who also had been awarded a PEP grant. This was a very
meaningful experience for Jim who believed it was his responsibility to pass on the
knowledge he had gained through PEP to other teachers. Jim also submitted a proposal
with Dan for a presentation at the National Conference the second year after the grant
completion. Although it was turned down at the national level, both he and Jim did
present this at the State convention during the past school year.

Jim’s other contribution was becoming a Peer Assistance Review Representative
(PAR). Both he and Debbie applied and were accepted as representatives; something that
brought the profile of physical education in this district up considerably given that in the
past 15 years there had been only one other physical educator selected in this capacity,
and Debbie was the first high school physical educator to be accepted. Denise recalls:

…the two that really shine that came out and were selected as PAR people. I think
that’s saying a lot because for peer assistance review teachers, hardly ever do they
pick a special area. And to have two picked at once does speak to the grant
because when they went in, they said how many things that they have done as a
result. I mean they can verbalize so many things because people have told me that
were on that interviewing committee how they both shined about, they’ve
presented at national level conventions, they were like wow, you know. People
don’t expect that of physical educators, where they can go in and speak so highly
of their craft, with such authority about knowledge of pedagogy, it doesn’t happen
in this district. You know, but the two of them that could go in, not together, and
talk on the same level, I think they were blown away, and two were selected
which I never thought would happen. (I, p. 10)
In addition to becoming a PAR teacher and her direct contributions to the district, Debbie is now also involved in teaching the districts virtual high school and plans on becoming involved in a wellness program the district is currently negotiating. Although Debbie suggested she doesn’t yet know what she will be doing, she does know “I’m going to use a lot of the stuff from PEP in this wellness program that we’re going to implement” (I2, p. 7). Part of her involvement in this project stems from a willingness to pursue further training in a fitness curriculum (Fitness for Life) she was introduced to during her work with the second grant. She has been trained in the delivery of the curriculum and this past year piloted the program in her high school. Debbie also attended the National Conference again this year through funding from the second grant.

Dan also continues to make indirect contributions in addition to his direct contributions. He has presented at the State conference with Jim this past year, and he is very proud of the fact that he is currently getting the personal fitness books he designed for his students published and that “those will affect a lot of teachers” (I2, p.19).

Although Susan has presented at the state conference and a symposium during PEP, and she lists both presenting and being asked to present as two of things she is most proud of, her informal contribution since the end of PEP has been limited. She believes she is ready to make a contribution and does through her work as a cooperating teacher, feeling honored that she would be selected because “a cooperating teacher can either make or break somebody at times and I think that’s kind of cool that I’ve been asked not just once but three times really” (I2, p.3). Like Karen, Susan believes that opportunities to contribute have been the limiting factor since PEP ended. When asked during the group interview about their disappointments, Susan’s comment was this;


...And I put down workshops too because, like I kinda wanted to share more of what we did and I think there’s still a lot of PE teachers who are struggling, but I can’t go out and find ‘em”. (GI, p. 3)

In addition to her direct contributions with both in-service days and grant workshops, Crystal has contributed indirectly on three levels. First she attended an initiative called the ‘summer institute’ that was designed through the second grant to help teachers plan new curriculum for the upcoming year. This was the outcome

…we really focused on, ok how are we going to do the cooperative learning and do we need to take a step back and teach social skills before we can do that, and yes we did. And as result of that, I did social skills the entire year. (GI, p. 5)

Her second contribution has been her work in designing and maintaining a webpage for physical education teachers in the district, a role she volunteered for during an initiative that was made available to all district physical education through the second PEP grant. Teachers were invited to meet after school at a local eatery, the purpose of which was to discuss professional issues in physical education (PEP G2, p. 11). Crystal, Dan and Jim all took advantage of this informal opportunity and all were regular attendees at the series of six meetings that took place. As mentioned earlier, Crystal volunteered to do the blackboard web page that was an initiative talked about on the final night of that intervention program.

What is remarkable about the teachers’ contributions is that prior to PEP, these teachers were not contributing to physical education beyond their buildings, with the exception of Jim who had done one presentation about his experiences as a first year teacher in an urban school, and Crystal who Denise characterized as “always willing, way ahead of us technology wise, so she could do things” (I, p. 11). Most of these teachers
were simply trying to do the best they could in their gymnasiums and that is where their contributions focused. Crystal said this about being involved in PEP:

I was just happier to come and work because at the time, the year that I was doing PEP, was hellish …I think I was transitioning again…I just know my impression was that, that was just the year from hell. And so PEP was really my outlet and what kept me focused and made me more positive instead of falling into all the rumblings in the building. I really was removed from that and was really focusing on what I needed to do and what I wanted to do. (I1, p.12)

Susan characterized herself as a second year teacher who felt like she was “already starting to slip” (I2, p.1) and Debbie said that prior to PEP, she had never done any presentations because she “had no desire”. This response came immediately after the one in which she identified her presentations as her “biggest accomplishments” (I2, p. 1).

Dan described the focus of his pre-PEP days in this way:

I tried to get anything I could for activities ‘cause there was no curriculum, we had benchmarks but there was no, you could basically do whatever you wanted to. No models to go by, you know, I had no idea, I never knew what the tactical model was, whatever, hadn’t been in the field, you know, it wasn’t around when I graduated. Sport Education wasn’t around, not that I use it here to the full extent here at elementary, but there was no Hellison’s model; nothing like that…I did basketball even, I did soccer; I know nothing else, that’s all I knew….I tried to, I knew those themes during that first part just from those books, the recipe books that they have there. So I was just trying to search, I was just searching, yeah, on the weekends, that’s all I did. On the weekends all I did was trying to find out, ok what can I do? (I2, p. 8)

**4.4.2. Changes in Opportunities to Contribute at the District Level**

Prior to their participation in PEP the teachers in this study had little contact with other physical education teachers in the district and were focused within their own gymnasia and buildings. Teachers began to contribute in the district as a result of more opportunities becoming available given the training of trainers focus that connected participants in the first grant to both inservice workshops and to those that were provided
within the second grant. Rather than simply assume, however, that all opportunities to participate both formally and informally were created by the district and therefore would be available regardless, it is possible that as teachers self-author their identities, as they learn, and make changes that become evident in their behavior and their discourse, they can in turn influence the district. Given the theoretical position of this study and it’s acceptance that individuals have the capacity for agency and to assume multiple and evolving identities, recursive relationship between individual and structural change is a potential outcome.

The data shows that there were opportunities provided to the teachers that resulted from their participation in the original grant; opportunities that would not otherwise have become available. A good example would be Karen’s informal contribution as the leader of the after-school program Jumps. Denise’s insistence that the position ought to be filled by a PEP teacher was based upon the assumption that PEP teachers, in this case Karen, had a particular expertise because of her training in the PEP intervention. The position was offered to Karen because of the knowledge and skills she demonstrated to Denise during the intervention. Had Denise not had confidence in either Karen’s preparedness or willingness to assume the role, she might never have been offered the position.

Denise was very explicit in stating that she believed teachers developed expertise as a result of the grant and that new opportunities opened up as a result.

…The amount of knowledge that we got from all the people, from the different programs; from Hellison, from Judy Oslin and Connie, and just everything, you know, Sport Ed, all of it, it was just; they had gotten self confidence; we all did; a shot in the arm about ourselves, that we were professionals. Plus we were being recognized outside of just the grant, like with the Wolfe Symposium when we
were invited to that through [Joe from the district], and different things. And all these committees now all of sudden I’m invited to with upper level people as the voice of physical education; where we would have never been at that table. But because we had a program that was so good they were willing to showcase it a bit. So, I have to say that, I can say with confidence that physical education is starting to arrive now in [this district]. (I, p. 3)

At the Wolfe Symposium that took place during the final stages of the PEP implementation, teachers were asked to present the ways in which they were implementing technology into their classroom. The invitation to the symposium came as a direct result of teachers’ participation in the first grant. Susan presented at the symposium and felt very proud of the fact that “Denise chose me to present” (I2, p. 2). Dan also presented at the symposium, and at the time introduced his personal fitness log that he is now reworking for publication.

Other examples include physical education’s inclusion into the district’s 21st Century Grants. I interviewed Joe, the district representative in charge of connecting all programs in the district to grant opportunities, and he said the following when asked how physical education and the 21st grants became connected.

Okay, the 21st century grants were among first that this office was involved in and we didn’t have physical education built into any of those early 21st Century grants…we had 10 or 12 21st century grants, 10-12 sites funded and we were going continually for about 3 a year period. It just seemed as if, in the early years, we didn’t build phys-ed in because there wasn’t anything special to build in. (I, p. 4)

Joe’s commitment and work in finding a way to connect physical education with that grant after PEP stands in stark contrast to his resistance to doing so prior to PEP. Joe had previously been contacted by the same university professor who collaborated with Denise and ran the PEP program. At the time, the invitation was declined because Joe did not see a role for physical education in the grant. Joe also talked about the other grants
that Denise has been involved in since the end of PEP; including Hoops. We had this exchange:

**JF:** …We’ve been able to spin off of the PEP grant opportunities for her to take health and physical education to other arenas. And a lot of that again has to do with her willingness to keep this thing moving, because the dollars aren’t there.

*I:* And my understanding is she’s actually using the teachers who were initially trained in the role to plug those into roles of the new grant?

**JF:** Right. Right. Absolutely…(I, p. 9)

Denise’s ‘willingness’ to find spaces within the new grants extended beyond her long commitment to the quality of physical education and was also the result of having a group of teachers who had a particular expertise. Denise talked about the influence of this training:

So after having that grant and having, right now, with the second grant, two grants under our belts, we have 48 teachers that I could say are very highly trained. Very current in pedagogy because prior to that, I would say most of them were circa 1970 and less. Now that we have a good core, even people in the district keep saying, yeah, you know phys-ed’s in good shape… its like “I have a PEP grant teacher” and they’re very proud of that because the PEP grant brought equipment into their schools and they know that they’ve seen the change of what’s happening in their gyms. And like you know Joe speaks to it all the time, how from one grant, we’ve [carried it] into two or three other grants; where our people are being infused around the system as trainers and different things because we do the trainers of trainers model. So right now, it has a very good name in the district…We’ve got the best that there is right now in physical education, and then there’s 48 teachers who are now stepping out and continuing to train others for professional development days. (I, p. 2)

The former Elementary Curriculum Director who had hired and supervised Denise prior to retiring describes the results of the first grant as:

It’s just like a wave. It’s like a wave now and it’s just unbelievable that I could have been a small part of what is going to be so dramatically different…I had no clue….(I, p. 3)
4.4.3. Changes in Teachers’ Capacity to Contribute

In addition to having more opportunities available due to their evolving position as knowledgeable leaders in the district, the data show that teachers also experienced changes in how they imagined or envisioned their own capacities and abilities. Even if teachers would have been provided the opportunity to contribute to physical education outside of their schools prior to the PEP intervention, they would have been hesitant to assume those roles. Prior to PEP, their behavior or ‘self-in-practice’ (Holland et al., 1998) did not include a vision of themselves enacting the roles they have since accepted within the district, either formally or informally.

The voices that emerged in the analysis and presented in research question one were not the same voices teacher’s used to describe themselves when reflecting on their contributions prior to PEP. During the final interview, each teacher was asked to consider what their contribution to physical education in the district might have been prior to PEP. Dan suggested his contribution would be “How to run effective meetings” (I2, p. 9). After opening with “nothing” (I2, p. 7), Debbie elaborated: “

I would say that I didn’t have the desire. I didn’t have the, I wouldn’t have had the desire. I was doing my own thing at my school and surviving my teaching experience and that’s, and that’s were I was. I was in survival mode and I wouldn’t have wanted to take on anything extra”. (I2, p. 7)

Karen’s comment was this:

Oh Lord, it wouldn’t have been a very good one. I mean I had good classroom management and I could have shown somebody a good model for classroom management, but as far as everything else it was the traditional PE and it was ugly. (I2, p. 4)

Susan’s comment was similar:
I probably wouldn’t have made a contribution honestly; because I don’t think I had enough confidence in what I was doing to make a contribution. Like, if she had said to me before PEP will you come and talk to these teachers about what you’re doing in your gym I probably wouldn’t have done it. (I2, p. 6)

When asked what would have prevented her, Susan replied:

...number one what I was doing at that time wasn’t that great to be perfectly honest. I was just trying to keep my head above water and I would not have felt comfortable going in front of teachers and just being like, this is my second year out of college, and this is what I’m doing. (I2, p. 6)

Both Jim and Crystal felt they had something to contribute. Jim, having been asked to share his classroom management strategies and his experiences as a first year urban teacher coming from previously suburban experiences, felt he could continue to share his experiences. At the end of our final interview however, it became apparent that for Jim, he no longer wished to just present experience. The following dialogue occurred as Jim expressed the differences in presenting personal anecdotes and presenting content:

*I2: …would you have imagined yourself as a mentor or say, yeah, I’ll step up and do whatever Denise needs or whatever the district needs, I’ll take that role, and....

…. It’s easy for you to go up there and talk about what you’ve done, that’s easy. But taking something that you’ve leaned and not saying I did this, I did that, but taking that and then presenting that to people as a, just a presenter is a little more difficult. You know, when I’ve had to do that I try not to say me, I, this is what I, you just present it. Almost like a lecture type of thing, that’s a little harder and I prepare more for that so I don’t direct it towards me as opposed to, well tell me what you’ve done, oh, I can do that. (I2, p. 18)

He provided an example:

Yeah, and for me when I presented, that’s a different approach. Like when I presented at the Levels of Social Responsibility. That’s just the levels of social responsibility, explaining this is how he did it, it’s a lot more in depth than the way I do it because there’s things that I don’t do and there’s things that I’ve changed that I use that completely wipe out this whole portion. So when you’re presenting the knowledge of the content as opposed to how you use the content, it’s totally different. (I2, p. 18)
Crystal’s remained actively involved in taking courses related to technology prior to the PEP grant and believed she might have contributed her expertise in technology and gymnastics prior to her experience in the grant. She also believed her experience in PEP was the catalyst that made her feel comfortable with presenting within the district, in part because it helped remove her feeling of isolation. Prior to the intervention, Crystal expressed the isolation she felt even within her own building with a co-teacher working down the hall:

[Even though Kim and I are both in this building, we’re at opposite ends of the building, we don’t see each other the majority of every day and it’s very isolating at times. You know, you’re in your room, you don’t come out, you teach and you go home. And, so I really was missing that comradery…. (I1, p. 12)]

Crystal later explained “and you know, that’s been a big positive outcome for both of us being involved in PEP…because we have, I mean it really solidified, it’s a team here” (I1, p. 16). During the group interview, Jim and Crystal who taught three miles from each other and now regularly communicate via e-mail expressed a similar shift:

Jim: “I mean you know, Crystal was right down the road and until that PEP grant came along…”

Crystal: Yeah, we’d never even met (GI, p. 6).

This isolation prevented Crystal from becoming comfortable presenting to groups of people. When asked how she had changed as a result of her participation in the grant, she responded:

I think the biggest one is just being outgoing in the district and just being involved in the district; being willing to, to actually do workshops. I hate public speaking, with a passion, you know it is a nightmare and to be actually willing to go and lead a group and teach other people and, you know, that is a huge step for me. And I wouldn’t have done that before, I wouldn’t have gone and taught
orienteering to middle and high school teachers prior to PEP, forget it. So that for me is the biggest change. (I2, p. 5)

After describing her current role within the district in which she maintains a webpage for district physical educators, a role she volunteered for, Crystal was asked if she would have envisioned herself contributing to the district in that fashion prior to PEP. She responded no, and followed up with this comment:

…but I am now willing to voice my opinion when it comes to issues in the district or issues with PE or whatever. That been a huge thing for me from PEP. (I2, p. 4)

She went on to say:

Like, you know, if we’re all discussing issues or whatever, before I would have never had even put my opinion out there at all, you know unless somebody directly asked me. And now it’s like… when I had something that I felt I could contribute, I was willing to put, I was willing to say it instead of just keeping it in my brain and not saying it to anybody; which is what I would have done prior to PEP. (I2, p. 5)

Since the PEP grant ended, Crystal has also been involved formally in the delivery of several workshops both during in-service days when she has presented technology and new curricular approaches and during technology workshops provided for participants of the second grant. As well, she voluntarily attended a PEP-TALK initiative designed to stimulate and support critical, content based dialogue between teachers in the district during a monthly informal meeting after school.

4.5.  Research Question 4

Research Question 4: What characteristics of the PEP program helped create and sustain changes at the level of the individual, school and district?

The findings presented thus far show that teachers did change on multiple levels as a consequence of their participation in the professional development intervention.
Findings also indicate that particular features of the intervention facilitated the changes. Although uncovering the particular arrangements or provisions that were most meaningful can be difficult, these emerged from the data by proxy as the influences that affected teachers’ capacities and abilities emerged. For example, as detailed below, teachers valued having perceived experts delivering the workshops. From that finding, we can see that infusing experts was a desirable component of the program, or part of an arrangement that allowed for sustained change.

Data showed that there were four features of the PEP intervention that were found to be particularly important in creating and sustaining change at each level. The first was the provision of multiple opportunities to learn new curriculum, instructional strategies and techniques from workshop leaders who teachers believed to be ‘experts’. The second was the requirement that participants implement at least one unit of sport education and one unit of tactical in order to receive funding, because by proxy, this provision allowed teachers to see student response and learn how they might modify and adapt the new innovations to fit their particular contexts. The third feature was providing time and multiple opportunities for participants to collaborate and share ideas with colleagues. Finally, the fourth feature that was found to be important in sustaining changes was providing opportunities for teachers to assume leadership positions. Although on an individual level data from question one indicated that teachers assumed identities as leaders in the district, the finding particular to this question relates to having the opportunity to be a leader. Without these particular opportunities to actually take leadership positions, the identities as leaders may not have been such a strong finding.
Although findings for each of these components will be presented individually, conceptually they actually work together. An example from a conversation with Crystal shows how these opportunities become intertwined. Given that Crystal was well prepared in her MEd. program and had been exposed to many of the things PEP provided, I asked if there had been anything she learned from PEP specifically that was outside of what she had learned in her preparation program. Crystal’s reply was this:

That’s a good question. I think just a refining of what I had already learned … because when I did it in grad school, I mean it was very fast, it was very intense, but I didn’t have my own group of children to try it on, so I wasn’t trying it and getting feedback and refining it. And so through PEP and being able to actually try it with my own kids, and that you know, before PEP started I had already been doing some of it, but then when we all got together; it’s like, the playing off of each other and getting the feedback; well, have you tried this? Or did this work.? So it wasn’t necessarily the information, it was just getting to refine those skills and getting to get input back from other teachers about how to make it more effective. (OI, p. 3)

4.5.1. Opportunity to Learn from Experts

One of the features of the grant was that it used professors from all over the country to present curricular innovations and delivery systems that had authored in many cases. In essence this established the intervention with an authority and a particular vision for what these teachers ought to be learning. Rather than feel that this authoritative discourse was limiting and confining them in particular ways, the six teachers found that learning from these experts contributed to their willingness to make changes; the discourse became internally persuasive. Again, although presented individually, part of that internal persuasion was also connected to seeing specific changes in students, collaborating and talking about their experiences with their peers, and having the opportunity to enact new roles.
Data showed that teachers valued the opportunity to learn from a variety of ‘experts’ in the field, but not simply because they were experts. These workshop leaders have been educating teachers and working in schools for years and as a consequence, valued the teachers, asked for their input, made themselves accessible and available to them, and encouraged them to make modifications as necessary. Jim, for example, talks about the influence of having dinner with Hellison after the workshop:

We must have sat down for three, I bet you it was three, three and half hours and ate and talked. I mean you’re talking about somebody who goes all over the country talking about the things that he does and you know, that you implement. I mean, when are you going to get an opportunity like that again? (I2, p. 11)

He also expressed his feeling about some of the other workshop presenters:

At first we thought, oh yeah, like they’re going to listen to us and that wasn’t the case, that really wasn’t the case. You know I think that’s another thing that has worked and has been beneficial. (I2, p. 11)

Hellison’s accessibility outside of the workshop also influenced Dan:

Would I have found personal social responsibility through Hellison without PEP? Probably not from that extent, and not from that whole process of having Don [here] and going out to lunch with him and being his chauffer for the day and a half that he was here. I wouldn’t have opportunities like that without PEP for sure, so I’ve learned a lot from that perspective. (I2, p. 2)

In the final interview each teacher was asked to reflect on the parts of the program that had kept them coming back to an intervention that lasted 15 months and from which they could withdraw at any time. Four teachers were very explicit in acknowledging the role of the workshop leaders:

Jim’s response was this:

When you can have people come in to speak to you, the head of the phys-ed department from [the university], Don Hellison, Judy Osln, and for them to come it, I mean you’ve got this at your fingertips, you’re crazy if you don’t go. I mean, you’re given these opportunities to go. It was the people and I enjoyed being
around the people. I enjoyed going in hearing different ideas from people and in turn giving different ideas back, and so that part of it kept me going. And it was, you know, you’ve got all these opportunities at your fingertips, you’ve got all these people with hours and hours, and some with some power in different areas, that, if you didn’t, why wouldn’t you take advantage of it. Why not, because you have to get up on a Saturday? (I2, p.11)

Karen said the following:

We would go to different places, we would meet different people. They would bring in specialists in the field. Judy, I can’t think of her last name, but I met her as Judy. Here she is the person that started this tactical program, book and things like that, and to meet her and to hear her and then for her to tell me, well, no what you’re doing’s right, that’s ok. You know, no, it’s not the way I do it, but what you’re doing is fine. (I2, p. 13)

In addition to suggesting that the variety of presenters (of whom she named five particular ones), was important, Susan’s answer was this:

…I didn’t know who those people were before PEP, I truly didn’t. And that might have been my own ignorance, I just didn’t know. And I remember Denise saying once…you don’t realize how important these people are, you guys don’t realize… I didn’t know anything about [Dr. M] and she said these are leaders in the field and that’s the problem with physical education is that we don’t know who the leaders are. And so the fact that those people changed and I realized, when they were coming up, how important these people were and what they had to say and that was like, I need to go and listen to what they have to say, like ‘cause they’re the experts, and they know what we should be doing. So that helped. (I2, p. 16)

Debbie’s comment was the following:

Well for me truly it was the interaction with the other participants. [pause] And just the, receiving the books, the instructional books, you know, how to do it, how to implement a new style of teaching and, you know, I mean we had the developers and the authors of the programs that we’re presenting. And that’s nice, your not hearing it through a third person, so I would say that’s you know, knowing that this was, information that I was receiving was stuff that I could actually use in my classroom. This wasn’t pie in the sky theory stuff. It was actual ways to implement content that were workable, doable regardless of whether you had equipment or not. (I2, p. 8)

For Crystal, the presence of expert knowledge was not important, but it was connecting to others that she found sustaining:
And yeah we were learning but we were coming together, we were playing, we were having a good time as a group and that’s the part of it that kept me coming back. If we had been sitting in a classroom and just talking about the stuff I would have been bored senseless and I don’t know that I would have made it going through the grant…but that’s where we really got to be friends. (I2, p. 10)

4.5.2. The Opportunity to Observe Student Change

By requiring teachers to implement one unit of both tactical and sport education, the structure of the grant created a space that allowed teachers to see the influence of the changes on their students. In essence it created a space for teachers to apply the theory to their own practice and by so doing, it contributed to the internally persuasive discourses of change. The pilot study that was used to inform this one (as discussed earlier) found that teachers consistently talked about the influence of their practice on students. This was also the case in this study. Teachers often identified these changes and associated them specifically with new things related to what they had learned in PEP. This was very clear and resonant under the findings surrounding the implementation of the tactical approach as discussed earlier. The evidence presented there showed that not only did teachers use the model, they often talked about the influence of the model on their students.

As well, the influence of student change emerged with other aspects of the grant. Teachers talked about student changes as a result of new instruction. Crystal suggested that her students “absolutely love the pedometers” (I1, p. 2), suggesting that it has made a tremendous difference because

… some of them are really making the correlation between, oh, well this is a more sedentary activity versus a more active activity because oh, we only had 200 steps during bowling and oh, we’ve got a 1000 steps doing jump rope; so I mean, they really are drawing those conclusions, which is really cool to see. (I1, p. 8)
Don suggested a similar effect: “I think they were able to understand what it means to be active with pedometers” (I2, p. 11). Susan articulated the changes she had seen in her students surrounding student choice, one of the themes discussed earlier: “I think they enjoy PE more because they have more options and they have a little bit more choice in what they’re going to do” (I2, p. 10). When asked how she had changed as a teacher as a result of her participation in the program Susan also referred to her students. In addition to including having a bigger ‘bag of tricks’ in her answer, she also wrote: “my students have more choice and opportunity. They experience different activities and they enjoy class more” (LH, p. 2). Similarly, Jim talked about student choice when articulating how his changes have influenced his students “it’s putting more on a student…student decision making, student choice. Kids love choice…” (I2, p. 16).

Teachers were asked to list their successes since the end of PEP on one of the questionnaires. Karen listed student outcomes that included the following: “Increased student participation / motivation; responsible students and students who are more team oriented and willing to help one another” (LA1, p. 1). Like the other teachers, Debbie also saw the changes in her students. Her data appeared earlier as she reflected on the influence of the tactical approach.

4.5.3. The Opportunity to Collaborate and Share Ideas

Just as the classroom was a space that allowed teachers to enact a particular curriculum and observe student response, findings indicated that the opportunity to collaborate with both peers and with experts also influenced teachers in multiple ways. The opportunities to collaborate appeared in various forms throughout the 15 months and included opportunities like sharing ideas, both formally and informally, completing group
activities or experiencing new curricular models in the gymnasium just as their students would. These experiences resonated differently with the teachers. For some it allowed them time to talk with others and learn how to change and modify things they were already attempting to do. For others it allowed them to experience things they had never before learned in fun environment, and for some it provided them with a sense of what others in the district were doing and removed the feeling of isolation.

The following exchange with Debbie is indicative of how opportunities to collaborate have the potential to influence change in directions that become visible as we talk about them; even for a teacher, who like Debbie, have been teaching for 20 years:

*I: So in the early days you got to see your students as people, and then how did you evolve to where you are with the responsibility part when did you start focusing on that within your teaching?

DR: Well, probably, when I came to [this high school] about 10 years ago. Because I was at a point where I felt comfortable with my ability to teach activities, you know and sport skills and that. And then, I guess just the behavior of the students here at the high school level. I just saw that their, actions, you would come into class and no one, they would do what they were told to do, um, but they weren’t really into helping each other. And they would cooperate with each other because they wouldn’t want to deal with me, you know [I. yeah] Ok, but I didn’t want them to work with each other because they were afraid of the consequences of what Miss Ross might say or do, I wanted them to do it because it was in their heart to do.

*I: So how did you get them to do that?

DR: Those are hard questions, you know, I just do what I do, I don’t think about it. I don’t know, you know, I just talked about respecting each other as human beings and that, and um, you know being cooperative and that, and I guess truly, I was working on it before we got involved in the PEP grant, but truly once, I, I attended Hellison’s workshop and, and his book and his ideas and that, that kind of, that really put it in focus. I mean I, I was sorta doing that before he came along anyway, but it just, I guess it just kind of confirmed the direction I was headed and um gave good ideas of how to further expand on what I was already trying to do. (I1, p.5)
For Karen, participating as a student with her PEP colleagues while learning a new curricular model helped overcome her disbelief that the unit would work. When asked if anything about PEP had made the implementation easy, she responded “I think all the demonstrations that we got through PEP. You did it, you got to participate, you were part of it; you learned how it felt” (I1, p. 15). She provided an example:

Like, the rugby one was the one that stuck with me the most. We got to do that, and we did it as a sport ed model and we also did it as tactical. We were in a small room, looking at the space, looking at the number of people. I’m like this is going to suck; this is never going to work. And then having to do it, ok, it did, it stunk because we didn’t have a big enough spot, but you know what, we had fun. We had a good time and that became my new focus, you know. I may not have the space, but lets do what we can with the space we have and the kids are going to have fun, and they do (I1, p. 16).

For Susan, collaboration was helpful in reducing her feelings of isolation. Referring to the intervention, she said this:

It did work. It did work ‘cause I realized that there were other teachers out there doing cool stuff and exciting stuff, and there were other teachers dealing with the same problems I was dealing with; and I didn’t know that before. I mean if I had never done PEP I would have thought that every teacher in [the district] was doing the exact same thing he [her co-teacher] was doing… Cause we just don’t get out and see each other, so that, it really, really, it served its purpose... ’cause I think it’s made me a hundred times better teacher than I was before.

*I: How. How are you better?

SP: It’s just given me the tools and information and resources and ideas. I mean a lot of stuff that I learned in PEP I don’t necessarily do, but I’ve taken bits and pieces of it and made it work for me and my students, you know. (I1, p.6)

Like Susan, Crystal felt the collaborative spaces reduced her isolation, maintained her excitement and was a source of new ideas:

And, once we got involved with PEP, then, ok now we were going to early release meetings. And so now it’s like I don’t go and see total strangers, now it’s like communicating with those people that I made friendships with. And I don’t talk to many of them outside of those meetings or other classes, but just to have that
bond, it does keep me excited…you can’t help but take some of that excitement on and it just keeps me going. Hearing their ideas and hearing what they’re doing…(I1, p. 12)

In the group interview, Crystal also explained that “the biggest thing for me was the networking. Just the meeting other phys-ed teachers, not feeling isolated any longer and feeling like there was a huge network for us to support each other” (GI, p. 2).

4.5.4. Opportunities to Assume Leadership Positions

The data indicated that finding spaces for teachers to assume leadership roles was an important part of their experience. It is one thing to feel like you have the potential or the desire to be a leader, and it is quite another to experience being a leader; one envisions and suggests a shift in capacity or desire; the other enacts and facilitates a shift in ability and / or identity. Each teacher in this study was asked the same opening question in the final interview: Can you describe the five things you are most proud of in terms of your professional accomplishments. Five of the six teachers in this study expressed that they were most proud of some aspect of the leadership role they had assumed outside of the classroom. Jim said this:

You know, being able to present at the national conference. For me, that was, that was one of my proudest moments was being able to do that. You know to be out in front of everybody, at the national conference…” (I2, p. 1)

Crystal responded:

Just teaching, I have gone out and done several different classes, one was one on orienteering, one was on, I went and helped with technology during the second grant doing, my helping was using PowerPoint as an assessment tool and teaching them how to build quizzes and interactive stuff on PowerPoint. (I2, p. 2)

Similarly, Dan’s response included technology:

I guess a fourth accomplishment is, um, being able to use technology, implementing technology in my own program and then being able to help other
teachers involved in it and get them, and not just PE teachers because I deal with classroom teachers too, with technology. (I2, p. 3)

Debbie first response was the following:

Um, well, I would say probably the presentations that I’ve made which has been, you know, presenting about the PEP grant at the national convention, at the OAHPERD Convention. I’ve done presentations for professional days for the district. I’ve done presentations within my own school. So, so I that’s probably the biggest accomplishment is, you know, being able to pass on the knowledge that I’ve gained from the PEP grant. (I2, p. 1)

Interestingly, although Susan was selected based upon her low involvement, the presentations that she did during the PEP intervention were powerful and had a lasting influence. Although these words were shared earlier, they also apply here:

So when I got a chance to present in front of all these people from affluent … you know all these great places and they came to listen to a bunch of [teachers from our district] teachers talk; like that was big to me so that was, that was really cool. Diane had chosen me to do some things that are really cool. (I2, p. 2)

Karen was the second teacher selected for her low involvement, and she was the only one who did not include leadership as one of her accomplishments. This is actually congruent with what we know about commitment to reaching out informally to other teachers rather than adopting a leadership role within the district in a more formal capacity.

Teachers were provided these opportunities to take on leadership roles during the intervention and then through the opportunities that had become available in the district. Denise explained how she connected people and places and how she approached the teachers in order to get them involved:

They never said like I want to do this particular date, they said I’d like to present this to the group. And then I’d say ok, and then as I was planning, I’d call them up and say oh, you know what, I see a nice slot for you on this date, would you like
to do it? And they’d say yes or they’d say no. A few of them came forward but for
the most part it was things that they said in general and then I would call them as
those dates were coming up and say would you like to present on this day or
would you like to present on this day? You know, give them choices about which
one they wanted to do it in. (I, p. 7)
CHAPTER 5

DISCUSSION CONCLUSIONS AND RECOMMENDATIONS

This study examined how participation in a professional development community influenced teachers’ professional identities, created opportunities for contributions to physical education at the district level and within a larger professional community, and influenced teachers’ capacities to create and sustain change that had the potential to influence learning opportunities for their students.

Although the community of practice itself is not the primary focus of this study, the opportunity for teacher learning and building teacher identities in this initiative was tied to the community of practice that was the foundation of the program. Given the initial intention of creating a cadre of teacher leaders, the long term nature of the program that built in multiple opportunities for collaboration, the creation of shared artifacts (such as unit plan booklets, lesson plan booklets, and CD’s with model lessons from multiple participants) and the expectation that all members would commit to the entire intervention and thus be considered a cohort group, constitutes what Barab and Duffy (2000) characterize as a true community of practice.

From this intervention, the data paints a picture or perhaps more appropriately documents a story of change that began three years from when this study began and has continued in the 19 months since the end of the program. The story is also one of status
quo, of small shifts and modest triumphs, of hopes and disappointments and of lessons learned. Each of these stories will be woven into the discussion. The story provides an examination of both the observable and hidden dimensions of teachers’ professional lives. Korthagen (2004) suggests these include the environment and behavior that are more easily seen, as well as teachers’ beliefs, identities and mission. Finally, the story is developed through the voices and discourses of the teachers as they negotiated spaces between individual agency and structural constraints, having self-authored their identities within their classrooms, their schools and the district. As Holland et al. (1998) suggests, the teachers both collectively and individually negotiate the tensions between their past histories and present discourses that have worked to both attract or impinge upon them.

These stories are told using the data drawn from four research questions and are discussed using Korthagen’s (2004) model as a heuristic to consider how teachers’ practices and beliefs changed as a consequence of the PEP intervention. These changes are conceptualized below in Figure 5.1. Recommendations for future research are embedded within this discussion and implications for future professional development initiatives are included at the end of the chapter.
5.1. The Layers of the Story

5.1.1. The Environment

At the outer layer of the environment, the story is perhaps most complicated as it is one of change, of status quo, of small shifts and of disappointments. Findings did show that teachers contributed to the district in ways they were not contributing prior to the PEP intervention. They ran workshops, presented at conferences and contributed their knowledge, expertise and ideas to other PE teachers in the district. Their involvement was a catalyst for future district participation and precipitated a change in beliefs by the District Director of Grants who began to value physical education and its potential to contribute to other grant initiatives such as the 21st Century grant. As a consequence a
recursive relationship between opportunities to contribute to the goals of the school
district and the development of expertise acquired by the PEP teachers through increased
participation emerged.

As well, findings showed that as a consequence of having a cadre of trained
teachers, the district was in the position to apply for a second federal grant that drew
upon the expertise of the original cadre of teachers to show sustainability. The second
grant was received and as a consequence it too opened up important opportunities for the
six teachers to participate as leaders and share their expertise with a new cohort of
teachers.

This spawned what Wertsch et al. (1995) refers to as a spin-off of curricular
initiatives. Currently the district is developing a high school and middle school
curriculum as a third step in what has become the long-term development of physical
education in the district; a long term development that began with the first intervention
and the willingness of the teachers who had participated to assume leadership positions as
PEP II and other initiatives evolved.

Data suggests the district coordinator believes she now has teachers with subject
matter knowledge who are available and willing to share their expertise during in-service
workshops designed specifically for physical educators, and there have been other
benefits as well. Denise believes she has gained respect and that the discipline has gained
respect from colleagues and from some of the principals in the district who specifically
request PEP teachers and talk about the value of having a PEP-trained physical educator.

Perhaps the greatest disappointment lies in the fact that in spite of all the
documented and sustained changes the teachers made at multiple levels, the principals of
these six teachers were not aware of the specifics of the PEP grant or the long term commitment each of these teachers had made to professional development. Although the four new principals would not have been able to identify changes in the practices of their teachers, none of the principals had heard of the PEP grant beyond the information they had received from their teachers. One of the principals who was not new thought the program was centered on the acquisition of equipment and the other knew simply that her physical educator “had received it” (I, p. 1). Over the course of two years the district had received approximately $500,000 in two PEP grants and had made important and sustained changes in physical education district wide yet the principals of these teachers, four of whom have remained highly involved in the district, had never heard of the PEP grant. Arguably, this was not the case across the district, as evidenced by an e-mail correspondence from a principal to the District Coordinator specifically requesting a PEP teacher to fill a teaching position.

School principals are central characters within school level reform and serve as gate keepers to change at the school level (Fullan, 1992). Given their mediational role, they are important partners and need to be included in the discussion of professional development for physical education teachers. This would serve two purposes. The first would be to help the principals develop an understanding of the disciplinary knowledge base that exists in physical education and upon which a quality program might be judged. Although the intervention worked hard to embed assessments and accountabilities into each teacher’s classroom, the six principals interviewed as part of this study measured teacher success in physical education as: students show teamwork, students are behaved, teachers have a good rapport with students, students are dressed, and students are
engaged. The data from the principals suggest that an incongruity exists between principals’ perceptions of the goals, purposes and outcomes of physical education and what might be considered goals relative to the NASPE standards and embedded within the PEP intervention.

The second purpose for including principals in reform initiatives is to help design professional development programs that assist physical educators in creating programming that supports or is perceived to support the larger mission of the school. The focus on assessment and accountability within the intervention was an important step in aligning with the accountability agenda underlying the current educational climate, but for the most part principals were not included as partners within the initial intervention. Although one letter had been sent to the principals telling them of their physical educators’ participation in the grant, the principal’s role did not extend beyond that.

Preliminary evidence in this study showed a total incongruence between the principals’ perceptions of the purposes of the physical education and their criteria for judging the effectiveness of physical educators compared to professional standards within the discipline. This suggests a more research is needed to understand the nuances behind this incongruity. When preparing and structuring professional development initiatives for physical educators, we need a better understanding of not only the principals’ expectations for physical educators, but what they believe about physical education’s place in the school’s educational agenda. Until we bring principals into the discussion in a more substantive way, their mediational effect might continue to be a negative one as they work to meet the demands of reform in core subjects and in so doing introduce
unintended and which in most cases are negative consequences for subjects considered “non-core” within the NCLB legislation (USDE, 2002).

Although the whole-school approach to reform lauded in the professional development literature as creating a community with a shared focus on learning and student outcomes (WestEd, 2000) sounds inclusive, these data suggest negative and unintended consequences of this reform for physical education. Perhaps the most striking example of this was Debbie’s situation. She was a teacher of 20 years who, through her experience with PEP, went from being a teacher in “survival mode” (I2, p. 4) unwilling to take on anything extra to a teacher who assumed a leadership role within the district and envisioned herself sharing her expertise with other teachers in the future. However, when her school divided into three small schools the context of her classroom changed. Debbie had more students in one class than any of her prior years, was forced to provide developmentally appropriate lessons for three different age groups in the same class, and experienced an increase in class discipline as a result of having no support from the administration in terms school level consequences for discipline. Similar stories were found in Karen’s case and with Jim and Crystal who expressed negative feelings about having to teach reading instead of physical education and its influence on their physical education scheduling. In addition, Dan was not able to start an in-school fitness club because of the reading block.

Rather than assuming recommendations for professional development are beneficial to all members of the educational community within a school, more research is needed to understand the influences of reform on subjects not considered ‘core’ courses.
and the role of the principal in mediating school level response. As well, research is needed on the district level in order to understand this issue across schools.

In spite of the principals’ lack of knowledge surrounding the PEP intervention, the school environment did change for students of these six teachers. Data showed students receiving the benefits of new curricular innovations and themes introduced during the intervention in addition to having a variety of new equipment used to support the interventions. Debbie introduced the Social Responsibility model to the entire school and Susan plans to do similarly this fall.

5.1.2. Behavior

Findings indicated these six teachers demonstrated sustained change in their practice 19 months following completion of the intervention. This supports findings from other long-term professional development initiatives where teacher learning is achieved when professional development is grounded in collaborative communities (Borko et al., 2000; Grossman et al., 2001; Butler et al., 2004). It also extends what we know about long term effects of professional development initiatives because the teachers in this study were observed long after completion of the intervention and were not dependant upon ‘outsiders’ to help sustain changes; a level of examination called for by Butler et al. (2004).

Unlike the initiative in South Carolina where teachers were required to submit video-tapes of their teaching to show alignment with state physical education requirements, or the Lincoln-Nebraska initiative that required teachers to adopt a particular curriculum or instructional strategy aligned with the target of reform (Ward, 1999), the teachers in this study were free to modify, change, eliminate or adopt any part
of what they had learned during the intervention based upon their personal and professional contexts. Although this autonomy and concomitant lack of specific accountability comes at a cost that some argue contributes to physical education’s marginalized status (Siedentop & Locke 1997), is more evidence of benign neglect (Bain, 1990), and might not be as desirable as physical education struggles to be included in reform efforts (Ward, 1999, Rink, 2002), it has provided a unique opportunity to learn the extent to which teacher’s participation in this community of practice has worked to develop an internally persuasive discourse of change observable through their behaviors in the gymnasium.

The data showed that these teachers sustained changes that were initiated during the intervention. Although teachers did not use fully articulated versions of what they had learned, they did continue to use an amalgam of content, curricular models and pedagogies derived and adapted from the curricular innovations and themes introduced during the professional development program. These sustained changes did not result from a linear transmission of knowledge from authoritative others to the teachers, but rather through a confluence of factors. These factors included that teachers learned from experts whom they found knowledgeable in their field, accessible in terms of their time, possessed the ability to relate to issues important to them and who valued and solicited their feedback. While learning from knowledgeable experts, teachers were also learning from their peers whom they valued and explicitly identified as contributing to their experience. They also learned from their students. The requirement that each teacher write and implement a unit of instruction for both the tactical and sport education curricular approaches to receive a portion of their funding provided teachers the
opportunity to impact/influence their students and the culture of their classroom. As the teachers talked about the changes they had made in their gymnasiums, data showed that they often embedded unsolicited references to their students’ enjoyment; this was particularly true as they talked about the tactical approach to teaching games and a model of Social Responsibility used in teaching physical education.

Although the latter finding stands as evidence that seeing successful changes in students influenced changes in the teachers’ practice, the finding cannot be interpreted as evidence that seeing successful change in practice precedes changes in beliefs (Gutskey, 1986). When learning takes place within a community that itself nests learning in the context of teachers’ classrooms in addition to a constellation of other activities over time, the distinction between whether or not changes in beliefs precede or follow changes in practice becomes less clear.

The teachers did make sustained, observable changes and although teachers did not embrace fully articulated versions of what they had learned, the standard of fidelity should not be applied as the litmus test of whether or not the changes were substantial and sustained over time. At the level of educational reform, Cuban (1998) characterizes fidelity as “assessing the fit between the initial design, the formal policy, the subsequent program and its’ implementation (p. 4). The standard should not be applied for three reasons. First, as Cuban (1998) suggests, both popularity and longevity might be alternative and more appropriate criteria to measure adherence to policy initiatives at the school level. This might also apply to initiatives introduced during professional development. Popularity and longevity were both present and particularly robust for curricular innovations introduced during the PEP professional development workshops.
Second, the expectation of modification and adaptation might be particularly relevant for physical educators given the great deal of autonomy they have. In physical education teachers are free to make curricular decisions and determine both the content and manner in which content is taught (Solomon & Ashy, 1995). Research that considers the influence of differences in perceptions of subject matter and goals on teachers’ willingness or ability to adapt instruction (Stodolsky & Grossman, 2000) is beginning to suggest adaptations might be related to teachers’ perceptions of autonomy. Stodolsky and Grossman (2000) found that math and English teachers view their subjects differently and therefore their willingness to consider adapting their instruction to different student populations was different. English teachers tended to view themselves as having a great deal of autonomy to choose what to teach and they were shown to make more adaptations to their instruction to meet the needs of diverse students than their math counterparts. Math teachers viewed their subject as “cut and dried” (p. 164) and were less likely to adapt curriculum and instruction.

Perhaps most importantly, the ability to adapt, change and modify curricula might be evidence of teachers’ practical knowledge. Clandinin (1985) describes personal practical knowledge as “tentative, subject to change and transient, rather than something fixed, objective, and unchanging” (p. 364). In their recent work exploring narrative understandings of teacher knowledge, Clandinin and Connelly (1998) suggest that each teacher works within a professional knowledge landscape within which things are known in certain ways to that teacher. When Debbie was asked, for example, about how she got her students to cooperate prior to learning about Hellison’s Model of Social Responsibility her response was this: “those are hard questions, you know. I just do what
I do, I don’t think about it. I don’t know…” (I1, p.5). When she discovered Hellison’s Social Responsibility Model it provided her with a concrete and structured way of formalizing what she had already been doing.

Given the sociocultural frame of this study, modifications between what teachers learn in professional development interventions and their application in the classroom should be an anticipated consequence. Teachers make decisions regarding what to include in their particular contexts, for the benefit of their particular students and modifications can be seen as evidence of teachers exercising individual agency. Although questions regarding the presence or absence of modifications are important, questions concerned with how teachers modify content, why they modify content, and the conditions under which they modify content are of primary importance when we accept that teachers are at the center of change and mediate the delivery of content to children. Understanding these dimensions is important if we are to develop an understanding of how to steer teachers away from modifications that are not in directions necessary to ensure positive student outcomes. All modifications are not beneficial, and some are in fact detrimental to student outcomes.

An example of this tension between encouraging and valuing modifications and allowing teachers to negotiate out of making important and necessary changes appears within this data set in the case of Susan. She is an outlier in the sense that she made the decision not to use either the sport education or tactical innovations; believing the latter to be too difficult for her students and the former too difficult to negotiate in terms of differential class sizes. Susan’s choice not to implement the models based upon her beliefs about her students and context provides an example that suggests all adaptations
are not positive; particularly when contrasted against Dan’s use of the Social Responsibility model for assessment or Debbie’s decision to delay the use of nets to increase student success.

Susan might have needed more help in learning how to implement these models in her particular context, and perhaps in her case, more time was needed to develop teaching skills that would allow her to be more successful with these curricular approaches. When reflecting on things she might have done different, Susan said this in her final interview:

I feel like I kind of jumped around a bit. Like I tried some things then I quit and then I went to something else then I quit, and I wish I would have stuck with a couple of them longer and then been able to build upon them. (I2, p. 3)

Reflecting on Susan’s experiences during her preparation program and her feelings of being unprepared for this context when she arrived, perhaps this also suggests that professional development initiatives should avoid a one-size-fits all approach when setting up support infrastructures. Perhaps Susan needed more than one site visit per week, and perhaps she would have benefited from additional time to implement a second unit of instruction prior to learning about the next curricular innovation. Although perhaps a naïve perspective when considering large scale efforts with limited funding, this is possible within small scale and well funded initiatives.

5.1.3. Competencies

Data showed that teachers did experience a shift in competencies or an “integrated body of knowledge, skills and attitudes” (Korthagen, 2004, p. 80). This was evidenced not only through the voices that emerged from the data but also from the observations that showed sustained change, and the ways in which teachers contributed to physical
education within the district and larger professional community, each of which appeared in the findings relative to research question two and three. Teachers were observed using PEP innovations and infusing PEP themes in their delivery of PE and their discourse demonstrated their fluency in referring to what they had learned, and how they had modified what they had learned. Data showed shifts in what teachers believed were their contributions to physical education both before and after the PEP grant. Not only did teachers show new competencies, but they also believed they had new competencies that included new subject matter knowledge.

One of the limitations of this study is that competences must be judged through the presence or absence of teaching behaviors, participation in district initiatives and teacher discourse as no data related to student outcomes were collected. More research connecting changes at the teacher level to changes at the student level is necessary. Although the work within the WestEd (2000) initiative attempts to make this connection, the task is made more difficult in physical education when the educational outcomes of physical education are unclear (Siedentop & Locke, 1997).

5.1.4. Beliefs

Although teacher beliefs was not a primary focus of this study as it was for the pilot study (Deglau & O’Sullivan, 2005, January), the story of teacher beliefs is one of change and status quo. Findings indicated beliefs can be considered as both mediating changes in teacher competencies and as being mediated as a consequence of teacher participation in the PEP professional development intervention. Perhaps the most striking example of how beliefs mediated change in practice was that of Susan. Her beliefs about
her students were reasons she cited for not implementing the curricular innovations and developing competencies around their delivery.

For Karen, participating in a workshop and forming beliefs about the power of a curricular intervention to provide fun motivated her to change some of her classroom practices. She regularly implements both tactical and sport education in her program and acknowledges the positive differences in her program since doing so.

Rather than assume then that beliefs mediate competencies and / or beliefs, a sociocultural approach assumes that this relationship is bidirectional. As such, more study is needed to understand how specific features of professional development mediate teachers’ beliefs, just as studies of the workplace show the mediational effect of workplace conditions on the beliefs teachers hold about the status of their subject matter (Sparkes et al. 1993).

This study does suggest that providing opportunities for teachers to see the positive influence of the interventions on their students contributed to their beliefs that the model would work in their contexts.

5.1.5. Shifting identities and Mission

Although ultimately a story of change, this story begins as one of sameness. This study supports other research (Sparkes, Templin & Schempp, 1990; Sparkes, Templin & Schempp, 1993; Stroot, Collier, O’Sullivan & England, 1994) that finds physical education teachers struggling for legitimacy within the overall educational context, and teachers’ marginalization continues to be a recurring theme within physical education. Findings showed that physical educators in this study had positional identities as marginalized teachers based upon their experiences with classroom teaching colleagues,
administrators, parents and by workplace conditions influenced by recent educational reform agendas. We saw, for example, that both Jim and Crystal were forced to teach reading instead of physical education, and Debbie’s story of the small school within a school (use reference to this specific education reform agenda) made teaching physical education less not more effective.

Stories of change can be seen in the voices of the six teachers that emerged in spite of, in opposition to, and sometimes in concert with voices of marginalization. Findings showed that teachers were at times able to assume other voices and take on new identities as collaborators, leaders, advocates and experts and innovators as they found ways of negotiating a response to their marginalization and isolation in subtle and often hidden ways. One example of the dual influence of workplace conditions on practice and shifting identities and agency was seen with Debbie’s experience. She fully admitted that as a consequence of the small-school model, she was no longer able to provide the quality programming she had been delivering to her students prior to the re-structuring. She fully acknowledged the quality of her program was negatively influenced as she made decisions about how best to deal with the change in her gymnasium. Debbie did not, however, return to a skills based approach she would have used prior to the PEP intervention and she did not go back into survival mode. Instead she maintained some things she felt were important aspects of what she had learned and she continued to emerge as a leader in the district, even choosing to pilot a new fitness curriculum Physical Best. Debbie preserved aspects of PEP that she felt were relevant, important and doable in her changed physical education context,
Viewed through a sociocultural lens that accepts that agency and the space for change exists as teachers negotiate environmental constraints. Workplace conditions did not prevent learning in this case, nor did they prevent individual level sustained change. Instead these constraints required change in a particular direction initiated by a teacher who had a fundamental shift in her commitment to making changes in her classroom. Arguably, the change in this direction was less desirable; however, she found a small space in which to negotiate her response that became visible through careful observation and follow-up questioning. In addition to supporting the earlier call for research examining specific modifications teachers make, this also suggests that methodologically, there is utility in including direct observation in addition to taking a narrative approach to understanding issues of identity and mission. This allows a more robust understanding of how teachers’ values are reflected within the classroom and adds and important dimension when asking teachers to reflect on their experiences.

Teachers’ agency was reflected in the data as teachers became advocates, leaders, and collaborators with other teachers who had similar desires. Perhaps the best example is Jim who insisted on taking a proactive stance with his new principal by intentionally explaining to her the types of activities and presentations he had been involved with during PEP. He was not prepared to simply accept the potential negative influence a new principal might have on a program he felt was running well as a result of his efforts both during and since the PEP intervention. As well, Jim showed increased and renewed resistance to teaching reading in the place of physical education and as a result of his stance, his new principal re-arranged the reading blocks and assigned to teaching physical education full time.
The strength and enduring nature of these alternative identities can be seen through the experiences of the Karen and Susan who were selected to the study based upon their lack of district involvement since the end of the intervention. Although both Karen and Susan expressed their disappointment that networking and collaboration did not continue beyond the intervention, their noted disappointment stands as some evidence of their commitment to collaboration. The data showed that each teacher chose a different response to the gap that existed between his/her desire to collaborate and their perceived lack of a space or opportunity to collaborate.

Karen sought out spaces to enact her new identities at a local level. She began to seek collaboration with other teachers on professional development days, and armed with a new expertise and envisioning herself as a knowledgeable leader, initiated contact and offered help to a new teacher in a neighboring school. She became an advocate for physical education in terms of the message she sent to parents and she pushed her principal to purchase heart-rate monitors. Prior to PEP she felt her program was nothing to be proud of and had been reluctant to advocate for it.

Susan could not find a way to reach out to others even though she felt strongly about being a knowledgeable leader, advocating for her profession, and wanting to share her expertise. From her perspective, she could not share equipment because she had no way of communicating with other teachers, and she could not take on these roles of sharing her expertise with non-PEP teachers because she could not “go out and find ‘em”. The finding suggests that Susan seemed to return to a culture of individualism (Hargreaves, 1993) that characterizes education, and indeed characterizes the teaching conditions with her physical education teaching partner. She noted her co-teacher ‘rolled
out the ball’ and an administration who for the most part, was not interested in what was
happening in her gymnasium. Regardless of her inability to reach out, she maintained her
desire to contribute and her belief that she had knowledge to share.

Both Karen and Susan are middle school teachers and did express in the group
interview that they did not have the same opportunities to meet as a group as their
elementary colleagues. Debbie felt the same way. These findings also suggest, therefore,
that the district should have made a special effort to ensure that middle and high school
teachers specifically, receive opportunities to collaborate that are not provided for during
inservice days.

The shift in teachers’ discourse also demonstrated the degree to which the
teachers assumed new or expanded identities as experts and innovators. The process of
developing new ideological positions that under identities involves a process in which the
discourse of others becomes embedded and eventually indistinguishable from one’s own
(Holland et al. 1998). Teachers developed a common, shared technical language when
talking about what they had learned and what they felt they had the authority to modify.
In Denise’s interview she talked about how the PEP teachers had developed a new
language that was not shared by other teachers in the district. Dan talked about how
other teachers in his Masters program had never before heard of things like the tactical
approach. This lends support to the methodological utility of analyzing teacher discourse
to discover how and why teachers change their beliefs and practices.

The ability to internalize and reproduce the discourse of the expert workshop
facilitators shows the degree to which teachers embraced the new knowledge and
embedded it within their own. Rather than ascribing an authoritative or top-down
orientation to the content presented, teachers embraced the knowledge. Again, this was as a consequence of an amalgam of factors discussed earlier.

Korthagen (2004) suggests that interventions required to change behavior might be different than those “required to promote awareness of one’s professional identity and mission” (p. 88) and also suggests we know very little about the appropriate interventions to bring about change in identities. Preliminary findings from this study suggest that changes in identity did develop through the provision of opportunities within the professional development program that allowed teachers to engage in experiences that recursively influenced their identity formations. Providing teachers with opportunities to be leaders and to share their expertise with other teachers helped them adopt identities as leaders. Similarly valuing the opinions of teachers while encouraging and supporting them in their efforts to modify curricula to fit their own contexts allowed them the opportunity to enact a version of themselves that included being an expert and innovator as they modified what they had learned in to improve student learning.

More research is needed to understand which particular structural arrangements facilitate the development of particular identities, and also how shifting identities influence changes in teaching practices, the experiences of students and student outcomes. Findings from this study also have other implications. Teachers need the participatory space to engage in practical and relevant activities that work to inscribe positions until teachers themselves choose to internalize them. Just as poor class schedules and negative perceptions of parents and administrators inscribe identities of marginalization, valuing teachers’ opinions by allowing time for collaboration that includes opportunities to publicly share their knowledge inscribes a position of expertise. Conceptually, this might
be considered a structural alignment between the professional development intervention and the provision of opportunities that allow teachers to enact new roles and develop internally persuasive discourses that lead to sustained change in identity.

The same would be true for the level of mission that Korthagen (2004) refers to as “deeply felt personal values that the person regards as inextricably bound up with his or her existence” (p. 85). If, as Korthagen (2004) contends, people are not necessarily aware of this level until something draws attention to it, then the structural arrangements of professional development must begin to do so. One of the teachers in this study did show a fundamental shift in the way she wanted to commit to student learning as a consequence of her long-term participation as a leader after the intervention. Debbie shifted from being a tired high school physical education teacher who believed her mission was to teach her students not only skill competencies but affective skills as well, to envisioning a future that was centered around sharing her expertise with other teachers in order to impact students beyond her gymnasium. She did not initially just assume this position by virtue of her many years of experience, but rather she felt it was ascribed to her initially by other teachers who sought her expertise. It then became actualized by the leadership positions she assumed after the grant. Debbie’s current focus is on finding ways to assume this position formally and she plans on leaving the classroom to do so within the next year.
5.2. The Story of Lessons Learned: Implications for the Design and Delivery of Professional Development Initiatives

Based upon the findings from this study and the earlier pilot study there are several lessons that have emerged regarding how to structure and deliver professional development programs for physical education teachers.

5.2.1. Delivery counts

The success of this intervention in creating sustained changes at the level of the individual, school and district was the result of particular aspects of the delivery that resonated with the teachers. Change takes time and attention to alignment between the organizing features of the intervention and the goals of the program are important. Data from this study suggests these features include the use of knowledgeable, approachable experts who understand teachers’ contribution as valuable; the provision of multiple opportunities to collaborate; the opportunities to enact new curricular models within their own teaching contexts; and the provision of opportunities that allow teachers to enact emerging identities.

5.2.2. One size does not fit all

There were several important ways in which long-term sustained change must be planned for in terms of providing different levels of follow-up and making instructional design decisions. The first one is to consider the infrastructures that are available within the district to support on-going teacher initiated participation. The middle and high-school cohort in this study had a different in-service structure than the elementary cohort and the findings showed that this difference may have influenced teachers’ ability to continue their collaboration between and across buildings.
Second, although perhaps resource dependant, interventions that include guided support by site facilitators might consider that some teachers need more scheduled visits or scaffolding and other teachers might need fewer visits.

Third, those designing interventions must find a balance between how much to include and teachers ability to assimilate the new content over a specified period of time. More content might not be better given that it takes time for teachers to learn how to apply new subject matter knowledge to their particular contexts.

Finally, if interventions continue to be designed for a group of teachers with varying levels of expertise, some consideration should be given to differentiated instruction as it relates to teachers who have a background in a particular area and those who do not. In this study for example, Crystal and Susan suggested they would have benefited from a more advanced presentation of technology given their pre-existing content knowledge.

5.2.3. Provide a variety of support structures

This intervention included the provision of money for equipment that supported curricular initiatives and themes the teachers were learning in the workshops. Although not specifically discussed as a finding, without the provision of funding to purchase equipment that aligned with new programming, delivery of the new content would have been impossible. Jim would never have used digital cameras to videotape the dance performances; Dan would never have used his palm pilot for grading; Kathy would have never been able to offer rugby; and Susan would not have offered lacrosse.
5.2.4. Passion might not be enough

During my interview with the now retired Elementary Curriculum Director we discussed the limited funding available for on-going professional development which is most particular to physical education within the current reform. She noted:

You overcome that with passion. People who are passionate don’t care about the money. Do you think Denise cares a whip about the money, no, she doesn’t. And most of the other people, they’ve become passionate about it, they’ll do it because of the joy, and I’m not saying money’s not nice, it’s great, and there are some people that you have to use that as bait, but mostly it’s passion. (I, p. 5)

The data indicated that for at least four of the teachers, money or some form of incentive was important and provided a catalyst for their initial attendance. Passion did not drive them to enroll in a 15 month intervention that would require multiple weekends, the submission of unit plans, and the implementation of new curricular models that forced some teachers from their comfort zones. Although there were particular attractors that ‘hooked’ teachers once they arrived as reflected largely in the findings for question four, they did need an initial incentive to become involved. This has particular implications when considering professional development in a subject where continuous professional development is neither funded nor mandated.

5.3. Summary

This study sought to understand the long term changes that resulted from teachers’ involvement in a community of practice underlying a 15 month professional development program. Data indicated that teachers developed new identities through their participation in the intervention. These identities were seen through the voices that emerged as teachers talked about themselves, their schools, their experiences. Findings also showed that teachers made sustained changes in their practice, and continued to use
the innovations and themes introduced in the study. These changes were observed directly and indirectly via teachers’ discourses. The study found the six teachers contributed in multiple ways to their profession and the school district’s mission since the end of the PEP professional development program; contributions they we not making prior to the PEP grant. There were also particular characteristics of the intervention that facilitated sustained change. These findings suggest that not only is sustained change in practice an outcome of this intervention, but that deep and lasting changes can occur at multiple levels when a recursive relationship between changes in teachers’ beliefs and their commitment to the teaching learning process at their school and across the district.
LIST OF REFERENCES


APPENDIX A

INFORMED CONSENT
I consent to participating in research entitled: **Negotiation Individual and District Level Change: A Sociocultural Journey into Teachers’ Professional Development.**

Mary O’Sullivan, Principal Investigator, or her authorized representative Dena Deglau have explained the purpose of the study, the procedures to be followed, and the expected duration of my participation. I understand that in addition to completing questionnaires, I will participate in two individual interviews, a focus group interview and that the investigators will observe me teaching during a pre-arranged time that is convenient for both of us. I understand that all interviews will be audiotaped and transcribed and also understand that NO audiotapes or videotapes of the classroom observations will be needed. Possible benefits of the study have been described, as have alternative procedures, if such procedures are applicable and available.

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. 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: ___________________________

(Participant)

Signed: ___________________________

(Principal Investigator or his/her authorized representative)

Witness: ___________________________
APPENDIX B

DISTRICT PHYSICAL EDUCATION AND HEALTH COORDINATOR INTERVIEW QUESTIONS
District Physical Education and Health Coordinator

1. Can you describe what physical education was like in the district before the PEP grant?

2. What was your annual budget?

3. Describe how physical education in the district has changed since the PEP grant?

4. How are the PEP teachers involved in physical education in Columbus?

5. Were these opportunities available before PEP? Why, why not?

6. Can you describe some of the ways in which you have used the PEP teachers – and why those ways?

6. Have any of the PEP teachers contacted you and asked for more of some thing – for example, we need this or more of that?...

7. Is this the same or different from what happened prior to PEP or different from the requests you receive from non-PEP teachers?

8. Did any of the PEP teachers speak to you about becoming involved at the district without an invitation to do so? Who and When?

9. Were you able to get these teachers involved in any way?

10. Are you providing any opportunities for teachers to become mentors or leaders for other teachers that you were not providing prior to PEP? Had you planned on these when you wrote the grant?

11. What has been the most surprising thing about the effects of the PEP grant on physical education in Columbus?
Questions Director of Grant Management

1. To what degree has physical education entered into the discussion about what’s happening in the district?

2. How did the district Physical Education and Health Coordinator become connected with this office?

3. How has the PEP grant changed physical education in the district?

4. What are the three most important impacts of the PEP grant in the district?

5. Can physical education do something that it is not currently doing in order to become part of more grant opportunities?

6. What would your advice be to physical education moving forward?
District Elementary Curriculum Director

1. Can you describe what your role in the district was prior to your retirement?

2. When was the first district coordinator hired in the district? …why did Columbus choose to go in that direction?

3. Can you describe what physical education in the district was like prior to the Diane’s arrival?

4. How did you first hear about the PEP grant?

5. When you began work on the PEP grant, how did you think if might influence the district?

6. Do you feel the grant has influenced physical education in the district? – How

5. What would be your advice for the field of physical education in the future?
APPENDIX E

GROUP ACTIVITY 1
Group Activity 1

Protocol: Teachers will be asked to consider the following scenario and respond individually prior to discussing this in a larger group.

Activity 1
Name:

1. Since the end of PEP, some of my successes have been …

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. Since the end of PEP, some of my disappointments have been …

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

3. I wish that PEP had…

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

4. Parents would say my physical education program …

________________________________________________________________________
4. Other teachers in the building would say that my physical education program…

5. My principal believes my physical education program…
Group Activity 2

Name:

You have a colleague who will be retiring at the end of the year, and your principal has asked for your input with hiring a replacement.

1. If you were the principal, what attributes would the physical education teacher need to have in order to be successful in your building?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. What do you believe are important attributes a physical education teacher needs in order to be successful in your building?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

3. In order for a teacher in your school to make a contribution to physical education in the district, s/he would need…

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
4. From question 3, why those things?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

5. What might a new physical education teacher expect from other teachers, parents and students in your building?

Teachers:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Parents:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Students:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
APPENDIX G

GROUP ACTIVITY 3
Group Activity 3

Name:

Your principal, who has been very supportive of you and your program, approaches you before the first class on Tuesday morning and asks for a private meeting to discuss an opportunity regarding your physical education program. It seems that she has been approached by the district curriculum committee and has been asked to do a presentation to the parents in the district that explains what physical education is about and its value to the mission of the school.
Your principal then asks if you would be willing to prepare and present a response to the committee and parents.

1. Under what circumstances would you consider preparing this presentation?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. Who, if anybody, would you choose to work with when preparing this presentation?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

3. What factors contribute to your choice to work with those people or why would you choose to complete it alone?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
4. Under what circumstances would you feel this is an appropriate task for you as a teacher?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

5. Regardless of your choice to have someone else do the presentation, what points would you make in the presentation?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
APPENDIX H

GROUP INTERVIEW QUESTIONS
Group Interview Questions

1. What did Columbus Public Schools get for its $250,000?
2. Was it good value for the money?
3. What do you think is different in the school district since the grant?
4. Would someone who was new to the district be able to see anything as a result of the grant?
5. What would they see or notice that you think is different?
6. What did you get for the money?
7. Was that good value for the money?
APPENDIX I

VALUE ORIENTATION INDEX
Below you will find groups of statements that describe goals for students in physical education. Because of limitations in class time, facilities, equipment, and scheduling, etc., we often have to make hard choices about which goals are most important for students in our physical education classes.

Please read the items in each set and rank them from 5 (most important) to 1 (least important). Although some items in the various sets may seem similar, they express different goals that physical educators believe are important. Your rankings will be used by your school district to plan staff development sessions and other support services to assist you in accomplishing your goals for students in physical education.

Directions:

1. Carefully read all of the statements in each set before answering.

2. Consider the importance of each statement to you when planning and teaching students in your physical education classes.

3. Assign your priority (5 to 1) by ranking each statement.

4. Place a "5" next to the statement that is most important in your planning and teaching, a "4" next to the statement that is second most important and so on through number "1" which is the statement of least importance when compared to the others.

MOST IMPORTANT:

5. PLEASE GIVE EACH STATEMENT IN THE SET A DIFFERENT number (1-5) EVEN WHEN THIS IS DIFFICULT. The inventory can not be scored if a set has two 1's or three 2's, etc.

SET I:

1. ___ I teach students rules and strategies for efficient performance in games and sport.

2. ___ I teach students to use ball-handling skills to score by themselves or assist teammates.

3. ___ I teach students that disruptive behavior limits others' abilities to learn.

4. ___ I teach students to select goals consistent with their unique abilities.

5. ___ I teach students to solve problems by modifying movements and skills based on the demands of a given situation.

PLEASE TURN TO THE BACK OF THIS PAGE
BE SURE TO USE A DIFFERENT NUMBER (5-1) FOR EACH ITEM IN THE SET

SET II:
6. ___ I encourage students to balance their personal ability to score goals with our class goal of helping more students to be involved in the game.
7. ___ I teach students to work together to solve class problems.
8. ___ I teach students the processes associated with learning new skills.
9. ___ I teach students to select tasks that they value and enjoy.
10. ___ I teach students to move effectively when performing skill and fitness tasks.

SET III:
11. ___ I teach students to respect the rights of others in team and group activities.
12. ___ I encourage students to take control of themselves.
13. ___ I teach students to share equipment so that each person has a chance to improve their skill or fitness level.
14. ___ I require students to practice the skill, sport, and fitness activities that I introduce in class.
15. ___ I plan so that tasks become progressively more difficult.

SET IV:
16. ___ I teach students the basic concepts necessary for effective performance in games, sport, or fitness activities.
17. ___ I urge students to be patient with others who are learning new skills or strategies.
18. ___ I teach students to appreciate efficient performance in skill, sport, and fitness activities.
19. ___ I teach students lifetime recreational or dance activities so they can feel comfortable socializing in the future.
20. ___ I teach students to complete tasks so they will learn personal responsibility.
BE SURE TO USE A DIFFERENT NUMBER (5-1) FOR EACH ITEM IN THE SET

SET V:

21.____ I allow each student to express personal preferences for class activities.

22.____ I plan carefully when selecting games/sports and making rules to ensure that everyone has a chance to play.

23.____ I plan classes so that students can select from different activities to find those that are meaningful to them.

24.____ I teach students to apply their understanding of basic movement, skill and fitness concepts to the development of their own sport and exercise program.

25.____ I include grade-appropriate information about moving and exercise from such areas as anatomy, kinesiology, and exercise physiology.

SET VI:

26.____ I teach students to use skills learned in class to help their team.

27.____ I encourage students to participate in a variety of activities to gain a greater understanding of themselves.

28.____ I teach students skills so they will enjoy playing sports and games.

29.____ I teach students to observe their partners' movements and offer feedback to improve performance.

30.____ I talk with students about problems they sometimes have with their classmates and help them to work out solutions.

SET VII:

31.____ I sequence tasks so that students can understand how each physical activity contributes to their fitness or skill performance.

32.____ I teach students to be positive and supportive when speaking with other students.

33.____ I teach students games, sport, and fitness activities so they can participate with others.

34.____ I teach students to select activities that are important to them.

35.____ I encourage students to allow everyone in the group to play their favorite position at least once during the unit.

PLEASE TURN TO THE BACK OF THIS PAGE
BE SURE TO USE A DIFFERENT NUMBER (5-1) FOR EACH ITEM IN THE SET

SET VIII:

36. ___ I teach students that group goals, at times, are more important than their own individual needs.

37. ___ I encourage students to enjoy learning skills, games, and fitness activities.

38. ___ I teach students to look to the future and learn activities to enhance their lives after they finish school.

39. ___ I encourage students to feel good about themselves.

40. ___ I teach students how to correct their own mistakes.

SET IX:

41. ___ I plan so that students must combine several movements or skills to solve movement problems.

42. ___ I teach students to work together to make our class a better place to be.

43. ___ I teach students about principles and concepts of exercise and movement that everyone needs to know to lead a healthy life.

44. ___ I teach students to make decisions about activities they would like to learn for the future.

45. ___ I encourage students to be patient with their own physical limits.

SET X:

46. ___ I plan so that classes reflect an emphasis on social interaction and skilled performance.

47. ___ I teach students to appreciate the benefits of movement, skills, and fitness in an active, healthy lifestyle.

48. ___ I plan units so that students add new performance skills and knowledge to those that were learned in earlier units.

49. ___ I encourage students to experience new activities that they have never tried before.

50. ___ I teach students to respect differences in ability in our class.
BE SURE TO USE A DIFFERENT NUMBER (5-1) FOR EACH ITEM IN THE SET

SET XI:

51. I encourage students to apply fitness knowledge to improve their personal health.

52. I challenge students to learn new things about themselves.

53. I teach students to use many forms of feedback to improve their movement, skill, and fitness performance.

54. I teach students to create a better class environment by talking through problems rather than fighting.

55. I teach students to become skilled and fit.

SET XII:

56. I teach students the most effective way to perform specific movements and skills.

57. I teach students to work independently on activities.

58. I teach students that gradually increasing task difficulty will lead to improved performance.

59. I teach students to try new activities to find ones they enjoy.

60. I teach students to use their personal skills to assist their team to be successful.

SET XIII:

61. I encourage students to work together to accomplish group and class goals.

62. I teach students to find activities that they enjoy doing or find useful.

63. I point out to students ways in which a new skill is similar to a skill we have already learned.

64. I include activities that represent specific interests and abilities of students in my classes.

65. I teach students to perform exercise skills and movement fundamentals correctly.

PLEASE TURN TO THE BACK OF THIS PAGE
BE SURE TO USE A DIFFERENT NUMBER (5-1) FOR EACH ITEM IN THE SET

SET XIV:

66. I teach students to test themselves to identify their own strengths and weaknesses.

67. I create a class environment where students learn to plan and prepare for a healthy, active future.

68. I teach students to monitor and improve their own performance based on specific criteria.

69. I guide students to assume responsibility within our class community.

70. I teach students why skills are best performed using specific techniques.

SET XV:

71. I plan group activities so that students from different backgrounds will learn to respect each other.

72. I require students to spend class time practicing games, skill, and fitness activities emphasized in the daily objectives.

73. I talk with students about their concerns and help them participate in activities they feel are most important.

74. I teach students to explore different ways to perform to discover ones they enjoy.

75. I teach students to apply skills in appropriate game and exercise situations.

SET XVI:

76. I teach students to explore many alternatives to discover an effective way to perform.

77. I encourage students to try new activities that they may find useful or enjoyable.

78. I teach students about the positive effects of exercise on their bodies.

79. I encourage students to be personally responsible for their own actions.

80. I plan for student participation by assigning each student a specific task or position.
BE SURE TO USE A DIFFERENT NUMBER (5-1) FOR EACH ITEM IN THE SET

SET XVII:

81.____ I encourage students to be sensitive to other students’ problems and work to help them.

82.____ I teach students to perform complex skills by combining simple movements.

83.____ I teach students to select the best option or strategy to balance their needs with those of their team.

84.____ I teach students to be self-directed and keep themselves going in the right direction.

85.____ I plan so that students exercise at optimal frequency, intensity, and duration levels to improve their fitness.

SET XVIII:

86.____ I plan so that students are practicing skills, games, or fitness tasks.

87.____ I teach students how to break down movement, skill, and fitness tasks to emphasize the most critical components for learning.

88.____ I teach students that group goals are sometimes more important than personal needs.

89.____ I teach students to use the abilities of every member on their team.

90.____ I plan so that students may select the most challenging and relevant tasks from among several options.

PLEASE TURN TO THE BACK OF THIS PAGE
APPENDIX J

PROFESSIONAL / LIFE HISTORY INFORMATION FORM
Professional / Life History Information Form

Name:

Age: Total number of years teaching:

Current School School:

Years at current school:

1. Please indicate how long you have been teaching, and outline your professional history beginning after your teacher preparation program.

Where did you teach?___________________________________________________

Grade Level?______________________  How long were you there?__________

Where did you teach?___________________________________________________

Grade Level?______________________  How long were you there?__________

Where did you teach?___________________________________________________

Grade Level?______________________  How long were you there?__________

Where did you teach?___________________________________________________

Grade Level?______________________  How long were you there?__________

Where did you teach?___________________________________________________

Grade Level?______________________  How long were you there?__________

2a. During your tenure as a teacher, have there been any professional development experiences that you remember either positively or negatively (other than PEP)? Please list and briefly describe them

1.

2.

3.

4.

(please add extra numbers here if necessary)
2b. Which ones were effective and which ones were ineffective and why?

1. 

2. 

3. 

4. 

2c. What was significant about your experience with these programs?

3a. How have you changed as a teacher from the time you began teaching to the beginning of PEP?

3b. Describe the key factors that contributed to this change
4a. How have you changed as a teacher since your participation in the PEP program?

4b. Describe the key factors that contributed to this change.

5a. Have there been any personal influences that have impacted your participation in the program?

5b. How have they impacted your work as a professional?
APPENDIX K

FIRST INDIVIDUAL INTERVIEW QUESTIONS
First Individual Interview Questions

1. Can you tell me how you first became interested in teaching?
2. Can you describe what your undergraduate program was like?
3. How did you decide on what school to go to?
4. What was your first teaching experience like?
5. How have you changed since those early days?
6. How well prepared did you feel for your first teaching job?
7. Can you describe the conditions in your school
8. What is the current climate of your school like?
9. How have you changed since your involvement in PEP?
10. Is there anything that you’re doing in the gym that you were not doing prior to PEP?
11. How have you modified some of the things you’re doing to fit your particular school context?
12. Have there been any difficulties in implementing or changing things in your context?
13. How have your changes influenced your students?
APPENDIX L

FINAL INTERVIEW QUESTIONS
Final Interview Questions

1. Can you describe 5 things that you’re most proud of in terms of our professional accomplishments?

2. 5 things that your least proud of?

3. Can you describe the kind of support you feel from Diane

4. Can you describe the kind of support you feel from the district?

5. Had Diane asked you to make a contribution to physical education before the PEP program, what would your contribution have been?

6. Can you describe the ways in which you see yourself contributing to physical education in the future – what would you contribute now?

7. Can you tell me 4 ways you’ve changed as a teacher since the PEP program began three years ago?

8. What factors have most contributed to the change?

9. How have your changes influenced your students?

10. What opportunities do your students have as consequence of PEP?

11. Can you tell me 4 ways you’ve remained the same?

12. What factors have contributed to these staying the same?

13. What were your experiences working with the PEP teachers?

14. What are your experiences with the PEP teachers now?

15. Has your sense responsibility to physical education changed in the district since your involvement with PEP?

16. Do you see yourself as a mentor or leader for other teachers in the district?

17. What kept you coming back to PEP?

18. Describe 5 words that describe you as a teacher.

19. Have you worked with, around or through your principal?
APPENDIX M

OBSERVATION PROTOCOL
Observation Protocol

<table>
<thead>
<tr>
<th>Date:</th>
<th>Participant:</th>
<th>School:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content:</td>
<td>Duration of Lesson:</td>
<td># Students:</td>
</tr>
</tbody>
</table>

1. Was there any evidence the teacher implemented any or all of curricular innovations they were introduced to? (ie tactical, sport ed, hellison?)

Tactical:

Sport Education:

Hellison:

2. Was there any evidence the teacher implemented any of the key themes that were infused throughout the PEP grant?

Student Choice:

Technology:

Assessment:

Inclusion strategies:

3. Were there any additional ways in which the teacher provided opportunities for students to learn not previously identified or categorized?

4. Were there any examples of the teacher contradicting the principles of quality teaching that were infused throughout the curriculum?
APPENDIX N

POST OBSERVATION INTERVIEW
Observation Interview Questions

1. Were the lessons I saw typical of what you normally do?

2. Why did you make some of the decisions to do…

3. Why not…..

4. What do your students learn in your class?
APPENDIX O

PRINCIPAL INTERVIEWS
Principal Interviews

1. Can you tell me what you know about the PEP grant, if anything?
2. Your Background
3. How did you hear about the grant?
4. Have you heard anything about the grant?
5. Has anything changed in your building as a result of the grant?
6. What are your expectations for a physical educator teacher in your building?
7. When hiring a physical educator, what are the types of qualities you look for?
8. What are the types of things Susan does well?
9. Is there anything you wish she would do more of?
10. How can you tell if Susan is being successful?
11. What purpose does physical education serve in your school?
12. How do you support physical education in your school?
13. What attributes does a physical education teacher need to be successful in your building?
14. How do other teachers in the building perceive PE?
15. What do you think professional development should look like?