JOB-EMBEDDED LEARNING: HOW TEACHERS LEARN FROM ONE ANOTHER DURING THE WORKDAY

by

STEFANIE C. WYNNE

(Under the Direction of Sally J. Zepeda)

ABSTRACT

The purpose of this study was to examine the learning which occurs among teachers in a high performing middle school in the state of Georgia. The goal of the study was to uncover actual teacher perceptions regarding their personal learning experiences. To examine the job-embedded learning experiences of classroom teachers, at a high-achieving middle school in a large, urban, public school district, a qualitative case study method was used. Ten participants were each interviewed one time and observed during formal planning meetings. Artifacts and field notes rounded the data sources.

The research was informed through one-on-one interviews and participant observations with the middle school teacher participants. Teacher perspective and actual observations of activities teachers participated in during the school day account for the basis of this research, with hopes to inform local, district, and state policies effecting mandates directly impacting the structure and required components of teacher professional learning.

The major findings revealed sources of motivation for the teacher participants to improve their teaching practice, an examination of how teachers learn from one another during their

workday, and an exploration of what influences teachers to participation in job-embedded professional learning.

The findings of the study revealed that job-embedded learning is woven into the culture of Edison Middle School. Professional development of teachers is job-embedded, and the teachers take personal responsibility for their own learning. The findings suggest that the high-achieving school studied in this case study displayed practices which were consistent with effective professional learning practices and ideal team learning practices identified in the literature.

INDEX WORDS: Educational administration and policy, Job-embedded learning, On-the-job learning, Professional development, Professional development policy, Professional learning, Situational learning, Teacher learning, Teacher professional development, Team learning

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DEDICATION

This learning journey I have taken is dedicated to my mother, Carolyn Wynne, Ed. S., the retired school teacher. No one in my life quite understands the importance of this degree more than you do. Thank you for your constant support and love, and for always understanding and listening from a teacher and a mother's heart. And to my daddy, Jack Dyson Wynne Jr., my biggest fan. Thank you for making me Daddy's Little Girl – I miss you every day. This is the "big event" in my life and I wish you could have stayed on this earth to see the biggest accomplishment of my life.

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CHAPTER 1

INTRODUCTION

The roles and responsibilities of public school teachers have undergone a significant evolution since the 1983 publication of *A Nation at Risk* (National Commission on Excellence in Education (NCEE) that included a call to improve public education through enhanced teacher preparation. Teachers in the 21st century are viewed as purveyors of knowledge, but they have incurred a new set of responsibilities as the demands of their learners increase (Dweck, 2009; Kuhlthau & Maniotes, 2010). As student needs have changed over the past few decades, so has the need for teachers to examine the most practical and accessible ways in which they enhance their own craft (Levine & Marcus, 2010). Teachers teach, of course, but they do not simply dispense information to their students. Teachers are essentially the tour-guides who inspire and educate the youth of today and who will become the leaders for the future. Hopefully, they challenge, motivate, and encourage while creating opportunities for students to demonstrate what they know and what they can do.

Numerous questions emerged while framing this study. How do teachers improve and enhance their craft once their formal teaching preparation ends? Where does the learning occur that assists teachers in continually improving their skills as an educator and what motivates them to participate in their own learning? Who bears the burden of responsibility to ensure teachers themselves are adequately equipped to prepare our nation's youth to compete in a global society? Is it the federal, state, or local government's responsibility? Should this task be left to districts and local school leaders to accomplish, or should teachers be responsible for creating their own

learning opportunities? What are the internal and external influences that make groups of teachers working together successful in producing positive results?

Teacher's responsibilities far exceed their main obligation, which is to deliver instruction to their students. They are expected to grade papers, supervise extracurricular activities, prepare and execute engaging lessons, attend before and after school meetings, mentor students and fellow teachers, communicate with parents, conduct conferences, maintain a website to ensure constant and accurate communication all while engaging themselves in activities to improve their own teaching practice.

Background of the Study

Over the past 20 years, job-embedded learning has become a popular approach to teacher professional learning. As the research by Little (1982), Rozenholtz (1989), and the National Center for Educational Achievement (Coopersmith, 2009) concluded, there is a clear need for job-embedded learning to exist within schools. Additionally, public policy has provided stipulations for job-embedded learning practices to exist in schools, but remains an unfunded mandate. Job-embedded learning is described by many names and is delivered through a variety of models. The approach to professional development job-embedded learning most closely mirrors, surfaces in the research in various forms, including small schools, smaller learning communities, and teacher teams (Fiszer, 2004; Gregory & Kuzmich, 2007; Little, 2006; McLaughlin & Talbert, 2006; Whitford & Wood, 2010; Zepeda, 1999, 2008). Whether a job-embedded learning approach is referred to as situated learning (Horn, 2005; Lave & Wenger, 1991; Wenger, 1998); communities of practice (Horn, 2005; Levine & Marcus, 2007; Rodrigues, 2005; Viskovic, 2006); authentic professional development (Slepkov, 2008; Zepeda, 2004); or even workplace learning (Slepkov, 2008; Viskovic, 2006), the objective seems to be the same.

Learning which occurs during a teacher's workday with a collaborative group of supportive peers, is clearly a path to successful professional learning, which could inevitably result in positive student learning outcomes (Gordon, 2004; Gregory & Kuzmich, 2007; McLaughlin & Talbert, 2006; Whitfield & Wood, 2010; Zepeda, 2008). When compared to more traditional forms of professional development which tend to look to outside sources for instruction, the basic underlying concept of collaboration is what makes job-embedded learning a dominant force in the professional learning arena.

The benefits of collaboration have been addressed through both quantitative and qualitative studies. Rosenholtz (1989) may have been the first researcher to attempt a large-scale statistical analysis of the relationship between teacher collaboration and student achievement. Quantitative data gathered from her statewide representative sample of 78 elementary schools in eight school districts showed that collaboration is a strong predictor of student achievement gains in reading and math. The gains were measured with one cohort of students from second through fourth grades and a regression analysis controlled for school socioeconomic status, school size, teacher experience, teachers' verbal ability, and pupil-teacher ratio. The teacher practices in these successful schools comprised of teachers who were regularly engaged in professional dialogue with colleagues; shared ideas, knowledge, and techniques; and participated in collaborative problem-solving around classroom issues. Teachers also worked together to develop shared technical knowledge and discovered common solutions to challenging problems.

Little (1982) conducted case studies of four schools identified as successful on the basis of student achievement on standardized achievement scores and two schools identified as unsuccessful on the basis of the same criteria. Successful schools were characterized by Little (1982, 1990) as those in which teachers were provided frequent evaluation of their performance

and feedback, teachers talked with one another and taught each other about teaching, and teachers worked together to design their classes. Both Little (1982) and Rosenholtz (1989) brought teacher workplace factors into the discussion of teaching quality, maintaining that teachers who felt supported in their own ongoing learning and classroom practice were more committed and effective than those who did not. The collaborative practices deemed successful were conspicuously absent in the unsuccessful schools which were examined in both of these seminal research studies.

Numerous researchers (Butler, Lauscher, Jarvis-Selinger, & Beckingham, 2004; Gersten, Vaughn, Deshler, & Schiller, 1997; Joyner, 2000; Knowles, 1980; Schmoker, 2004; Witmer & Melnick, 2007) warn against one-day training programs because there is typically a lack of focus on collaborative learning, with a top-down approach and due to the low level of teacher involvement, there is rarely any type of systematic change sustained over time. Joyner (2000) specifically refers to this type of staff development as “drive-by” to help educators understand the need for schools to be reflective places where teachers can learn what they need to improve teaching and learning. This type of isolated professional development often occurs when a school invites external experts who do not have any contextual sense of what the staff needs to enhance their own learning.

Follow-up support is critical to ensure learned practice is appropriately implemented in the classroom when this type of “canned” professional learning is presented (Crow, 2009; Guskey, 2000; Hawley & Valli, 1999; Hirsh, 2009; Tienken & Stonaker, 2007; Witmer & Melnick, 2007), and this is often not a component of this type of teacher training. The one-shot workshop style of professional development with no common goal or long-term plan has been

criticized; however, these types of learning opportunities are still pervasively used (Hess, 2008; Lieberman & Miller, 2008; Miretzky, 2007).

According to Coopersmith's (2009) summary of the *Schools and Staffing Survey* (SASS) *2007-2008*, regular, full-time public school teachers in the United States spend an average of 52.8 hours per week on all school-related activities, which includes 30.2 hours per week delivering instruction to students. This leaves 22.6 hours a week that teachers spend meeting their responsibilities above and beyond the direct instruction they provide in their classrooms. One may extrapolate from the amount of time available, that teachers would constantly be involved in job-embedded learning activities and working collaboratively with school leaders to influence local practices. This dataset also revealed that teachers reported relatively low levels of influence on school decisions and policies and lower levels of cooperative effort and course coordination with other teachers (Coopersmith). These conclusions suggest that the kind of job-embedded collaborative learning that has been found to be important in promoting instructional improvement and student achievement is not a common feature of professional practice across many schools.

Similar results were yielded by the SASS survey in 2003-2004 where the findings revealed that teachers still received most of their professional development through workshops and did not receive *effective* learning opportunities in many areas in which they wanted help. Of the teachers surveyed in the United States, 57% of them received no more than 16 hours of training in their subject areas. Additionally, teachers in the United States, "Report little professional collaboration in designing curriculum and sharing practices, and the collaboration that occurs tends to be weak and not focused on strengthening teaching and learning" (Roland, 2007, p. 5). More than two-thirds of teachers nationally had not participated in even one day of

training in supporting the learning of special education or Limited English Proficient (LEP) students during the previous three years, and "Only one-third agreed that they had been given the support they needed to teach students with special needs" (Roland, 2007, p. 5). Teachers give relatively high marks to learning opportunities, with 59% indicating training was useful or very useful. But fewer than half found the professional development they received in areas not related to content-area learning, such as classroom management, to be of much value, despite the fact that they want more support in this area (Roland).

Additionally, the SASS 2003-2004 dataset summary report emphasizes that about 70% of teachers reported participating in regularly scheduled collaboration with other teachers on issues of instruction; a slight decline from 74% in 1999-2000. Unfortunately, the SASS does not specify define what "regularly scheduled" means in terms of frequency or duration. It is unclear whether teachers were meeting for a few hours a month or as much as 10 hours a week. Other responses suggest a low intensity of teacher collaboration in most schools. Nationally, only 17% of teachers reported a great deal of cooperative effort among staff members, and only 14 % agreed that they had made conscious efforts to coordinate the content of courses.

The 2004 SASS Teacher Questionnaire included a few items related to opportunities for teachers to participate in job-embedded, collaborative professional work with other teachers, but unfortunately, were removed from the 2008 questionnaire. The one question retained in the 2008 questionnaire that provides some indication about the level of teacher collaboration in U.S. schools was related to school climate. The survey item reads: There is a great deal of cooperative effort among the staff members. Participants responded using a Likert scale which ranged from strongly agree to strongly disagree. Few teachers in 2008 perceived cooperative effort among staff members in their schools; a finding consistent with results from the 2004 survey. Seventeen

percent of teachers in 2004 and 16 percent of teachers in 2008 agreed or strongly agreed that there was a climate of cooperative effort among staff members in their schools. These recent results represent a significant decline from 2000, when 34 percent of teachers agreed or strongly agreed that there is a great deal of cooperative effort among the staff members.

In the preface to *Professional Development in the United States: Trends and Challenges* (Wei, Darling-Hammond, & Adamson, 2010) Hirsh expressed her passion associated with the need for daily teacher collaboration to occur stating:

> To ensure effective teaching in every classroom, educators must have opportunities each day to refine and expand their practice, reflect on how their practice impacts student learning, and engage in ongoing improvement to address learning challenges in the school. Through structured collaboration and unyielding expectations for more effective professional development – promoting shared responsibility for student success across grade levels, subjects, and schools – the best teaching practices will spread from classroom to classroom and ultimately school to school. (p. ii)

Through a partnership formed between the National Staff Development Council[1](NSDC) and the Stanford Center for Opportunity Policy in Education[2] (SCOPE) two phases of a three phase study which examined the effectiveness of professional learning in the United States. Phase two of the study was completed in July 2010 (Wei, Darling-Hammond, & Adamson) and assessed each state on the quality of their professional development across11 indicators that comprised a promising newly-developed Professional Development Access Index. The report provided a comprehensive look at the status of professional development across states and the variation among states in providing professional learning opportunities.

Phase one of the analysis produced a comprehensive report, *Professional Learning in the Learning Profession: A Status Report on Teacher Development in the U. S. and Abroad* (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009) by researchers from Stanford

[1] National Staff Development Council (NSDC) has recently changed the name of the organization to Learning Forward
[2] Formally, The School Redesign Network at Stanford University

University and the NSDC (2009). This report examined what research has revealed about professional learning that improves teachers' practice and student learning. The report describes the availability of such opportunities in the United States and high-achieving nations around the world, which have been making substantial and sustained investments in professional learning for teachers over the last two decades (Darling-Hammond et al., 2009). Findings related to job-embedded learning were reported stating:

> While the United States is making progress in providing support and mentoring for new teachers and focusing on bolstering content knowledge, the type of support and on-the-job training most teachers receive is episodic, often fragmented, and disconnected from real problems of practice. (p. 1)

The report further examined what research has revealed about professional learning and how best practices yield improvement in teachers' practice and student learning. The report also described the relative availability of high-quality professional learning opportunities in the United States compared to high achieving nations that have been making substantial and sustained investments in professional learning for teachers over the last two decades.

In a thorough review of the research literature, the report found that effective professional development is ongoing, intensive, and connected to practice and school initiatives; focuses on the teaching and learning of specific academic content; and builds strong working relationships among teachers. Rigorous scientific studies have shown that when high-quality approaches are sustained by providing teachers with 50 or more hours of support per year, student test scores rise by an average of 21 percentage points. The report clearly documents many weaknesses associated with teacher professional development and points to a less than perfect assessment of the state of professional development in K-12 schools. The NSDC further analyzed the findings from this research to reveal that there is a glaring lack of collaborative learning which is needed to produce the most positive results across most states, districts, and schools in the United States.

The unpublished portion of the NSDC study will include in-depth case studies of several states and districts that show evidence of exemplary, research-based practices and increases in student achievement. Through these case studies, NSDC and SCOPE hope to deepen current understanding of the kinds of policy contexts that lead to excellence in the practice of professional development at both the state and local levels. The concluding report will identify a set of state and/or national policies that can lead to more effective local professional development.

Scholastic and The Bill and Melinda Gates Foundation (2010) recently conducted a nationwide survey of 40,490 teachers to illuminate the thoughts of American teachers with regard to the state of education with hopes of influencing educational reform. The study, *Primary Sources: America's Teachers on America's Schools*, revealed that of the teachers surveyed in Georgia, 93% agreed that time for teachers to collaborate in their day is essential to retaining teachers (Scholastic and The Bill and Melinda Gates Foundation). A middle school teacher who participated in the study stated, "On-going embedded professional development in an environment where teachers are valued and supported would have an enormous impact" (p. 40). This study is of particular interest to this research because it delineates the findings by state and therefore, provides significant statistics directly related to the state in which the research was situated.

In a recent article published by NSDC, there was a call for a new definition of professional learning in which, every educator would engage in professional learning at their particular school as part of their workday (Hirsh, 2009). The definition suggests that outside experts make important contributions, but the tremendous expertise of teachers within the school is required to determine specific learning needs and then to seek others' help to address these

needs. King and Newmann (2000) found that teachers are most likely to learn when they collaborate with colleagues both within and outside of their schools. When there is access to external researchers and program developers, teachers tend to share the gained knowledge with others with whom they collaborate with often. Under this scenario, schools and teams become continuous improvement organizations, and, as Brandt states in an interview with Hirsh (2009), "True learning organizations exchange information frequently with relevant external sources" (p. 12). It is important to note that there is not a proposal to completely eliminate external consultation, but rather a need to follow-up with classroom implementation of learned skills.

Sykes (1996) characterized the inadequacy of conventional professional development as "The most serious unsolved problem for policy and practice in American education today" (p. 465). The *No Child Left Behind Act* (NCLB) of 2001 (U.S. Congress, 2001) requires that states ensure the availability of "high-quality" professional development for all teachers. NCLB does not, however, address questions such as, what constitutes high-quality professional development or how should professional development be made available to teachers? Unfortunately, states and local school districts alike have been left to define this in their own terms. Whatever the collaboration among teachers, it does not seem as though time during the school day is spent in common curriculum planning or in building the types of strong professional relationships needed for successful collaborative learning among teachers to occur (Levine, 2010; Musanti & Pence, 2010; Tourkin et al., 2007).

Portions of educational budgets have been devoted to professional development for teachers to help them accommodate their practices to the realities of their classrooms, but funding for teacher professional learning is yet another unfunded federal mandate which relies on local school systems and states are to fund this requirement. Previous research has suggested

that despite this significant investment, there has been little, if any, positive change in the execution of professional learning for teachers (Crow, 2009). Now more than ever, amidst stringent budgetary cuts, there is a need to examine more cost efficient practices for school districts to put into practice. This research draws attention to the question: what else might be done to reform policy related to professional learning and contribute to transformational change in the teaching profession? The current state of professional learning, along with the forthcoming historical perspective, provide the foundational concerns for the need to place additional attention toward the state of professional learning practices in the United States.

Statement of the Problem

Every year, 9 in 10 of the nation's 3 million teachers participate in professional development designed to improve their content knowledge, transform their teaching, and help them respond to student needs (Darling-Hammond et al., 2009). These activities, which include workshops, study groups, mentoring, classroom observations, and numerous other formal and informal learning experiences, have mixed results in how they affect student achievement (NSDC, 2009; Vescio, Ross, & Adams, 2008). Research shows that professional learning can have a powerful effect on teacher skills and knowledge, and student learning (Fullan, 2001; Jacobson, 2010; Little, 1990; Slepkov, 2008; Tienken & Stokaker, 2007; Yoon, Duncan, Lee, Scarloss, & Shapley, 2007). To be effective, however, professional development, "Must be sustained, focused on important content, and embedded in the work of collaborative professional learning teams that support ongoing improvements in teachers' practice and student achievement" (Darling-Hammond et al., 2009, p. 7).

There will always be teachers who oppose changes which may impact their current teaching practices. Hargreaves (1994) pointed out that such behavior could be a response of

resistance by teachers when there is a call for any type of change with regard to their personal practices. Although traditional forms of professional development, sometimes referred to as “sit and get,” are quite common, they are widely criticized as being ineffective in providing teachers with sufficient time, activities, and content necessary for increasing teacher's knowledge and for fostering any type of meaningful changes in their classroom practice (Garet, Porter, Desimone, Birman, & Yoon, 2007; Hess, 2008; Liberman & Miller, 2008; Miretzky, 2007).

There are many different delivery models used to present professional development for teachers. Extensive research has been conducted on professional development models, but little research has been conducted with the intent to examine what teachers themselves deem valuable learning to help progress toward improvement of classroom instruction. Moreover, there is little research to examine practices of what Little (1982) referred to as a successful school, and much of the research examined within the scope of this research had little to reveal about the practices of teachers within what this research defined as a high-performing schools. Although research has shown that participation in sustained, content-focused professional development has increased, greater attention to other critical features of professional development is necessary to foster instruction and achievement improvements that accountability policy is intended to induce.

Purpose of the Study

The purpose of this study was to examine the learning which occurs among teachers in a high performing middle school in the state of Georgia. For the purpose of this study, a high performing school is defined in the context of the district and state in which it is situated. Data used to determine Adequate Yearly Progress (AYP) for the 2008-2009 school year placed the research site as the overall top ranking middle school in all performance areas except for sixth grade reading which was ranked second. Teacher perceptions with regard to their personal

learning experiences informed the research through one-on-one interviews and participant observations with middle school teachers employed at a high achieving middle school in the state of Georgia.

Research Questions

Because there are many different terms and definitions used to define what teacher professional development is and how it is accomplished at local schools, it was significant to this research to gain insight from practicing teachers. Questions this study sought to answer include:

1. What do middle school teachers perceive to be the motivation to improve their teaching practice?
2. How do middle school teachers learn from one another during planned, unplanned, and spontaneous learning situations when grouped together by themselves or others during their school day?
3. What factors influence middle school teachers to participate in professional development during their workday with regard to the construction of their practice?

Conceptual Framework

The context of this qualitative study is grounded in situated learning theory as a way to examine the interactions among teachers. In contrast with most learning activities that involve abstract knowledge which is taken out of context, Lave (1988) argued that, “Learning is situated as it normally occurs, is embedded within activity, context, and culture, and is typically unintentional rather than deliberate” (p. 88). Lave and Wenger (1991) refer to this as a process of “legitimate peripheral participation” and others have proposed that situated learning occurs in a process of engagement referred to as communities of practice (Horn, 2005; Levine & Marcus, 2007; Niesz, 2007; Rodrigues, 2005; Smith, 2009; Viskovic, 2006). Brown, Collins, and

Duguid's (1989) seminal work described learning through the concept of "cognitive apprenticeship." A number of other prominent researchers refer to a similar concept as situated learning (Horn; Lave & Wenger, 1991; Wenger, 1998).

Brown, Collins, and Duguid (1989) believe that learning occurs when there is, "An opportunity to learn freely in structured and unstructured environments where advances in cognition are made through collaborative social interaction and the social construction of knowledge" (p. 42). Niesz (2007) revealed in her research surrounding communities of practice that learning and teaching were interwoven in social networks. Expanding on Lave and Wenger's (1991) work, Niesz (2007) discusses the concept of learning as social participation which is based on the model of communities of practice. This social learning theory incorporates four deeply interconnected and mutually defining components:

1. *Community*: learning as belonging;
2. *Identity*: learning as becoming;
3. *Practice*: learning as doing; and
4. *Meaning*: learning as experience (Niesz, 2007, p. 606)

These situative theorists; Brown, Collins, and Duguid, Niesz, and Lave and Wenger; conceptualize learning as changes in participation in socially organized activities, and individuals' use of knowledge as an aspect of their participation in social practices (Lave & Wenger, 1991).

A diverse range of social structures exist within schools, for instance teacher inquiry communities (Levine & Marcus, 2007), communities of practice (Horn, 2005; Levine & Marcus, 2007; Niesz, 2007; Rodrigues, 2005; Smith, 2009; Viskovic, 2006), teacher networks (Meyers, Paul, Kirkland, & Dana, 2009), and teacher learning communities (Hord, 2008; McLaughlin &

Talbert, 2006; Whitfield & Wood, 2010) are established to advance collaboration among teachers. It is within these constructs that this dissertation was situated. The researcher set out to examine the ways teachers learn from one another in various groupings, by themselves or with others, and through planned, unplanned, or spontaneous learning. In an attempt to understand the meaning of teacher learning through their interactions, a case study approach was employed.

In this study, social constructivism was used to explore and to establish a philosophical understanding of the meaning generated through interactions among teachers. Social constructivists see the context in which learning occurs and the social contexts as crucial components brought by each learner to their learning environment (Gredler, 1997). Kim's (2001) research explores social constructivism rooted in three specific assumptions about reality, knowledge, and learning. To understand and apply models of instruction that are anchored in the perspectives of social constructivists, it is important to know the premises that underlie them. Social constructivism is based on specific assumptions about reality, knowledge, and learning (Kim).

Social constructivists believe that reality is constructed through human activity and that members of a society together invent the properties of the world (Kukla, 2000). For the social constructivist, reality cannot be discovered because they do not believe it exists prior to its social invention. Knowledge is seen by social constructivist as a human product, and it is socially and culturally constructed (Gredler, 1997; Prawat & Floden, 1994). "Individuals create meaning through their interactions with each other and with the environment they live in, and in turn are creating the product of knowledge" (McMahon, 1997, p. 221). Social constructivists view learning as a social process. It does not take place only within an individual, nor is it a passive development of behaviors that are shaped by external forces (McMahon). Meaningful learning

occurs when individuals are engaged in social activities. This study sought to capture instances of teacher learning through a social constructivist lens to gain understanding of reality, knowledge, and learning via the examination of the perspectives and interactions among middle school teachers in a high performing school.

Overview of the Methods

The purpose of this study was to examine the learning which occurs among teachers in a high performing middle school in the state of Georgia. This case study intended to illustrate and to consider the participant-determined meaning of teacher professional development embedded in their workday and how these experiences influence and develop their craft as teachers. The design of this study was qualitative in nature. Qualitative researchers seek to preserve and analyze the situated form, content, and experience of social action, rather than subject it to mathematical or other formal transformations (Richardson, 1996).

According to Merriam and Associates (2002), "Qualitative research is distinctive in that it is interpretive in nature, uses the researcher as the primary instrument for data collection and analysis—and is inductive in nature" (p. 5). This research study was appropriate for a qualitative study because it examined personal perceptions collected by the researcher which were, in turn, examined through a phenomenological lens. Research that attempts to understand the meaning or nature of experience of persons lends itself to getting out in the field and finding out what those people are thinking (Merriam, 1998). The study was designed to examine the details surrounding the specific perspectives of teacher's feelings, thought processes, and emotions that are difficult to extract or to learn about through more conventional research methods.

In explaining what a case study is, Yin (1989) suggested that this terminology should be referred to as, "An event, an entity, an individual or event to be the unit of analysis" (p. 22).

These perceptions of the teachers interviewed were considered as the unit of analysis for this case study. A case study is an empirical inquiry that investigates an event within its authentic context using multiple sources of evidence (Yin, 2009). Anderson (1993) saw case studies as being concerned with how and why things happen, allowing the investigation of contextual realities and the differences between what was planned and what actually occurred. Case study is not intended as a study of the entire organization; rather, it is intended to focus on a particular issue, feature, or unit of analysis (Merriam & Associates, 2002). To understand and examine the processes of learning activities at the research site, case study method was chosen. This method allowed the researcher to understand the complex real-life activities in which multiple sources of evidence were used. The use of case study to probe an area of interest in depth is especially appropriate as described by Patton (2001), who asserted that, "Case studies become particularly useful when one needs to understand a specific problem or situation in great-depth" (p.23).

Case studies have been criticized by some as lacking scientific rigor and reliability, and because there is an absence of specific findings to specifically address generalizability to other settings or situations of a similar nature (Yin, 2009). There are, in fact, many strengths of case study as a research method. For example, it enables the researcher to gain a holistic view of a certain phenomenon or series of events (Gummesson, 1991) and can provide a broad scope of reference since many sources of evidence are used (Yin, 2009). Another advantage to using case study is its usefulness in, "Capturing the emergent and immanent properties of life in organizations and the ebb and flow of organizational activity particularly when things are changing rapidly" (Hartley, 1994, p. 120). Case studies do, in fact, allow generalizations to be drawn from the findings through the use of multiple sources of data, and can often lead to some form of replication (Merriam & Associates, 2002).

No single qualitative research method or source has a complete advantage over another; rather, they work together complementary and can be used to provide a broader scope of understanding. This case study used many sources which were relevant to the study to increase the likelihood that other schools exploring replication of the job-embedded learning practices occurring at this high performing middle school, will be able to find useful information displayed in the findings section of the dissertation to inform their own practice.

Significance of the Study

Effective professional learning is positioned as a key ingredient in schools classified as successful (Borko, 2004; Calkins, Guenther, Belfiore, & Lash, 2007; Darling-Hammond & Richardson, 2009; Fiszer, 2004; Fullan, 2001; Gordon, 2004; Guskey, 2000, 2003; Meyers, Paul, Kirkland, & Dana, 2009; Zepeda, 1999, 2008). It is hoped that the findings from this study will add to an existing body of research that examines best practices for teacher professional development. The research site boasts some of the highest student performance scores in the state of Georgia, and this study may provide insight to those seeking to align local, district, or state practices with a high performing school.

There are numerous studies (Little, 1982; Rosenholtz, 1989) centering on best practices for teachers; however, the research surrounding actual teacher perceptions is just beginning to surface as a significant component to consider when designing professional learning to create positive student outcomes (Jurasaite-Harbison & Rex, 2010; Levine & Marcus, 2010). More importantly, due to budget cuts in the state of Georgia, there is currently a suspension of requirements for teachers to obtain a specific number of professional learning hours of training. The Georgia Professional Standards Commission (PSC) (2010) lobbied to add language to House Bill 1307. After the Bill was signed into law, the press release from the PSC stated:

> During the 2010 Legislative Session, the General Assembly voted to temporarily suspend PLU requirements for certificate renewal as a way of providing relief to educators during the budget crisis. House Bill 1307, which was signed into law and became effective July 1, 2010, inserts into O.C.G.A. 20-2-200 the following language: "*from July 1, 2010, through June 30, 2015, no professional learning requirements shall be required for certificate renewal for clear renewable certificates for certificated personnel or for certificate renewal for paraprofessionals*."

It is now more important than ever before in the history of public education, for state governments and school systems alike to determine low cost avenues for teachers to still gain the training they need to hone their skills as teachers, while positively impacting student achievement.

Teachers in the United States participate in workshops and short-term professional development events at similar levels as teachers in other nations, but the United States is lagging behind in providing public school teachers with opportunities to participate in extended learning opportunities and productive collaborative communities (Darling-Hammond et al., 2009). Professional development is the vehicle to provide opportunities that allow teachers to work together on issues of instructional planning, to learn from one another through mentoring or peer-coaching, to plan collaboratively, and to learn from one another through job-embedded learning activities. These opportunities yield high dividends for schools and their personnel through such processes that allow teachers to collectively guide curriculum, assessment, and professional learning decisions. This research sought to provide insightful reflections directly from teachers with regard to structured and unstructured professional learning to add, perhaps, a new dimension to the existing body of research centering on teacher perceptions about the effectiveness of professional learning.

Assumptions

As I mentally prepared for this research, I had some assumptions as to what my interviews with middle school teachers would reveal. I instinctively assumed that all teachers

want to improve their craft and knowledge and that all teachers are, in fact, life-long learners with a commitment to learning in a collaborative culture. As the world around us evolves with advances toward a fully digital society, I assume educators will strive to prepare students to become productive members of the future workforce by providing their students with engaging learning through discovery. When working with teachers at a high performing school where standardized test scores seem to influence overarching systems set up within the school it seemed logical that teachers would be in a constant state of data analysis.

I am a realist as well, and I know these are not completely pragmatic assumptions. There are teachers who have not been in a classroom with the intent to learn since they completed their own degrees. I also believe that individual student level performance data should direct every aspect of instruction. Reality tells me that this is not the case for most teachers, especially at a high-performing school. My personal bias related to the research is that I in fact consider myself to be a life-long learner, and my perspective as a local school leader is that if I provide and structure time during the workday for teachers to work and to learn together collaboratively, then learning will occur. My entire professional career has been spent in a school, and this may have a significant impact on what I expect from the participants.

Definition of Terms

High-performing School – For the purpose of this study, the research site is defined as high performing in the context of the district and state in which it is situated. 2008-2009 AYP results places the research site as the overall top ranking middle school in all performance areas except for sixth grade reading which was ranked second. All results placed the school within the top seven performing middle schools in the state of Georgia.

Job-embedded Learning **–** Also referred to as on-the-job learning or training, job-embedded learning specifically refers to the learning which occurs during the normal course of a teacher's daily work activities. Participants learn by doing while continually reflecting and sharing with other teachers and administrators with regard to continuous improvement of instructional practices (Zepeda, 2008).

Learning **–** Learning is defined within this study as, (1) An activity whereby knowledge, skills, or attitudes are acquired, revised, or relearned and recognized as such by learners, (2) An activity that does not take place within the context of or follow from a formally organized learning program or event, and (3) An activity in which the adult learner is involved in an interactive work situation. Moreover, an activity that meets these three criteria is defined within this research as an interactive learning activity (Koopmans, Doornbos, & Van Eekelen, 2006).

Middle School **–** The Official Code of Georgia (O.C.G.A. 20-2-290) defines Middle Schools for funding purposes as a single school site which houses grades 6-8 with a dedicated fulltime principal.

Professional Development **–** A combination of continuous and incremental experiences built on existing skills that empower educators to improve curriculum and instruction to facilitate student growth and development (Fiszer, 2004; Gordon, 2004; Zepeda, 1999, 2008). Activities teachers undertake to enhance professional knowledge and skills or career opportunities, with the goal of improving student learning (Hirsh, 2009).

Limitations of the Study

In most qualitative research, generalizability in the statistical sense is limited by the use of small, purposeful samples (Yin, 2009). In this study, there are some unique limitations which may impact the use of the findings in other settings. Case study does not represent a "sample."

The school is, in fact, the highest performing middle school in the school district in which it is located. The sampling for this study may limit the usefulness beyond the leaders in this particular school because the demographic make-up of the student population is unique. Additionally, the study may be limited by the fact that the researcher worked in a supervisory position at the school where the interviews and observations were conducted. This factor may have limited the perceptions shared, that may have otherwise been shared with a researcher having no affiliation with the research site. Also, this may have limited those wishing to participate in the study since the researcher was a supervisor in the building. With accountability increasing for schools there is undoubtedly a push to establish causal relationships through research and to be able to designate a specific "treatment" to mend low performing schools. This research poses exemplars for practice rather than strategies to improve student achievement.

There may be limitations to the research due to the fact that research in the selected school site has not offered a treatment applicable to other settings. However, the professional experience of the researcher across a variety of settings may provide important background knowledge to assist in identifying important questions as the data emerge, as opposed to a researcher who has no prior experience in a school setting. It is important to maintain professional relationships within the building, and a high level of trust from the teachers is placed in the fact that the data from the interviews may reveal information to a supervisor in the school which may have not otherwise been disclosed.

Constant mental and written reminders were used during reflection as the researcher progressed through the study to remind the researcher that findings were confidential and could not be revealed; even if it could provide information that could be used to make local school improvements to professional learning practices. Additionally, a journal was maintained to

provide an audit trail and to serve as a source for review of reminders to reference throughout the research process. Notes were made following each interview and at significant points during the research as phases noted on the research process flowchart began and ended.

Organization of the Dissertation

The organization of the dissertation begins with a description of the background and the statement of the problem with the research questions, which anchors the overarching rationale for the study in Chapter 1. Additionally, this chapter provides an overview of the methods and conceptual framework, while also addressing the significance of the study. Key terms were then defined as they relate to the present study and limitations were also presented.

Chapter 2 presents a review of the related literature relevant to professional learning relative to the context of the study. The review includes the historical influences of policy on professional development, current proposed legislation effecting teacher professional development, successful professional learning practices, team learning behaviors, and workplace relationships. Chapter 3 presents the research method and the overall scope of how the study was preformed, and the cross-case findings from the data are presented in Chapter 4.

Chapter 5 presents policy implications of the study with a focus on the findings related to each research question and factors needed to set-up successful job-embedded learning systems. Finally, this dissertation concludes with a summary and discussion of the findings and implications for further research with concluding thoughts in Chapter 6.

CHAPTER 2

REVIEW OF THE RELATED LITERATURE

Introduction

What is professional development and how is it defined? Effective professional development approaches for teachers are a high priority as school districts struggle to improve teaching and learning for all students in this era of high stakes accountability (Levine & Marcus 2010; Lieberman & Pointer Mace, 2010; Skerrett, 2010; U.S. Department of Education, 2010; Yendol-Hoppey, 2010). A survey conducted more than 20 years ago by the U.S. Department of Education (1999) found that many teachers believed that job-embedded, collaborative staff development activities, such as common planning time, being formally monitored by another teacher or networking with other teachers outside the school, are more helpful as professional development than the more traditional forms of development strategies. There will always be mandates for teacher professional learning; however, there is a need for policy to shift toward a focus on ways to enhance learning of teachers instead of simply focusing on delivery of content knowledge (Webster-Wright, 2009).

The purpose of this study was to examine the learning which occurs among teachers in a high performing middle school in the state of Georgia. For the purpose of this study, a high performing school is defined in the context of the district and state in which it is situated. Data used to determine Adequate Yearly Progress (AYP) for the 2008-2009 school year placed the research site as the overall top ranking middle school in all performance areas except for sixth grade reading, which was ranked second. Teacher perceptions related to their personal learning

experiences informed the research through one-on-one interviews and participant observations with middle school teachers employed at a high achieving middle school in the state of Georgia.

The research questions this study sought to answer include:

1. What do middle school teachers perceive to be the motivation to improve their teaching practice?
2. How do middle school teachers learn from one another during planned, unplanned, and spontaneous learning situations when grouped together by themselves or others during their school day?
3. What factors influence middle school teachers to participate in professional development during their workday with regard to the construction of their practice?

A number of large-scale studies have identified specific ways in which professional learning can deepen teachers' knowledge, build their skills, and improve instruction (Bryk, Camburn, & Louis, 1999; Calkins et al., 2007; Goddard, Goddard, & Tschannen-Moran, 2007; Louis & Marks, 1998; Supovitz & Christman, 2003). Darling-Hammond et al. (2009) analysis of the *2003-04 Schools and Staffing Survey* (Roland, 2007), the *2004-05 MetLife Survey* (Markow & Cooper, 2008), and the *2007-08 NSDC Standards Assessment Inventory*, concluded that the structures and supports that are needed to sustain teacher learning and change to foster job-embedded professional development in collegial environments falls short. Therefore, this study is timely and significant.

As the federal department of education has begun using qualitative approaches to program evaluation (U.S. Department of Education, 2008b), it is important to contribute to this body of research examining professional learning. A qualitative approach, employing case study methods, was selected for this research to discover teacher perceptions related to structured and

unstructured professional learning. This chapter presents the five areas of literature in which this study was grounded—the historical influence of policy on teacher professional development, current proposed legislation impacting teacher professional development, common traits intrinsic to successful professional learning practices, an examination of the research with regard to the significance of team learning behaviors, and the importance of relationships among professionals.

Historical Influence of Policy on Teacher Professional Development

Professional learning for teachers has undergone significant reform beginning with the publication of *A Nation at Risk: The Imperative for Educational Reform* (NCEE, 1983), which was published in 1983. The report captivated public attention casting a spotlight on the need to improve schools and on the teacher as a primary agent of change. Many reforms and publications have impacted the progress made in public education since that time, but few have had the lasting effect this report has had on the public's perception of public education. The report left the American public questioning the value and worthiness of public education and began calling for policymakers to implement changes to improve existing policies or to create new ones effecting schools.

A Nation at Risk (NCEE, 1983) contended that many teachers did not have the knowledge, skills, and training they needed to produce successful students. Through this report, The National Commission on Excellence in Education (NCEE) called for strengthening teacher preparation both in content and effective teaching practices, but what followed was a greater focus on classroom-teaching philosophy rather than on the more needed subject-matter knowledge.

Although this report drew significant attention to the need for changes to educational policy, there was no legislative change toward the implementation of new practices to address these public concerns. *A Nation at Risk* (NCEE, 1983), along with a number of other similar reports, was a primary influence in the reform movements that have occurred in education during the past two decades. To gain a longitudinal perspective of how national educational policies has evolved over the past 25 years, Table 2.1 presents the significant recommendations from influential committees and policy reform directly impacting teacher professional development.

Table 2.1

National Educational Policy and Committee Publications 1983-2009: Influence on Professional Development

Document	Year	Source	Major Recommendations Impacting Teacher Professional Development
A Nation at Risk: The Imperative for Educational Reform	1983	National Commission on Excellence in Education	*A Nation at Risk* called for strengthening teacher preparation both in content and effective teaching practices. Following the publication of this document was an even greater focus on classroom-teaching philosophy, rather than on the more needed subject-matter knowledge for teachers.
A Call for Change in Teacher Education	1985	National Commission on Excellence in Education	This document was framed as a response to *A Nation at Risk*. It highlighted the need for reform movements in public education to begin with the teacher training programs with a focus for the need to improve teacher preparations and "To make teaching a more rewarding and desirable profession."

Table 2.1 *continued*

Document	Year	Source	Major Recommendations Impacting Teacher Professional Development
Goals 2000: Educate America Act	1989 (passed 1994)	U.S. Congress	Goals 2000 was set forth in Congress so that by the year 2000, the Nation's teaching force would have access to programs for the continued improvement of their professional skills and the opportunity to acquire the knowledge and skills needed to instruct and prepare all American students for the next century.
Improving America's Schools Act of 1994	1994	U.S. Congress	This document was the reauthorization of the *ESEA* which enacted additional supports for teacher professional development.
1998 Amendments to the Higher Education Act of 1965	1998	U.S. Congress	The goal of this Act was to improve the quality of the current and future teaching force by improving the preparation of prospective teachers and enhancing professional development activities.
The No Child Left Behind Act of 2001	2001	U.S. Congress	*NCLB* provided provisions which shifted accountability from postsecondary institutions that prepare teachers, to districts and schools for the preparation of new teachers and the development of the current teacher workforce.
Teaching at Risk: A Call to Action	2004	The Teaching Commission	This document proposed a multifaceted approach to helping teachers succeed; one that includes high standards for teacher classroom performance and student achievement, and ongoing and targeted professional development to help teachers meet the demanding new standards.

Table 2.1 *continued*

Document	Year	Source	Major Recommendations Impacting Teacher Professional Development
A Nation Accountable: Twenty-Five Years After a Nation at Risk	2008a	U.S. Department of Education	This longitudinal follow-up to *A Nation at Risk* addresses little about teacher professional development but it highlights the changes with regard to alternate routes to teacher certification.
American Recovery and Reinvestment Act of 2009	2009	U.S. Congress	This act designated one time funding to be spent in ways most likely to lead to improved results for students, long-term gains in school and school system capacity, and increased productivity and effectiveness. Each state is required to form its own system of evaluation to identify effective professional development to improve student learning.

What can we learn from the review of this historical timeline? Clearly a focus on professional development has been an aspect of the need for educational reform since the early 1980's with the publication of *A Nation at Risk* (NCEE, 1983). It is not surprising that current legislation continues the trend of examining professional learning as an important aspect of educational reform.

There is an urgent need to redesign teacher professional development and school schedules to ensure that teacher learning opportunities are sustained, job-embedded, collaborative, data-driven, and focused on student instructional needs. The National Staff Development Council (NSDC) has long provided standards for staff development (revised in 2001) to guide professional learning and recently redefined "Professional Development" (NSDC, 2009) in hopes of influencing the pending reauthorization of the *Elementary and Secondary Education Act of 1965*. This new definition has yet to officially be published.

A Nation Accountable: Twenty-Five Years After a Nation at Risk by the U.S. Department of Education (2008) notes that a number of special interest groups blocked the implementation of a number of the Commission's recommendations made in *A Nation at Risk* (1983) and little progress has been made to increase content knowledge of teachers. The enactment of NCLB did include the provision for teachers to become Highly Qualified, but again, the emphasis was on resource inputs rather than learning outcomes. As this historical review highlights, the need to provide the resources to increase teacher effectiveness is still a great need in our educational system, but the even greater need is for funding to be provided to support these systems for improvement.

Current Proposed Legislation Effecting Teacher Professional Learning

Keep Teachers Teaching Act of 2009 was introduced to the 111th Congress on February 24, 2009 to amend the *Elementary and Secondary Education Act of 1965.* The intent of this Act was to direct the Secretary of Education to distribute competitive grants to local educational agencies (LEAs), states, and partnerships of LEAs, nonprofit organizations, and institutions of higher education for the development and implementation of innovative teacher retention programs that include: (1) professional development; (2) teacher mentoring; (3) advanced certification or credentialing; (4) research, travel, or fellowship opportunities; and (5) pairing of teachers with research or industry professionals. This bill was in the first step in the legislative process and went dead during the 110th Congress at the committee level. This proposal was referred to the subcommittee on Early Childhood, Elementary, and Secondary Education on April 22, 2009 with amended recommendations being made on March 15, 2010 (http://www.govtrack.us/). With the pending close of the 111th end of the Congressional Session, it is likely this Bill will go dead once again.

Most recently, the U. S. Department of Education (2010) published *A Blueprint for Reform: The Reauthorization of the Elementary and Secondary Education Act* (ESEA). President Obama begins the report stating, "We must foster school environments where teachers have the time to collaborate, the opportunity to lead, and the respect that all professionals deserve" (p. 1). This report was framed as a response to the *American Recovery and Reinvestment Act of 2009* ([ARRA] U. S. Congress, 2009) and requires each state to form its own system of evaluation to identify effective professional development to improve student learning. This report calls for every teacher and leader to have, "Access to the preparation, on-going support, recognition, and collaboration opportunities he or she need to succeed" (p. 13). The proposal requires districts to set up "conditions" to make these mandates happen without any further explanation of how "conditions" will be defined; moreover, the reauthorization proposed does designate funds from ARRA to support these systems, as long as they are aligned with evidence of improvements in student learning.

The plan presented in *A Blueprint for Reform* (U.S. Department of Education, 2010) requires high-quality and effective professional development, but just as NCLB fails to define this requirement, so does this new plan for the reauthorization of ESEA. Additionally, this proposal suggests restructuring the school day to provide teachers with the time needed to collaborate and improve their practice (U.S. Department of Education, 2010). Although the U.S. Department of Education is claiming the funds from ARRA should be working toward this goal, there is little evidence to support where exactly these funds are being funneled as districts struggle to find creative ways to meet budget deficits.

State budget shortfalls have recently begun to reduce work days for government employees and one school system in the state of Georgia (Peach County) was forced to reduce

their school week to four days during the 2009-2010 school year to make-up for budget shortfalls. Along with Peach County, Wilcox County approved a four day week for their students in the 2010-2011 school year, and at least 20 other districts have contacted Peach County's superintendent to inquire about this restructuring (Castillo, 2010). The *Wall Street Journal* (Herring, 2010) recently reported that nationwide there are over 100 school districts from the 15,000 plus districts nationwide operating on the 4-day a week schedule across 17 states and dozens others are considering the change for the 2010-2011 school year. Even Georgia's fourth largest school district, Fulton County, cut the school year to 177 days from 180 to address the need to reduce costs across the district.

Along with the proposals for the reauthorization of the ESSA, The National Staff Development Council (NSDC) highly anticipates the proposed new definition of "Professional Development" will have a significant influence on policy as the proposed Amendments to Section 9101 (34) of the *Elementary and Secondary Education Act*, the *No Child Left Behind Act of 2001,* is set for reauthorization. NSDC's proposed definition reads as follows:

> (34) PROFESSIONAL DEVELOPMENT— The term "professional development" means a comprehensive, sustained, and intensive approach to improving teachers' and principals' effectiveness in raising student achievement.
>
> (A) Professional development fosters collective responsibility for improved student performance and must be comprised of professional learning that is:
>
> (1) Aligned with rigorous state student academic achievement standards as well as related local educational agency and school improvement goals;
> (2) Conducted among educators at the school and facilitated by well-prepared school principals and/or school-based professional development coaches, mentors, master teachers, or other teacher leaders;
> (3) Primarily occurs several times per week among established teams of teachers, principals, and other instructional staff members where the teams of educators engage in a continuous cycle of improvement that,
>
> (i) Evaluates student, teacher, and school learning needs through a thorough review of data on teacher and student performance;
> (ii) Defines a clear set of educator learning goals based on the rigorous analysis of the data;

(iii) Achieves the educator learning goals identified in subsection (A)(3)(ii) by implementing coherent, sustained, and evidenced-based learning strategies, such as lesson study and the development of formative assessments, that improve instructional effectiveness and student achievement;
(iv) Provides job-embedded coaching or other forms of assistance to support the transfer of new knowledge and skills to the classroom;
(v) Regularly assesses the effectiveness of the professional development in achieving identified learning goals, improving teaching, and assisting all students in meeting challenging state academic achievement standards;
(vi) Informs ongoing improvements in teaching and student learning; and (vii) that may be supported by external assistance.

(B) The process outlined in (A) may be supported by activities such as courses, workshops, institutes, networks, and conferences that:

(1) Must address the learning goals and objectives established for professional development by educators at the school level;
(2) Advance the ongoing school-based professional development; and
(3) Are provided by for-profit and nonprofit entities outside the school such as universities, education service agencies, technical assistance providers, networks of content-area specialists, and other education organizations and associations. (reprinted with permission, NSDC, 2009)

NSDC's proposed new definition rests on the overarching assumption that confidence must be placed in teachers. All teachers can, should, and will learn if their school systems and schools provide them appropriate and sustained support (Mizell, 2008a) and systems within the school day to accomplish this goal

NSDC also believes in the potential power of professional learning that occurs at the school multiple times per week. NSDC's new definition reflects the value that professional development is a serious endeavor; not an option, not an after-thought, and not dependent on a specific day set aside for captive-learning. Mizell (2008b) contends that, "For this to be the case, educators must experience learning as integral to their normal work week and it must be as easily accessible in their schools as walking to a room down the hall" (p. 5). A component of NSDC's

new definition of professional learning, calls for every educator to engage in professional learning at their particular school as part of their workday (Hirsh, 2009).

The intent of the new definition is to inform and influence outside experts as they strive to improve the practice of educators inside schools. The definition suggests that outside experts make important contributions, but the tremendous expertise of teachers within the school is required to determine specific learning needs and then to seek others' expertise to help address these needs. As NCLB awaits reauthorization, it would behoove members of Congress to consult with those closest to the schools and research, so practical solutions can be put in to place with limited funds. It is now clear that Congress will not act on ESEA reauthorization until after the November 2010 elections.

With the end of the 111th Congress it is clear that the reauthorization will be left to the 112th Congress and having to wait until after the November elections may, in fact, have a strong upside for reform advocates. Until now, the conversation around ESEA reauthorization and other proposed education reforms has been very much a conversation at the top, a stimulating and productive conversation, to be sure, but carried out in forums like this one by professional advocates. Lasting reform, however, that closes the achievement gap and promotes an equitable system of education for all children, will require bringing into the conversation the people for whose benefit we are all advocating, the teachers, parents, and students, especially in low-income and minority communities, who have the most to gain but whose voices are not so often heard. During the final days of the current election cycle, a cycle in which incumbents are especially vulnerable and challengers especially hopeful, a cycle in which, candidates are listening to their constituents more carefully than ever it would be an ideal time for the public to engage their members of Congress in meaningful commitments to educational reform.

Successful Professional Learning Practices

There are nearly as many definitions of professional learning as there are researchers and authors who have written about the topic (Guskey, 2003; Hawley & Valli, 1999; Joyce & Showers, 2002; Lieberman & Miller, 2008; Sykes, 1996; Whitcomb, Borko, & Liston, 2009; Zepeda, 1999, 2008). What sets professional development programs apart as successful and unsuccessful? Gordon (2004) offers a definition of what is needed to be considered a *successful* professional learning program. He included a combination of experiences which is inclusive of empowerment to build capacity surrounding core elements. "Successful professional learning includes individuals, educational teams, and the organization working to improve core elements: curriculum, instructions, and student assessment to facilitate student growth and development" (p. 204). Gordon's research includes findings that teachers operating in collaborative learning environments refer to their practices as "a way of life"(p. 6) as they participate in daily embedded learning that lead to the ultimate goal: improving student achievement.

Fiszer (2004) believes that successful professional development should further be defined through the conditions which deem the practices as *effective*. He contends that:

> Professional development requires modeling, practice in simulated and actual settings, and structured, open-ended feedback about performance observed during actual practice. Effective professional development should ensure follow-up to the ideas discussed where collaboration, testing of selected ideas, and reflective practice are involved. (Fiszer, 2004, p. 2)

Learning needs to be ongoing, interactive, and supportive of the teacher with systems embedded within the school day to maximize opportunities for these ideas and practices to be put in place for success. Professional development practices should be set apart by defining what is not only successful, but also effective.

The importance of teachers' access to high quality professional learning opportunities throughout their careers, and of improving professional learning for teachers has been widely recognized. A recent major review of professional development (Darling-Hammond et al., 2009) notes that, in the last two decades, the research on effective professional development has begun to identify a consensus surrounding key principles in the design of learning experiences that can impact teachers' knowledge and practices. In this review, high quality or effective professional development was defined as that which:

> Results in improvements in teachers' knowledge and instructional practice, as well as improved student learning outcomes. We emphasize research that links teacher development to student learning. While the impact on student achievement is a critical indicator of the effectiveness of professional development, we believe the impact of professional development on teacher knowledge and instructional practice is also relevant, as these are worthwhile outcomes in themselves that support increased learning for students. (Darling-Hammond, p. 115)

Research on studies about the conditions that foster effective professional learning was summarized in 1999 by Hawley and Valli as a list of nine design principles. The Principles for the Design of Effective Professional Development are:

1. The content of professional development (PD) focuses on what students are to learn and how to address the different problems students may have in learning the material.
2. Professional development should be based on analyses of the differences between (a) actual student performance and (b) goals and standards for student learning.
3. Professional development should involve teachers in the identification of what they need to learn and in the development of the learning experiences in which they will be involved.
4. Professional development should be primarily school-based and built into the day-to-day work of teaching.
5. Professional development should be organized around collaborative problem solving.
6. Professional development should be continuous and on-going, involving follow-up and support for further learning - including support from sources external to the school that can provide necessary resources and new perspectives.
7. Professional development should incorporate evaluation of multiple sources of information on (a) outcomes for students and (b) the instruction and other processes that are involved in implementing the lessons learned through professional development.

8. Professional development should provide opportunities to gain an understanding of the theory underlying the knowledge and skills being learned.
9. Professional development should be connected to a comprehensive change process focused on improving student learning. (Hawley & Valli, p. 130)

Each of these statements is supported by an explanation of the basis for the principle. For example, the fourth principle highlights school-based professional development, and explains that:

> Teachers learn from their work. Learning how to teach more effectively on the basis of experience requires that such learning be planned for and evaluated. Learning needs arise and should be met in real contexts. Curriculum development, assessment, and decision-making processes are all occasions for learning. When built into these routine practices, PD powerfully addresses real needs. (Hawley & Valli, 1999, p. 132)

The importance of continuous and ongoing professional learning, with follow-up and support, as stated in the sixth principle is supported by this argument:

> Adoption and implementation of effective practices requires continued learning. Therefore, the design of PD must provide time to apply new ideas and, sometimes, must draw on additional outside expertise. Such follow-up and support ensures PD contributes to real change and continuous improvement. (Hawley & Valli, 1999, p. 132)

An Australian study analyzed the features of professional development programs that had been examined in four evaluation studies (Ingvarson, Meiers, & Beavis, 2005). The model for the analysis included contextual factors (e.g., school support), structural features of programs (e.g., length), process features (e.g., emphasis on content; active learning; examination of student work; feedback; follow-up), a mediating variable (level of professional community generated), and four outcome measures (knowledge; practice; student learning and efficacy). The findings from this study indicated that the most effective programs, in terms of their impact on teachers' knowledge and practice, were consistent with research such as that summarized by Hawley and Valli (1999). The study found consistent, significant, and direct effects across the four studies for the impact of content focus, active learning, and follow-up on knowledge and professional

community (Ingvarson et al., 2005).The most effective programs identified in this study shared the following features: Desimone (2009) argues that there is an empirical research base to support the identification of a core set of features of effective professional development and a core conceptual framework for studying the effects of professional development. She found a consensus of five core features, suggesting that the first feature may be the most influential feature:

1. The content focus of teacher learning;
2. Opportunities for teachers to engage in active learning are also related to the effectiveness of professional development;
3. Coherence, the extent to which learning is consistent with teachers' knowledge and beliefs;
4. Intellectual and pedagogic change requires professional development activities to be of sufficient duration, including both span over time over which the activity is spread and the number of hours spent in the activity;
5. Collective participation of teachers from the same school, grade or department, setting up interaction and discourse which can be a powerful form of teacher learning. (Desimone, 2009, p. 185)

A recent review investigated what research has revealed about professional learning that improves teachers' practice and student learning. This review drew on methodologically strong studies that pointed to some basic principles for designing professional learning:

1. Professional development should be intensive, ongoing, and connected to practice.
2. Professional development should focus on student learning and address the teaching of specific curriculum content.
3. Professional development should align with school improvement priorities and goals.
4. Professional development should build strong relationships among teachers (Darling-Hammond et al., 2009, p. 118).

A key finding of this research is the need for professional development to operate within content areas, thereby allowing teachers to develop their content expertise.

In Borko's (2004) presidential address to the American Educational Research Association, she described the professional development available to teachers as "woefully inadequate." Borko went on to emphasize that effective professional development is critical for

teacher growth and to produce increases in student achievement. To be effective, Joyce and Showers (2002) assert that professional development should be based on curricular and instructional strategies that have a high probability of effecting student learning. Hord (2004) emphasizes in her definition of professional development that the practice should be considered, "An entry point for changing teachers' mental models" (p. iv). Clearly there is a need for professional learning programs to be deemed effective if they are to produce positive learning outcomes for teachers and students alike.

So what is it that actually constitutes highly effective professional development? The National Commission on Mathematics and Science Teaching for the 21st Century (U.S. Department of Education, 2000) recommended that professional development should:

1. Deepen teachers' knowledge of the content being taught;
2. Sharpen teaching skills in the classroom;
3. Keep up with developments in the individual fields, and in education generally;
4. Create and contribute new knowledge to the profession; and
5. Increase their ability to provide explicit feedback to students. (p. 18)

This approach to professional learning acknowledges that teachers are at the center of their own daily learning, however; the major omission from the National Commission on Mathematics and Science Teaching's (NCMST) recommendations are the inclusion of collaborative learning. Ten years later, all five of these proposals are still the crux of what an ideal system of professional development should encompass, and a layman would assume that these recommendations would be progressive toward optimal professional development.

When comparing NCMST's recommendations with Little (1982) and Rosenholtz's (1989) seminal work, there is a glaring omission of the need for teacher collaboration which maximizes the learning opportunities for teachers. Each of the recommendations by the NCMST could essentially be addressed in isolation and don't provide strategies for implementation.

Moreover, not one of the recommendations specifically address the need for collaboration among teachers. Historically, teacher collaboration has been embedded in numerous reform movements presented by national committees (see Table 2.1) and overwhelmingly recommendations have included collaboration as a critical component to be considered effective, successful professional learning.

Effective professional development approaches for teachers continue to be a high priority in this era of high stakes accountability as school districts struggle to improve teaching and learning for all students. Barth (2004) found that when confidence is placed with teachers in collaborative settings, conversations begin to emerge from the teachers themselves. When given trust to work together toward student success, these opportunities can result in a powerful shift toward a collaborative culture of success. Lieberman and Pointer Mace (2010) similarly recommended paring accomplished practitioners with those who may be struggling in a mentorship type relationship to set the stage for critical conversations about teaching and learning to occur. If teachers are left in isolation and to follow through with the responsibility for their own learning, then there is a higher instance of losing teachers with great potential. Studies have suggested that systems of collaboration are needed to positively influence struggling teachers so that classroom teaching does not exist as a fleeting event, but rather as a series of cyclical events of learning and improvement which become sustained over time (Fiszer, 2004; Garet et al., 2007).

Webster-Wright (2009) recommends a greater focus to be placed on enhancing learning as opposed to simply focusing on delivery of the content. A survey conducted in 1999 by the U.S. Department of Education (1999) yielded similar results and found that many teachers believed that job-embedded, collaborative professional development activities, such as common

planning time, being formally monitored by another teacher, or networking with other teachers outside the school, are more helpful as professional development than the more traditional forms of development strategies. More than a decade later, these beliefs are still foundational to assist in establishing protocols for examining ways in which teachers are learning in their own schools with fellow practitioners.

Regularly scheduled meeting times for teacher learning is an essential component of successful professional learning. Schmoker (2005) postulates that:

> Professional learning communities begin with a group of teachers who meet regularly as a team to identify essential and valued student learning, develop common formative assessments, analyze current levels of achievement, set achievement goals, share strategies, and then create lessons to improve upon those levels. (p. xii)

This common scheduled learning time is what Barth (2004) refers to as the sharing of *craft knowledge*. If time is not set up on a regular basis for teachers to share their craft knowledge and learning is left to informal opportunities, then it is unlikely schools which are not set up with such systems will see any student growth. Simply articulated, common time must be built into a school day for teachers to be able to have critical conversations in which they are able to share their craft knowledge to learn from one another.

Rigorous research suggests that sustained, intensive professional learning for teachers is related to student-achievement gains (Darling-Hammond et al., 2009; Markow & Cooper, 2008; Mizell, 2008; NCEA, 2009; Odden et al., 2007). An analysis by the National Staff Development Council (2009) of well designed experimental studies found that a set of programs which offered substantial contact hours of professional development (ranging from 30 to 100 hours in total) spread over 6 to 12 months showed a positive and significant effect on student achievement gains. According to the research, these intensive professional development efforts that offered an average of 49 hours in a year boosted student achievement by approximately 21 percentage

points. Other efforts that involved a limited amount of professional development (ranging from 5 to 14 hours in total) showed no statistically significant effect on student learning (Darling-Hammond et al., 2009).

Cohen and Hill's (2000) tentatively linked professional development and student achievement at the school level examined the effects of professional development related to California's math curriculum reforms in the 1990s. The findings indicated that teachers who attended workshops on implementing reform-aligned teaching; even when these workshops were relatively brief; changed their teaching practice in a manner consistent with the reform. In addition, the researchers found an association between teachers who implemented practices consistent with the new frameworks and increases in student achievement. Results from this study lend support to the need for consistent and frequent content-oriented activities that are coherent with teachers' daily roles.

A recent study to examine professional development measured the effects of teacher participation in professional learning activities on reading scores, using random assignment to permit causal claims. This study (Glazerman et al., 2008) examined teacher practice and student achievement effects of two comprehensive teacher induction programs, which included mentors, a focus on instruction, and opportunities for novice teachers to observe seasoned teachers. Although teachers in these programs spent more time in professional development activities than the control group, there was no significant impact on teacher practices or student achievement after the first year of the programs.

Glazerman et al.'s (2008) findings were consistent with Cohen and Hill's (2000) earlier research surrounding professional development with instructional-focus for an extended duration. There were no statistically significant differences between the treatment and control

groups in the amount of time spent in specific professional development activities, including activities focused on instructional techniques and strategies, and on content knowledge. In addition, this study involved professional development interventions only for teachers who were new to the profession, and a body of literature on stages of teacher development suggests that novice teachers have different concerns and engage in different cognitive processes relative to more experienced teachers (Richardson & Placier, 2001). Furthermore, outcomes were measured after only one year of program implementation, and a longitudinal study may have been more appropriate to allow teaching practices to respond to the program, especially considering participants participated while in their first year of teaching.

Garet et al.'s (2008) experimental study focused on the effectiveness of two early reading professional development initiatives; one involving a content-focused extended duration teacher institute series, and the other involving the same institute series and in-school coaching. Although there were statistically significant impacts on teacher knowledge of scientifically-based reading instruction, and on one measure of teacher practice, neither intervention resulted in higher student test scores after the one year treatment, and there were no significant impacts on teacher or student outcomes in the year following the treatment. There were, however, positive changes in teacher knowledge and instructional practice. In addition, this study used a "business-as- usual" control group, and given that most teachers participate in some form of professional development, it is difficult to ascertain precise differences between what control group teachers actually received and what the formal professional development initiatives provided to their participants. The initial impact on teacher knowledge and practice is consistent with Garet et al.'s (2001) earlier findings supporting a content focus and extended duration as key features of professional development.

Numerous researchers (Darling-Hammond, 1997; Fiszer, 2004; Garet et al., 2007; Stoll et al., 2003; Wenger, 1998) have found the same to be true: frequent, content-focused, sustained professional learning for teachers yields desirable results. Although this analysis reviews some inconsistencies in recent research with regard to student achievement, there is a clear articulation that if teachers participate in purposeful, meaningful professional learning it is more likely it will lead to increased student achievement scores. These surveys and studies report that the influence, effective professional development which occurs over an extended period of time, offers desired outcomes necessary for schools to meet Adequate Yearly Progress (AYP) and is not addressed with intermittent appearances by guest speakers that have little to no follow-up with regard to implementation (Fiszer, 2004; James & McCormick, 2009; Miretzky, 2007; Solomon, Boud, & Rooney, 2006; Webster-Wright, 2009; Zepeda, 2008).

Successful professional development is defined slightly differently among researchers and some include broad guidelines when setting the stage for their study. According to Borko (2004), the four key elements needed to make-up any successful professional development systems are:

1. The professional development program;
2. The teachers, who are the learners in the system;
3. The facilitator, who guides teachers as they construct new knowledge and practices; and,
4. The context in which the professional development occurs. (Borko, 2004, p. 56)

Setting up systems for professional development programs to provide direction, are as important as those who participate in the learning and where it occurs. These basic systems must be set up methodically and deliberately for successful professional development to occur. Jarvis and Parker (2005) support similar findings in their research and refer to professional learning as, “A holistic experience rather than as an arrangement of interconnected dynamics” (p. 33). It is

widely accepted that learning is dependent on an interaction among the learners, the context, and what is learned (Borko; Jarvis & Parker).

Whitcomb et al. (2009) suggested that, "Professional development programs should be situated in practice, focused on student learning, embedded in professional communities, sustainable and scalable, and both supported and accompanied by carefully designed research" (p. 208). Fiszer (2004) stressed that there must be a school-wide cultural shift from isolation to a continual design of collaboration to sustain the learning that directly affects classroom practice. The professional development examined in Fiszer's study found that systems set up for teacher learning were most effective when based on the expressed needs of the teachers. Teacher needs were expressed through the structure of the advanced planning involved where teacher voices were heard and incorporated into the details of the school-wide professional development plan. Teacher suggestions and careful examination of teacher perceptions are worthy of consideration as the teacher education community moves forward with an agenda to provide high-quality learning experiences for teachers and to conduct research on their effectiveness (NSDC, 2009).

A growing body of literature indicates that professional development experiences are particularly effective when situated in a collegial learning environment, where teachers work collaboratively to inquire and reflect on their teaching. For example, the National Center for Educational Achievement (NCEA, 2006) conducted a study which examined data across 550 school sites to reveal the best practices of 140 elementary and secondary schools across 20 states which consistently out-performed demographically similar schools for at least 3 consecutive years across several grade levels on state exams. This large-scale study revealed that within the 140 "best practices schools," goals were clearly stated and instructional strategies were developed through school wide collaborative teamwork (NCEA, 2006). This wide-scale research

resulted in the formulation of *The Core Practice Framework*. This framework consists of five themes which the study determined should be present in successful schools. Specifically written to target the need for collaboration, the second theme addressing staff selection, leadership, and capacity building outlines a recommendation that classroom practices consist of:

1. Teacher collaborative planning;
2. Collaborative reflection – student performance data, standards, common assessments, and peer observations;
3. Structured collaboration – teachers compare their students' results to identify best practices and modify instruction as needed to best serve students;
4. Teachers actively visit each others' classrooms; and,
5. Teachers actively seek additional assistance from available resources. (NCEA, 2009, ¶ 3)

A prescriptive professional learning plan must be developed with systems set up to help teachers reach their optimum performance level of collaborative learning. To successfully implement the recommended practices from *The Core Practice Framework* (NCEA, 2009), the following critical actions are necessary:

1. Veteran teachers serve as new-teacher mentors with a directed focus on curriculum, instruction, and assessment;
2. Teachers participate actively and often in open discussions devoted to curriculum, instruction, and assessment;
3. Teachers visit each others' classrooms to discuss what is not working in terms of instruction;
4. Teachers seek the assistance of instructional coaches as a resource for ongoing professional development. (¶ 4)

Each component of this implementation plan requires collaboration from the teachers and an open dialogue focused on improving student achievement. Teacher interaction and participation is required for *The Core Practice Framework* to be properly implemented and to produce successful outcomes resulting from these practices. Conversations must be continuous throughout the year with a focused goal to improve curriculum, instruction, and assessment.

Recent publications from researchers and educational practitioners (Graham & Ferriter, 2010; Little, 2006; McLaughlin & Talbert, 2006; Stoll & Louis 2007; Whitfield & Wood, 2010; Yendol-Hoppey, 2010; Zepeda, 2008) have increasingly stressed the need for investing extensive efforts into developing collaborative professional learning communities within schools as a central strategy for improving teaching and student learning. To create successful, sustainable, and effective professional learning systems based on the recommendations of these large-scale research studies, there is a glaring need for these recommendations to be considered on a national policy level. Until research-based recommendations such as these are incorporated into educational policy, there is great doubt that these best practices will spread to the schools in need of improvement without mandates from the government. Moreover, a preponderance of the research reviewed shows that adults need on-the-job support to make spontaneous and planned learning to become a part of their daily routines (Joyce & Showers, 2002).

Team Learning Behaviors

How *is* learning defined and measured and what conditions are needed to ensure "it" occurs? Learning can be defined in many ways, and most commonly it is delivered through quantitative methods through the examination and comparison of outcomes. For instance, when determining if someone learned a topic, you may attempt to evaluate the degree of learning by administering a pretest and a posttest to ascertain how much learning occurred. This helps concretely quantify outcomes, but learning can also be an action. When shifting the analysis of learning to determine if learning actually occurred, consideration and analysis is refocused on *how* learning occurs and the actual process. When learning is defined in terms of an action rather than an outcome, a specific process in which learning teams function is followed to increase the

professional knowledge created through the experiences generated in effective team learning, which ultimately leads to change (Whitford & Wood, 2010).

Savelsbergh, van der Heijden, and Poell (2009) views team learning as an, "Outcome of communication and coordination that builds shared knowledge among team members" (p. 37). This research deemed projects successful when collective outcomes of a group effort are examined in terms of what that particular organization hopes to accomplish. Edmondson, Dillon, and Roloff (2007) focused their research on three areas which provide insight into how teams learn:

1. Team learning curves were explored with differences explained in rates of improvements within teams;
2. Focus on relationship between team cognitive systems and team task performance;
3. And exploration of team learning as a group process rather than as an outcome. (p. 299)

Team learning behaviors can be described through examples of a group action process which looks at "learning how to play the game" rather than the actual performance outcomes of the team (Edmondson, Dillon, & Roloff, 2007). Teams are examined through collective outcomes which are influenced by the relationships among the members of the team. Through the use of these three key concepts, team learning is didactic in its functioning, with a focus away from the individual.

Savelsbergh et al. (2009) referred to Edmonson's earlier research stating, "Team learning is an ongoing process of collective reflection and action characterized by (a) exploring, (b) reflecting, (c) discussing errors and unexpected outcomes of actions, (d) seeking feedback, and (e) experimenting within and as a team" (p. 582). Through these team learning behaviors, learning is enacted at the group level. For example, for a team to determine if what they are doing is producing results or needs improvements, the team members should test their

assumptions and discuss differences in an open forum with the group, rather than discussing it privately or outside of the group (Savelsbergh et al., 2009).

Gregory and Kuzmich (2007) presented a variety of research-based strategies to assist teacher teams to build this practice to encourage open communication with team members, which results in active learning and problem solving. Little (2006) contended that learning occurs best in a culture that supports teams in finding ways to air and explore disagreement, acknowledge their differences, and tolerate conflict. Optimum learning is achieved when the basic underlying concepts and practices of team learning practices are explored and implemented.

Eraut, Alderton, Cole, and Senker (2002) identified three clusters of learning within a group involving different contexts which highlight ideal team learning as:

1. Participation in organized learning supports such as mentoring, coaching, rotations, visiting, shadowing, and working directly with designated experts within the building;
2. Consultation and collaboration should occur within the working group, including ongoing consultation, observation, special group assignments, and feedback within the group; and,
3. Learning from people outside the working group such as seeking help or critical information from people in parallel positions when needed. (p. 130)

These clusters of learning culminate the best practices and premises of what clear, effective team learning practices should mimic. Again, learning within the school, from and among colleagues, through structured systems which foster continuous collaboration is a necessary structure for effective team learning to occur.

The National Staff Development Council (NSDC) supports the notion of school-based learning teams to provide a conduit to open communication and to remove teachers form isolated teaching environments. Mizell (2008b), NSDC's Distinguished Senior Fellow, advocates for learning teams to be a vital component of local school practices. He states:

> Creating school-based learning teams can provide a context in which educators routinely engage in reflection. There is safety in a group process that values self-examination and candor; providing such an environment should be a priority for learning teams. Reflection is important for a team because a team cannot accurately identify its collective learning needs without first understanding the needs of individual members. Team members need the opportunity to explore questions, dilemmas, and doubts, and gain perspective on their practice and its results. This reflection is only possible in teams that support their members, providing a sanctuary where they can acknowledge "what's not working" without fear of their peers' judgment. Learning teams may also prompt reflection by facilitating intra-school and inter-school class observations. Witnessing a colleague's success in increasing the achievement of students who are similar to those of the observing educator can be an eye-opening experience. (p. 2)

Such practices are not implemented with enough frequency in schools because systems have not been set up to provide such environments for teachers to feel comfortable enough with their peers to be able to have the confidence to follow-through with such practices.

A prominent belief statement valued by the NSDC (2009) is, "Student learning increases when educators reflect on professional practice and student progress" (p. 2). Through reflective practice and learning though teams, teachers should be sufficiently poised to best ensure student learning outcomes show continual improvement. The cycle of improvement section in the new definition of professional learning proposed by NSDC is the longest and perhaps the most profound part of the definition as it specifically references the need for specific behaviors to define teacher learning teams. The definition includes essential components of the continuous cycle of improvement needed for optimal team learning to occur.

Mizell (2008a) defines specific steps to create optimal conditions for team learning to occur. First, a learning team should begin with an evaluation process in which specific learning needs are pin-pointed through the use of teacher and student performance data. Next, the learning should use student performance date to determine a clear set of learning goals for the educators. The team should next move forward by seeking to achieve the learning goals through an

implementation process incorporating, “Coherent, sustained, and evidenced-based learning strategies that improve instructional effectiveness and student achievement” (Mizell, 2008b, p. 7). In other words, the learning team should search for and implement research based instructional strategies to systematically increase the team’s learning. Next, the definition called for learning team members to apply their learning through, “Job-embedded coaching or other forms of assistance to support the transfer of new knowledge and skills to the classroom” (Mizell, 2008b, p. 7). The learning team’s work should then continue in a cyclical process of on-going action research incorporating regular assessment of the effectiveness of the professional development toward the attainment of the identified learning goals (Mizell, 2008b).

As this review of significant research highlights, professional learning can have a powerful effect on teacher skills and knowledge, while also increasing student learning through the implementation of specific team learning behaviors that repeatedly resulted in positive outcomes. Graham and Ferriter (2010) defined specific ways professional learning teams differ from traditional teams. Effective teacher teams hold frequent, regular meetings that focus on student learning, they have a high level of trust among the members of the team, they seek to identify and amplify instructional practices that work, and the members view themselves as interdependent of each other. To be effective, however, meetings must be sustained, focused on important content, and embedded in the work of collaborative professional learning teams that support ongoing improvements in teachers’ practice and student achievement.

Similarly, Edmondson (1996) referred to team learning as,

> An ongoing process of reflection and action, characterized by asking questions, seeking feedback, experimenting, reflecting on results, and discussing errors or unexpected outcomes of action. Learning behaviors include a cycle of seeking feedback, discussion of errors, information sharing, and experimentation. (p. 115)

The research surrounding team learning behaviors appropriately mirrors the research presented with regard to effective professional learning practices and was influential in helping understand teacher learning behaviors as perceptions of teachers were examined in the current research.

Workplace Relationships

Relationships are a fundamental source of learning. By paying attention to the nature of the relationship between educators and learners, school leaders can make a significant difference in how schools operate. Based on the informal and social aspects of learning at work, learning is thus defined within this study as, (1) an activity whereby knowledge, skills, or attitudes are acquired, revised, or relearned and recognized as such by learners; (2) an activity that does not take place within the context of or follow from a formally organized learning program or event; and (3) an activity in which the adult learner is involved in an interactive work situation. Moreover, an activity that meets these three criteria is defined within this research as an interactive learning opportunity (see Chapter 1 for definition of Learning).

Teachers interact in a variety of ways to help develop, improve, and sustain their capacity for effective teaching. Their professional relationships may be formal or informal; mandatory or voluntary in which information, advice, or feedback, are sought or offered; offer information, feedback or advice; disseminated face-to-face or electronically, or conducted locally or at a distance. The 25th *MetLife Survey* (Markow & Cooper, 2008) found that successful teaching depends on many relationships: with students first and foremost, but also among teachers, principals, district administrators, parents, and community members. The foundational objective in holding meaningful conversations is to enrich the relationship. Every teacher has the opportunity to have countless conversations with students and peers. Each conversation has the opportunity to build respect for individuals, build understanding of cultures, and create new

understanding. Each conversation builds knowledge at first slowly, then suddenly, as a new way to understand a new or differing world, concept or point of view. Isolation in the classroom has always been a particular professional challenge for teachers and has been an issue addressed by decades of reform. Over the years of the *MetLife Survey* (Markow & Cooper, 2008), many new opportunities have evolved for teacher-to-teacher professional relationships, including mentoring, formal professional development and follow-up, teacher networks, advanced credentialing, and digital communication.

In Hargreaves (1972) school-based research in the 1970s, he drew attention to a little mentioned or understood aspect of schools. The social relationships of teachers form an important part of being a teacher, and also that the relationships among teachers have amongst themselves constitutes one of the most significant gaps in our knowledge of the social processes within the school. Guidance, policy, and legislation relating to most aspects of schools such as school improvement, curriculum delivery, and student achievement refers repeatedly to the phenomenon of teachers' work and the involvement of other teachers However, within these references, teachers' workplace relationships are simply assumed. Hargreaves (1972) stated:

> The teacher's conception of himself, his values and attitudes to many aspects of education, may...be influenced by his relationships with his colleagues and superiors and thus influence the teacher's behavior in the classroom and his relationships with his pupils. Life in the staffroom and its impact upon the teacher constitutes one of the most significant gaps in our knowledge of social processes within the school. (p. 402)

His impressions from his research are still true today as often times teachers may, in one learning environment be colleagues and in another, managers or the managed. More recent research surrounding collegial teacher relationships by Hargreaves (2003) argued that policies could get in the way of collegiality by putting too many requirements and restrictions preventing teachers from the time to grow the necessary relationships needed to forward the shared work of

schooling. Hord's (1997) research in the 1990s helped unravel the connection between teachers' attitudes and their abilities to be shaped and reinforced in the contexts in which they work and learn, including the communities formed by their relationships with other professionals, and not necessarily through traditional models of staff development.

Joyner (2000) connects team learning and staff development with relationships stating, "In any human endeavor, the quality of relationships determines outcomes. For that reason, staff development and team learning should be synonymous" (p. 391). In particular, Salzberger-Wittenberg, Henry, and Osborne 's (1983) research similarly found that, "The quality of the relationship deeply influences the hopefulness required to remain curious and open to new experiences, and the capacity to see connections and discover meanings" (p. ix). Even in Johnson and Johnson's (1989) seminal work, they noted that peers grouped with those they have congenial relationships can increase teachers' sense of moral and professional support, and promote committed and caring relationships among staff. Clearly the influence of relationships in the workplace has been a prominent topic in defining best practices among co-workers who yield successful results.

Learning is in the relationships between people. Barth (2006) contends that, "The nature of relationships among the adults within a school has a greater influence on the character and quality of that school and on student accomplishment than anything else" (p. 8). So what does this look like among the adults who learn together? Barth (2006) identified four stages of relationships in his research which included:

1. Parallel play – co-existence of peers working side-by-side without meaningful interactions;
2. Adversarial relationships – ones in which craft knowledge is not shared;
3. Congenial relationships – positive, personal, and friendly interactions;
4. Collegial relationships – interactions centering on improving teaching and learning. (p. 10)

Barth (2006) believes that a culture of collegiality is the cornerstone to successful positive professional relationships and the overall success of the school, and moreover, effective schools minimize parallel play and adversarial relationships while emphasizing congeniality and collegiality (Barth, 2006). Positive relationships subsequently create a culture where learners are more open and honest to communicate and learning thus occurs at more frequent rates.

Murphy's (1999) earlier research provided a foundational research to support Barth's (2006) focus on collegial and adversarial relationships contending that learning simply does not occur if relational conversations and interactions do not occur. Murphy's characterization of learning assists in defining the learning which occurs through relationships, stating:

> Learning traditionally gets measured on the assumption that it is a possession of individuals that can be found inside their heads. Learning is in the relationships between people. Learning is in the conditions that bring people together and organize a point of contact that allows for particular pieces of information to take on a relevance; without the points of contact, without the system of relevancies, there is not learning, and there is little memory. Learning does not belong to individual persons, but to the various conversations of which they are a part. (p. 280)

According to Murphy's findings, relationships coupled with the understanding of learning can be explained as a conduit of learning which must be present to establish relevancy within the context of the learning environment. Learning is collective and appears to be naturally intrinsic based on external relationships. Graham and Ferriter (2010) coupled these findings by overemphasizing the importance of informal conversations during brief familiar opportunities to serve as building blocks for positive professional relationships. This recent research is rooted in the importance of building relationships during formative years of establishing productive professional learning communities. By providing foundational trust, critical conversations can occur among team members moving individuals from remaining in one of the two toxic stages,

parallel play or adversarial relationships, which Barth's (2006) research determined to be barriers to productive teams.

Daley's (2001) research found, consistent results with the research of Eraut, Alderton, Cole, and Senker (1998), when he examined how knowledge becomes meaningful for different professional practices. Both studies found that work experiences and interactions with colleagues contribute the most to the continual development and refinement of knowledge. Similarly, Billett (2001) identified three key contributors to the learning of individuals through everyday work activities:

1. Engagement in everyday work tasks;
2. Direct guidance from coworkers; and
3. Indirect guidance provided by the workplace itself and others in the workplace. (p. 90)

These studies show that interaction is an important source for the ongoing development of workers and that workplace learning is inherently social in two respects. First, workplace learning situations involve other people either directly or indirectly (Cromwell & Kolb, 2004; Daley, 2001; Eraut et al., 1998). Second, the behavior of the adult learner and the behavior of the "other" within an interactive work situation can make the interaction either didactic or not, when the interaction is related to a learning outcome (Koopmans, Doornbos, & Van Eekelen, 2006).

Brown, Cervero, and Johnson-Bailey (2000) highlight the fact that relationships run deeper when examining how learning occurs in society and can become more obviously influential when examining how adults learn alongside one another:

> The power relationships that structure social life do not stop at the classroom door. Rather, these relationships that are structured around class, race, gender, and sexual orientation are also played out in all adult education classrooms and have a profound effect on all teaching and learning processes. (p. 273)

How learners co-mingle based on differences among themselves in formal and informal groups are clearly influenced by factors beyond the scope of what individual participants bring with them when they enter a learning environment. It is important to include findings from research in Adult Learning when examining interactions to realize that systems can be set up to avoid possible influences of class, race, gender, and sexual orientation, but the reality is, personal beliefs are influential in all personal interactions. The adult learning aspect of teach interaction is often overlooked and a focus is typically placed on the teacher-to-student relationship rather than on the teacher-to-teacher relationship. If teachers are not at ease to learn alongside each other in a collegial fashion, then it is unlikely successful collaboration will take place in productive learning teams.

Many conceptual discussions of professional learning communities identify respect and trust as essential features of a productive learning community. When in a safe and supportive environment, teachers are more likely to take risks and to engage in challenging discussions that push them to deepen understandings and attempt new practices that will reach more learners. Functional professional learning communities help to maintain a balance between respecting teachers as individuals and critically analyzing issues in their teaching practices.

Chapter Summary

This chapter began with a historical review of how professional learning has been a significant component of educational reform and has placed a prominent spotlight toward the public eye since the publication of *A Nation at Risk* (NCEE, 1983). This overview provided a framework for the need for the next section which highlighted the need for continual and current research to inform present legislative action with regard to educational policy. An examination of common traits intrinsic to successful professional learning practices revealed dependable

findings to support consistency in practices with regard to setting up structures for teacher learning. There is a strong research base with significant empirical evidence to support the need to establish norms for specific structures to best support effective professional learning practices. It is critical to note that the current research is not suggesting that the findings from the present research are not new to the professional learning arena, rather it provides evidence to support the need for a greater emphasis on successful job-embedded learning practices as policy and legislation is implemented.

The significance the research presented on team learning behaviors emphasizes the importance for systems to be set up to nurture the unique attributes present in effective learning teams. Specifically, there are desirable behaviors present in this body of research which led the research in the current study to examine the ways teachers learn with and from each other with regard to the construction of their own teaching practices and the cycle of improvement within a team learning model is on-going. The most advantageous learning is achieved when the basic underlying concepts and practices of team learning practices are explored and implemented through the creation of psychologically safe learning environments.

A review of research related to relationships among professionals provided the scaffolding to critically examine the perceptions of the participants in the context of their personal learning experiences highlights the influences of collegial relationships. Ultimately, work experiences and interactions with colleagues contribute the most to the continual development and refinement of knowledge, and that interaction is an important source for the ongoing development of workers in a workplace where learning is inherently social.

With the ensuing reauthorization of NCLB, inevitably there will be a component with implications toward the restructure of teacher professional learning. Already discussed in

President Obama's *Blueprint for Reform* (U.S. Department of Education, 2010), it is obvious that there will be some clear direction provided to schools with specific requirements for systems of professional learning. The connection between the components needed for successful professional learning, ideal team learning behaviors and the research related to workplace relationships, established the foundation for the current research.

In general, more research is needed that connects features of professional development activities with student achievement gains. Much of the research in recent years has focused on the impacts professional development potentially has on teacher knowledge and practice, which is an intermediate point on the causal chain to improved student learning. Studies that use nationally representative samples to look at these effects (Desimone et al., 2002; Garet et al., 2001), are very helpful in providing a general sense of effective professional development features, but do not tend to uncover the mechanisms through which new knowledge, beliefs, and attitudes translate to practices, or through which practices translate to achievement.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

The research design and methodology provided in this chapter details the research process used from beginning to end of the study. Included is the (1) purpose of the study, (2) research questions, (3) theoretical framework, (4) rationale and research design, (5) research site, (6) sample selection, (7) data sources, (8) data collection, (9) data analysis, (10) validity, reliability, and trustworthiness, (11) limitations of the study, (12) ethics, and (13) risk and benefits**.**

Purpose of the Study

The purpose of this study was to examine the learning which occurs among teachers in a high performing middle school in the state of Georgia. For the purpose of this study, a high performing school is defined in the context of the district and state in which it is situated. Data used to determine Adequate Yearly Progress (AYP) for the 2008-2009 school year placed the research site as the overall top ranking middle school in all performance areas except for sixth grade reading which was ranked second. Teacher perceptions with regard to their personal learning experiences informed the research through one-on-one interviews and participant observations with middle school teachers employed at a high achieving middle school in the state of Georgia.

Research Questions

Because there are many different terms and definitions used to articulate what teacher professional development is and how it is accomplished at local schools, it was significant to this research to gain insight from practicing teachers. Questions this study sought to answer included:

1. What do middle school teachers perceive to be the motivation to improve their teaching practice?
2. How do middle school teachers learn from one another during planned, unplanned, and spontaneous learning situations when grouped together by themselves or others during their school day?
3. What factors influence middle school teachers to participate in professional development during their workday with regard to the construction of their practice?

Through a critical understanding of how teachers learn during their workday, the researcher hoped to add a new dimension to the existing literature and to provide educational leaders and policymakers an account of how teacher learning influences the practices of those preparing our nation's youth to compete in a global society.

Theoretical Framework

This study is grounded in situated learning theory to examine the interactions among teachers. In contrast with most learning activities that involve abstract knowledge, which is often taken out of context, Lave (1988) argued that, "Learning is situated as it normally occurs, and that learning is embedded within activity, context, and culture. Learning is also typically unintentional, rather than deliberate" (p. 15). Lave and Wenger (1991), as well as others (Horn, 2005; Levine & Marcus, 2007; Niesz, 2007; Rodrigues, 2005; Smith, 2009; Viskovic, 2006), called this a process of "legitimate peripheral participation" and proposed that situated learning

occurs in a process of engagement referred to as communities of practice. Brown et al. (1989) used the concept of "cognitive apprenticeship" to describe situated learning (Horn; Lave & Wenger, 1991; Wenger, 1998). Learning occurs when there is, "An opportunity to learn freely in structured and unstructured environments where advances in cognition are made through collaborative social interaction and the social construction of knowledge" (Brown et al., 1989, p. 42). Niesz (2007) contended in the findings from her research about communities of practice that learning and teaching are interwoven in social networks. Continuing to expand on Lave and Wenger's work, Niesz discussed the concept of learning as social participation based on the model of communities of practice which incorporates four interconnected and mutually defining components of this social theory of learning:

1. *Community*: learning as belonging;
2. *Identity*: learning as becoming;
3. *Practice*: learning as doing; and
4. *Meaning*: learning as experience. (p. 606)

Situative theorists conceptualize learning as changes in participation in socially organized activities, and individuals' use of knowledge as an aspect of their participation in social practices (Brown et al.; Horn; Lave & Wenger; Niesz; Wenger). All of these theorists collectively found that learning is based on the situations in which they are embedded and occurs naturally in practices and communities set up through mere participation in learning activities. When examining teacher learning, the researcher was guided by this theoretical framework throughout data collection and analysis.

A diverse range of social structures exists within schools, for instance teacher inquiry communities (Levine & Marcus, 2007), communities of practice (Horn, 2005; Levine & Marcus,

2007; Niesz, 2007; Rodrigues, 2005; Smith, 2009; Viskovic, 2006), and teacher learning communities (Bryk et al., 1999; Gordon, 2004; Graham, & Ferriter, 2010; Gregory, & Kuzmich, 2007; Hord, 2008; Levine, 2010; Lieberman & Miller, 2008; Skerrett, 2010; Whitford & Wood, 2010; Yendol-Hoppey, 2010; Zepeda, 1999, 2008) are established to advance collaboration among teachers. It is within these constructs that teacher learning was examined, and the ways teachers learn from one another in purposeful grouping, by themselves or others, and through planned, unplanned, and spontaneous learning embedded in the workday.

In an attempt to understand the meaning of teacher interactions, a case study approach was employed because it was the researcher's objective to examine, analyze, and interpret the human interactions and exchange of ideas among teachers. Social constructivism was further explored to establish philosophical understanding of the meanings generated through interactions among teachers. Kim (2001) described social constructivists as those who recognize that the context in which learning occurs is equally crucial as the social contexts that learners bring to their learning environment. Social constructivists apply learning models based upon:

1. *Reality:* meaning is created through interactions;
2. K*nowledge:* humans create what they know through interactions in social interactions and;
3. *Learning:* occurs when there are social interactions. (p. 51)

It is through the social constructivist lens in which the present research was approached. The meta-theoretical ideas arising from social constructivist theory offer a perspective which sees individuals' lives as being multi-faceted and social, shaped by the personal construction of meaning and identity formation. The research methodology employed, namely interview, uses

discourse as a vehicle for the articulation and understanding of multiple realities among the participants.

Rationale and Research Design

The rationale for this research was driven by the desire to look at teacher professional learning by examining with an emphasis on job-embedded learning practices. The classroom is "ground-zero" for the implementation of policy, and it is critical for teacher perceptions and actual practices to be considered as the state of Georgia explores cost effective systems for professional learning to be delivered which have a direct impact on student achievement. Currently in the state of Georgia, there is a house sub-committee assembled to examine new ways to implement teacher professional learning across the state. Given that there is a suspension on the requirement for professional learning units (PLU's) to be earned for teachers to continue their certification (HB 160-3-3.10 – see Appendix E).

The process followed for the research was approved by the Institutional Review Board (IRB) at the University of Georgia. The research protocol is illustrated in Figure 3.1.

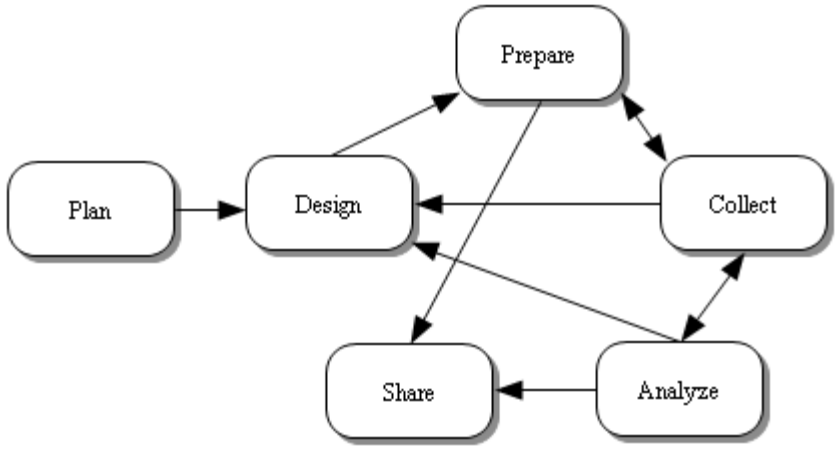

Figure 3.1. Research process flowchart.

Adapted from: Yin, R. (2009) *Case study research: Design and methods* (4th ed.).Thousand Oaks, CA: Sage, Inc.

The detailed steps of each step of the research process are as follows:

Plan
- Identify Research questions
- Decide on research method (Case Study – is this appropriate to answer questions or is another methodology more appropriate?)
- Review strengths and weaknesses

Design
- Define unit of analysis
- Develop theory surrounding the study

Prepare
- Develop case study protocol
- Gain IRB approval
- Develop researcher skills

Collect
- Follow established protocol
- Use multiple sources of evidence
    - Conduct interviews
    - Conduct participant observations
    - Collect documents for analysis
- Create case study database
- Maintain researchers log

Analyze and Review Data
- Use grounded theory strategies
    - Transcribe – constant comparative
    - Hand-code transcripts (color and abbreviations)
- Reviews
    - Participant review of transcription to check for accuracy and to clarify if portions are misrepresented (member checks)
    - Peer review of transcription to check for bias
- Chunk data under research questions
- Discard/scratch out questions
- Sort data to find common themes or ideas
- Establish new “folders” with new names and sort accordingly
- Sort new folders and collapse or adjust as needed

Draw conclusions
- Display evidence
- Write up findings chapter using common themes or categories across the data

Share
- Review with colleagues and scholars
- Re-write as needed

Through the use of a step-by-step flowchart, the researcher was able to organize each phase of the research and approach each segment in an organized cyclical manner, which provided clear direction during the duration of the research. Moreover, it provided the peer-reviewers with an organized framework for assisting with the audit trail.

Research Site

The research site is located in the North-Metro Atlanta area and is part of the largest school system in Georgia. The school district operates 123 schools and served more than 158,000 students during the 2008-2009 school year. The district is divided into attendance zones determined by geographic locations referred to as clusters. Within each cluster there are three to six elementary schools, one to two middle schools, and one high school. The research site chosen for the study is one of two middle schools in the cluster with two of the four elementary schools sending approximately 1,100 students to the school each year. The enrollment remains fairly consistent from year-to-year as the new home construction in the cluster has reached capacity.

The schools Limited English Proficient/English Language Learner (LEP/ELL) population is 2% which is significantly lower than the district-wide enrollment of 16%. The free/reduced lunch population has increased by 5% in one school year to 21%, but this is far from the district-wide 49% of students considered to be living at or below the poverty line. In stark contrast to the district's 13% gifted identified students, the research site served 35% of their students in the gifted program. Table 3.1 compares the research site to the district percents of each population served. Since the research sought to gain the perceptions of teachers at schools considered high achieving, the school was deemed ideal in meeting this qualification.

The primary criterion for selecting participants was for each teacher to work at a middle school site identified as high achieving in the state of Georgia. The site was identified based on

the demographic information presented in Table 3.1. Teacher learning practices at a high achieving middle school were sought as a unique sample for this research. Merriam (1998) defined a unique sample to be one which consists of "Rare attributes or occurrences of the phenomenon of interest" (p. 62). In this case, the sample was selected to highlight elements present among teacher learning at high-achieving schools. For the purpose of this research, high-achieving is defined as student achievement as measured by the 2008-2009 Criterion Referenced Competency Test (CRCT) student scores that the school ranked in the top two rankings among all middle schools in their school district in 12 of 13 scores when compared to 19 other middle schools in the district (see definition of high-performing school in Chapter 1).

Table 3.1

Demographic Comparison of District and Research Site

Demographic Identifier	District %	Research Site %
African-American	27.5	19.3
Asian/Pacific Island	10.3	15.4
Hispanic	25.2	8.5
Native American/Alaskan Native	0.5	0.2
Multi-Racial	3.9	4.8
White	32.7	51.7
Free/Reduced Lunch	49	21
LEP/ELL	16	2
Gifted	13	35
Special Education	11	15

Table 3.2 presents a profile of the test scores for the research site's standardized test performance and reports the overall ranking by sub-test and grade level for the CRCT main administration in 2008-2009. Social studies is omitted from the comparison because the scores are only used for eighth grade and are therefore not significant for comparison purposes within the present study.

Table 3.2

2008-2009 Main Administration Spring CRCT Rankings

	6th Grade			
	RE	ELA	MA	SC
Site Rank	3	2	2	2
Site % Pass	97.1	97.8	94.2	94
District % Pass	92.6	93.6	83.5	79.4
% above district Average	4.5	4.2	10.7	14.6
	7th Grade			
	RE	ELA	MA	SC
Site Rank	1	1	1	1
Site % Pass	89.4	98.9	98.9	98.2
District % Pass	92.6	93.9	91.9	88.4
% above district Average	5.8	5	7	9.8
	8th Grade			
	RE	ELA	MA	SC
Site Rank	2	1	2	2
Site % Pass	98.9	98.9	95.3	93.7
District % Pass	94.6	94.2	82.3	78.2
% above district Average	4.3	4.7	13	15.5

RE= Reading, ELA= English Language Arts, MA= Math, SC=Science

Sample Selection

The projected number of participants in this study was 10; however, in the end, only 9 of the participants were observed but all 10 were interviewed. Teachers were recruited first through a desire to participate and then the sample selection was narrowed using purposeful sampling. Purposeful sampling is a technique used after first determining, "What selection criteria are essential in choosing the people or sites to be studies" (Merriam, 2009, p. 77). It was important to interview a cross-sectional representative group of the school to mirror the demographic

make-up of the faculty (Bogdin & Biklin, 2007); therefore, selection was made purposefully based on grade level and subject taught.

Selection from the volunteers was made to balance curriculum area content and representation from all three grade levels, grades six, seven, and eight. A total of three participants were interviewed from Math and Science and four from Language Arts. Three participants were selected from the pool of volunteers which represented three teachers from sixth and seventh grade and four teachers from eighth grade. One male participated and nine females were interviewed. One participant was African-American and all others were White. This purposeful sampling closely mirrored the demographic make-up of the faculty at the research site and provided a cross-section of participants from all grade levels and three of the four core curriculum areas. Interviews lasted between 30 to 60 minutes, and data were collected from March 2009 through June 2010.

Purposeful sampling is typically used to gain information from participants who have the most relevant information sought by the researcher. Patton (2001) describes this method as a non-random method of sampling using information-rich cases from which we have the greatest to learn. Creswell (2007) recommends the use of maximum variation as a sampling strategy in which cases with the most to learn from are selected to study to add perspective to the research base from “diverse and deviant cases” (p. 129). The sample selected was appropriate for the study because the purpose of this study was to examine the learning which occurs among middle school teachers in a high performing school in the state of Georgia. The participants were able to provide individual perspectives based on the job-embedded learning experiences across time from the research site.

Participants were recruited at a regularly scheduled faculty meeting at the research site. The researcher provided a brief description of the study and provided a synopsis of the expectations of participants who choose to volunteer. As a follow-up to the faculty meeting, the researcher sent an e-mail to the entire staff as a reminder to express interest in participation if desired. As teachers self-identified themselves as participants via e-mail, the researcher responded to further describe the research and an electronic copy of the consent for participation was provided for each potential participant to review.

After a period of 48 hours, it was assumed that all interested participants had responded and expressed interest in being considered for the study. A data chart was then constructed by the researcher with the following information recorded: number of years teaching at the research site, total number years teaching, race, and the subject and grade level currently teaching. Volunteers assigned to be evaluated by the researcher were immediately eliminated from the considered pool of participants based on the IRB approval. The profile of the participants interviewed for the study is displayed in Table 3.3. Prior to scheduling the voluntary interview, face-to-face contact was made by the researcher to personally answer questions about the study and to determine a mutually agreeable time to conduct the interview. Participation was completely voluntary and participants who agreed to participate were made aware that they could withdraw their consent at any time during the study.

Data Collection

A case study seeks to use as many data sources as are relevant to the study. The data collection methods used in this study were semi-structured one-on-one interviews, field notes, and participant observations. These methods were chosen because they were collectively expected to provide the researcher with actual perceptions of how the teachers view job-

embedded learning in the workplace. The interview focused on the experienced meanings of the teachers' professional exchange of ideas with others in what is specifically considered a semi-structured interview (Merriam, 1998).

Table 3.3

Participant Profile

Name	Gender	Race	Grade	Subject	Total Years	Years at Site
Allyson	F	W	6	Language Arts	19	10
Alvin	M	W	7	Language Arts	10	10
Zorrest	F	W	8	Language Arts	30	11
Gina	F	W	8	Language Arts	17	9
Amiee	F	W	6	Math	27	13
Yolanda	F	W	7	Math	13	3
Sharyn	F	W	8	Math	27	13
Valerie	F	B	6	Science	9	3
Blanche	F	W	7	Science	19	9
Barb	F	W	8	Science	35	5

Particular themes, in this case, job-embedded learning for teachers, guided the conversations with a set of interview questions, which were standard for all of the interviews but was not entirely non-directive. Through the use of open-ended questions, the interviews focused on the topic of the research allowing the teachers to bring forth dimensions they found to be important. During each interview, the researcher used an interview guide, centering on job-embedded learning, but did not provide or express any specific opinions about these themes (Kvale & Brinkmann, 2009). The conversations were loosely structured and guided around the interview guide provided in Appendix A.

To gain personal accounts from teachers, it was appropriate to conduct semi-structured interviews through one-on-one interviews as opposed to a focus group. Semi-structured interviews were used to allow for a more flexible wording of the questions and to allow for the

respondents to explore facets of the topic in a non-directive manner (Merriam, 2009) and allowed ease of exchange to be more similar to an informal conversation as opposed to a formalized structured interview. The interview guide (see Appendix A) was provided to each participant prior to the interview to give them ample opportunity to reflect on the questions (see Table 3.4) if so desired. Of the 10 participants interviewed, 2 prepared answers in advance.

The choice of semi-structured rather than structured interview was employed because it offered sufficient flexibility to approach varying respondents differently while still covering the same areas throughout data collection. Bogdan and Biklen (2007) point out that more structured interviews are sometimes more desirable because it, "Allows for comparable data across subjects" (p. 104). This was not a necessary component of this study because the researcher examined the data for new and emerging themes as the data were analyzed. Specific to case study interviews, Yin (2009) describes three types of interviews: in-depth, focused, and survey. For the purpose of this case study, a focused interview was chosen to collect the data because the researcher was able to guide the participant toward specific topics of interest to allow for fresh commentary through a relaxed conversation.

Identical conditions of the physical setting were not deemed as a significant factor in influencing individual responses. In all cases, the interviewer requested the participant to choose the location of the interview. In 7 of the 10 cases, the participants chose to meet in their own classroom. Three participants chose to meet in the researcher's office. When interviews were conducted in the researcher's office, interruptions were minimized by closing the door and turning off the phone.

The interviews were digitally recorded to avoid losing data. Each digital file was uniquely coded using the participants identifying information and the date and time each

interview was conducted. A back-up mini-cassette recorder was used to ensure no data were lost due to possible equipment malfunction or failure. Once digital files were saved in two different locations according to IRB approval, the mini-cassette tapes were destroyed, and the digital data files were permanently removed from the digital recorder.

Table 3.4

Key Questions from Interview Guide Directly Aligned with Research Questions

Research Question	Questions from Interview Guide
What do middle school teachers perceive to be the motivation to improve their teaching practice?	What motivates you to participate in job-embedded learning?
How do middle school teachers learn from one another during planned, unplanned, and spontaneous learning situations when grouped together by themselves or others during their school day?	What does Job-embedded learning "look like" for you right now at your current school? When does it occur? Who participates? Are there defined roles? If so, what are they?
What factors influence middle school teachers to participate in professional development during their workday with regard to the construction of their practice?	What influences you to participate in job-embedded learning?

Audio-recordings, with the permission of interviewees, were used for all interviews in accordance with the guidelines approved by IRB. Each participant was provided a copy of the consent form (see Appendix D) in which data collection procedures were fully disclosed in advance. At the beginning of each interview session an explanation of the participant consent was offered. Each interview was assigned a unique code, for example "Participant *A* April 30 2010," and this was noted on the participant profile sheet provided in Appendix B. The researcher produced a verbatim transcript as soon as possible after each interview. Beginning with the first transcript each line of the record was numbered in sequential order and this pattern

of organization continued with each subsequent transcript. This allowed the researcher the ability to locate specific quotes with ease throughout the data analysis and reporting phases of the study.

Field notes were used as a secondary data source to supplement each interview. Because the human mind tends to forget quickly, field notes by the researcher are crucial in qualitative research to retain important environmental details regarding the setting which cannot be otherwise documented (Bogdan & Bilken, 2007). The field notes were kept in the researcher's journal and notes were jotted on each interview guide. Follow-up interviews with participants were not planned to occur unless stray categories emerged from the data and required further information or elaboration from specific participants. All participants agreed to possible follow-up interviews but none were deemed necessary.

Participant observations were conducted by the researcher in the natural environment to help provide information which was not obtainable from other methods. Anderson, Herr, and Nihlen (1994) discuss the varying degrees of participant observations with particular reference to school sites. They describe the level of interactions along a continuum from passive to total participation. The initial intent of the researcher was to limit interactions and to remain passive; however, the researcher quickly realized that this was not possible. After the first observation, moderate participation was sought as the researcher tried to maintain a balance between the ends of the spectrum. As shown in Table 3.5, each observation was timed and all observations took place between April 12, 2010 and May 17, 2010. For the purpose of this table, the data are displayed according to the date of the observation rather than by subject area.

Participant observations were conducted during regularly scheduled formal meetings. An unintended consequence realized while conducting data analysis was that of the 10 participants, nine were also curriculum lead teachers. Higher participation from a group of teachers already

identified as a leader in the school may have influenced their participation in the study. The only participant not observed was not a curriculum leader. The opportunity did not exist to observe Gina participate in a curriculum planning meeting because during the concluding potion of this research, school year 2009-2010, her teaching assignment changed to teach only Latin; therefore, she no longer had a group of teachers in the building to collaborate with during the school day. Curriculum planning meetings are scheduled for each Monday during the school year by subject and grade level. Participants were observed during planned grade level curriculum meetings which occurred during the final six weeks of the data collection phase of the research.

Table 3.5

Participant Observation Dates and Length of Observations

Participant	Grade	Subject	Date of Observation	Length of Observation
Allyson	6th	Language Arts	04/12/2010	35 minutes
Blanch	7th	Science	04/12/2010	20 minutes
Zorrest	8th	Language Arts	04/12/2010	35 minutes
Sharyn	8th	Math	04/14/2010	30 minutes
Valerie	6th	Science	05/03/2010	25 minutes
Alvin	7th	Language Arts	05/03/2010	15 minutes
Yolanda	7th	Math	05/10/2010	30 minutes
Barb	8th	Science	05/10/2010	30 minutes
Amiee	6th	Math	05/17/2010	15 minutes

Observations were recorded in a participant observation log (see Appendix C), noting the type of learning which occurred with a description of the observed engaged activities the participant took part in during the observation period. Similar topics were discussed across meeting since all were conducted in the final six weeks of the school year. Titles of others the participant interacted with during the observation were also noted with specific attention paid to the person's title and position. Table 3.6 is arranged by subject area rather than grade level to

highlight the similarities among the same curriculum areas and displays the date and the length of time for each observation.

Table 3.6

Observation Details by Subject Area

Participant	Grade	Subject	Date of Observation	Length of Observation
Allyson	6th	Language Arts	04/12/2010	35 minutes
Alvin	7th	Language Arts	05/03/2010	15 minutes
Zorrest	8th	Language Arts	04/12/2010	35 minutes
Amiee	6th	Math	05/17/2010	15 minutes
Yolanda	7th	Math	05/10/2010	30 minutes
Sharyn	8th	Math	04/14/2010	30 minutes
Valerie	6th	Science	05/03/2010	25 minutes
Blanche	7th	Science	04/12/2010	20 minutes
Barb	8th	Science	05/10/2010	30 minutes

The number of times each participant contributed to the conversation during the observation period was noted by the researcher with a plus sign (+) to indicate the conversation was "on-topic" or a minus sign (–) to indicate if the conversation was off-topic. All observations took place in the natural setting.

Document analysis was used throughout the study. A calendar of scheduled collaborative meetings was examined for the school year. It was then compared to actual minutes taken at the meetings to determine who was present, the topics of collaboration, and to determine if the meetings took place as scheduled. If available, the agenda from each of the formal meetings observed were collected to determine if there were common activities occurring across collaborative learning groups. These were analyzed to compare content and what was actually discussed during participant observations. Although the curriculum lead teacher's are required to

use a prescriptive agenda template, it was clear, in at least one of the observations, that it had not been used until the scheduled observation by the researcher occurred.

The researcher's log was considered an additional document which was analyzed to pinpoint when and where teacher learning was actually taking place in the teacher workday. According to Bogdan and Biklen (2007), these would be considered personal as well as official documents. Merriam (2009) recognizes these items as personal and public documents, and the use of the researchers log and the participant observation log (see Appendix C) is considered what Merriam and Associates (2002) refer to as a researcher generated document. No single source of data has a complete advantage over the others; rather, they are complementary and were used in combination to inform the data analysis phase of the research.

Data Analysis

According to Bryman and Burgess (1994), qualitative data analysis is essentially about, "Detection, and the tasks of defining, categorizing, theorizing, explaining, exploring, and mapping" (p.176). Although this case study research did not employ grounded theory as a research methodology, methods typically associated with a grounded theory study were used to systematically approach the data. The constant comparative method of data analysis was used to identify emerging categories during the data collection and analysis phase of the research (Creswell, 2007). Immediately following the verbatim transcription of each interview, open-coding was used to analyze each transcript to define salient categories across interviews using the constant comparative method to find links across the data.

The first review of each transcript simply involved the researcher jotting notes directly on the pages of the transcripts to record initial impressions. As the analysis and coding progressed, The researcher became increasingly aware of and clear about the connections between different

areas of the transcript Additionally, gaps and contradictions from one transcript the next were noted; a great deal of time was spent formulating and testing different systems of coding against the whole set of data, linking with themes identified in the literature review. A number of major categories surrounding the research questions began to emerge and eventually, emerged as themes.

These related to teachers views on education in general, management of schools and to the research inquiry itself. Again, more refinement and also the use of free-association techniques, upon my own spontaneously produced images, continued to yield themes associated with each of the categories. All initial impressions from this phase of the research were then recorded in a spreadsheet along with the transcript line number. Next, the spreadsheet was analyzed to reduce initial impressions to a short phrase or single word. Common categories and themes were noted and sorted within the spreadsheet.

A second review of the transcription involved color coding based on the emerging categories and themes across transcripts. Coding was next reduced to short abbreviations and was then hand-coded directly on each transcript and then recorded in the same spreadsheet. As coding emerged, the data dictated the categories and themes which were then clustered according to salient themes. After coding was conducted, themes were identified and sub-categories were labeled as they emerged. Subsequent interviews continued with the same procedures until no new themes emerged from the data. Once new categories and themes ceased to emerge from the data, it was considered that saturation of the data had been reached (Bogdin & Biklen, 2007) and the interview portion of the data collection phase was considered to be complete once the 10 participant interviews were completed. Table 3.7 provides a sample of the hand-coding used throughout the transcripts. Next, the hand-coding notes were transferred to an electronic

spreadsheet in two separate columns; one column noted the concepts and related themes in short concise phrases or single words, and the next column reduced the phrase to a three letter code and each data chunk with a code was associated with a specific research question.

Table 3.7

Sample Margin Notes and Coding

Line numbers	Data Chunk	Concept and Related Theme	Code
2569-2568	Alvin: And then I was fortunate to student teach here. I felt like I was fortunate to get hired here and then at some point I realized, you know what? This school is fortunate that I'm here. I really feel that there was a MOMENT….and I don't want to overstate my importance-but I realized at some point that I was now PART OF the culture here. I was now PART OF the reason WHY it was a great place to be. So I take great ownership in not only what happens here but in the whole building and how that looks "out there"- so I probably pay a little closer attention to things than maybe some other people do as far as who's making what decisions and why. Because the flip side of it is-the perceptions out there -I'm implicit in how that looks.	Personal commitment and motivation to improve practice Personal Motivation	MOT RQ1
46-66	Gina: Because this time we focused – we said "we need to improve writing" we didn't do it well last year. Researcher: So y'all did that as language arts 8th grade? Gina: As 8th grade language arts. We had a goal of what we needed to do and we started thinking about it last year – at the end of last year we started saying "our writing scores aren't as good" and one of the things – one of the local middle schools beat us! Beat us in our writing scores – we always win! We are always one of the best and we were like – nobody is going to beat us! We're gonna tackle this writing and so we made a goal and once we made a goal, over the summer we thought of a lot of things we wanted to do. What came out of our meetings that we had in pre-planning was we wanted to do a daily writing activity.	Overall goal for improvement in 8th LA – long term goal Competition with other schools Recognition for the school	MOT RQ1

Table 3.7 *continued*

Line numbers	Data Chunk	Concept and Related Theme	Code
1239-1243	Valerie: It's very informal. I mean if someone like I said sees something like-someone will come into my room and she will see my little homework board. "Why do you have that?" "Why do you keep that?" You know this and that- you know we just talk. You know it's informal and it's fine and it's good. It doesn't always have to be formal.	Informal learning Not planned Informal Learning	HOW RQ2
3732-3745	Allyson: Before we had our meeting on Monday I had e-mailed 6th grade language arts and I said please bring whatever you are using for CRCT prep to share. And so Lucy you saw her, she pulled out a bunch of stuff she had and I love that and that's what I- the collegiality and the fact that a lot of teachers in this building are so willing to share their ideas. It's not; in 6th grade language arts especially; it's not MY idea- it's OUR idea. And you know we will meet together and we will say well Lucy that's a really good idea but have you thought about maybe doing THIS in addition or INSTEAD of - and she will be like-No I might go ahead and try that now and then we would meet back and we would talk about whether it worked like that or not.	Formal learning at curriculum meetings Formal Learning	HOW RQ2
547-553	Gina: So 2 language arts teachers were together- 2 science teachers- so you were always right next to someone who taught your subject. So you were able to share equipment if necessary. If you wanted to have a speaker you could open up walls and share a speaker. You know there's lots of things you can do.	Classroom placement in the building influences informal learning Systems Provided	INF RQ3
2064-2071	Blanche: I think relationships with others play a huge role. It's like one of my teammates said; she will tell you that that's the reason she left the last school that she was at. She had some personnel issues, some people issues. She shared that. And she can rub some people the wrong way and umm with that being said and we had that discussion at the end of the year and trying after being on a team together and the discussion was you know – sometimes we are more alike than we think we are and sometimes those issues – so we had some really deep discussions about relationships and you know the role in that.	Relationships Commitment to improve working relationship Personally Controlled	INF RQ3

RQ= Research Question, MOT=Motivation to improve, HOW= how is it accomplished, INF= Influence to improve

Validity, Reliability, and Trustworthiness

Fidelity in qualitative research requires that attention be paid to issues pertaining to internal and external validity as well as reliability. When defining reliability and validity in quantitative research broad definitions of each term helps to focus these two aspects of qualitative research to assess whether the means of measurement are accurate and whether they are actually measuring what they were intended to measure (Golafshani, 2003). As in all research, consideration must be given to construct validity, internal validity, external validity, and reliability (Yin, 2009).

In seminal work during the 1980s, Guba and Lincoln (1982) substituted reliability and validity with the parallel concept of "trustworthiness," containing four aspects: credibility, transferability, dependability, and confirmability. Within these were specific methodological strategies for demonstrating qualitative rigor, such as the audit trail, member checks when coding, categorizing, or confirming results with participants, peer debriefing, negative case analysis, structural corroboration, and referential material adequacy.

Later, Guba and Lincoln (1989) developed authenticity criteria that were unique to the constructivist assumptions and that could be used to evaluate the quality of the research beyond the methodological dimensions. While Guba (1981) warned that their criteria were "primitive" (p. 90), and should be used as a set of guidelines rather than another orthodoxy (Guba & Lincoln, 1982), aspects of their criteria have, in fact, been fundamental to the development of standards used to evaluate the quality of qualitative inquiry. Standards for validity and reliability were thus established to strengthen the credibility of qualitative research.

Creswell (2007) referred to validity in the general sense as, “The accuracy of the data being produced” (p. 44). Internal validity is typically a strong attribute of qualitative research as

it compares the findings directly with factual information (Merriam & Associates, 2002). It is important to use internal validity checks to ensure that the data actually shows what the perception of the research is actually what was being observed. Member checks and peer reviews were used to provide internal validity to ensure the noted researcher's bias had not had an influence on the outcome of the data reporting. Participants were asked to review the transcription to ensure their perceptions were accurately represented and offered corrections if needed.

Peer review of the data and the researcher's analysis were used to identify any potential researcher bias and to provide feedback and opinion with regard to specific categorization of data. The peer reviewers were especially important because the researcher was employed at the same site in which the study was framed. Table 3.8 provides examples of suggested changes and comments provided by the peer reviewers during this stage of the research. Examples are provided for recommended changes to align a data chunk with a different research question and an explanation for the suggested change. An additional example shows suggestions from peer reviewers to orphan out chunks and consider their use in future research because the connection to the current research was not realized at the same level as the researcher.

The written peer reviewer comments opened discussion about the data, and in most cases changes from initial coding was changed to reflect feedback from the reviewers. One reviewer currently teaches at the research site but did not participate in the study. This important peer reviewer has taught at the research site for six years and has previously served in a variety of leadership roles in the school. At the time of the research she served on the Student Achievement Team, the professional learning committee, department chairperson for special education and is the 2010-2011 teacher of the year for the school.

Table 3.8

Sample of Peer Reviewer Comments

Line numbers	Data Chunk	Researchers Original Margin Notes	Peer Review comments
369-374	So I don't feel like if you take my power point and use it that that's stealing who I am as a teacher. Use my Power Point. You know go ahead. And we SHARE Power Points. We have a whole "drive" of things. I just made a Power Point for Anne Frank. I'm sticking it on the shared drive. If you want to use it- do.	Shared files Influence RQ3	Reviewer 1: Change from motivation to how – change from RQ 3 to RQ2
4523-4527	I think that it's important that whatever job-embedded learning we do is creating that critical mass a little bit of teachers who could then go out and mentor or coach somebody else, so that it really is – it's strengthening the individual, but it's also creating more leadership in the building if you will, I think that's important too.	Why is it important? Motivation or Influence? RQ1 or RQ3	Reviewer 2: Great quote but don't really see how it fits to any RQ's – may want to scratch out to use for future research
5600-5607	Not only do I learn from my math people, but switching teammates – people hate to do that – it is so cool. I've worked with Nanci on dance team over the years and whatever, so we've learned a little bit of what each other does but not until you're actually are their teammate. She's got so many unique ideas. Tori brings something else different to the table, and then there's Loretta who just has more experience than almost some of us put together. Newer teachers bring you stuff that is really up-to-date and I love that.	Cross-generational learning Influence on practice RQ3	Reviewer 3: Consider changing from RQ3 – influence to RQ1 – Motivation. This is influence on practice but it is also what seems to motivate her to improve practice

RQ= Research Question

The second peer reviewer is employed as a counselor in the same school district at a middle school, and completed her specialist research using qualitative methods. This is especially important because it provided a dual perspective; one through the lens of a local school educator, and the other as a qualitative researcher. In addition to reviewing the data

collection, she served as an editor for the dissertation and was able to give feedback for corrections and potential contradictions in explanations and examples throughout the course of the research.

The third peer reviewer is a school psychologist and completed her Master's thesis using qualitative methods for her research. She does work at the research site, but has limited interactions with the participants in the study. She provided feedback with context to the research site as well as the participants but she was not expected to fill teacher leadership roles within the school as the first peer reviewer does. The three peer reviewers provided the researcher with different perspectives with different connections to the participants that the other reviewers.

Construct validity was attained through the use of multiple sources of evidence (Yin, 2009). In this research, interviews, and observations were used to establish construct validity. One single source was not deemed appropriate and multiple sources of information were used to further establish construct validity. External validity examines how the research will "generalize" to other settings (Creswell, 2007). This was established by providing thick-rich description of participant observations and maximizing the variation in the selection of the sample of participants. By providing thick-rich description, there was little room for question regarding details of the research (Creswell) and the variation among participants was evident through the detailed descriptions provided.

In the naturalistic paradigm, the transferability of a working hypothesis to other situations depends on the degree of similarity between the original situation and the situation to which it is transferred. The researcher cannot specify the transferability of findings; he or she can only provide sufficient information that can then be used by the reader to determine whether the findings are applicable to the new situation (Lincoln & Guba, 1985). Other writers use similar

language to describe transferability. For example, Stake (1978) refers to what he calls “naturalistic generalization” (p. 6) meaning the same basic concept as transferability. Patton (1990) suggests that "extrapolation" is an appropriate term for this process (p. 489). Eisner (1991) established that it is a “form of *retrospective generalization* that can allow us to understand our past (and future) experiences in a new way” (p. 205, emphasis in the original).

In qualitative research, reliability refers to “the extent to which research findings can be replicated” (Merriam & Associates, 2002, p. 27). Reliability was established during the data collection phase of the research through the development and use of the case study protocol and the development of the database. These steps helped to ensure that the data collection procedures could be carefully followed and repeated if necessary (Yin, 2009). Detailed records were kept throughout the tenure of the research in a journal to ensure steps could be replicated if desired.

Triangulation is a popular method in which multiple data sources are used (Creswell, 2007). To ensure triangulation of the data in this research, 10 participants were identified to interview to make sure the perceptions of a singular participant were not used as a representation of the larger group. An audit trail was additionally used by the researcher to remain transparent in all facets of the research (Bogdan & Biklen, 2007; Merriam & Associates, 2002). Through the use of a researcher log, careful organization of documents gathered, and the use of an organized spreadsheet with filters and sorting tools in place to easily manipulate the data, all phases of the research were recorded to ensure an audit trail was maintained. Dates of interviews and transcription were kept as a component of the audit trail to ensure preliminary timelines were adhered to throughout the data collection and analysis phases of the research Member checks, peer reviews, and thick-rich description were collectively used to establish the validity and reliability of the findings of this study.

Limitations of the Study

In most qualitative research, generalizability in the statistical sense is limited by the use of small, purposeful samples (Creswell, 2007). In this study, there are some unique limitations which may impact the use of the findings in other settings. The school is, in fact, the highest performing middle school in the school district in which it is located. This case study examined an extreme example and the usefulness of this research may be limited beyond the leaders in this particular school. Additionally, this study may be limited by the fact that the researcher works in a supervisory position at the school where the interviews were conducted. This may limit the perceptions shared that may have been otherwise shared with a researcher with no affiliation to the school. The site in which the research takes place is highly selective and the specific population of teachers does not begin to capture the breadth and depth of the potential impact this research could have on schools attempting to replicate practices of high-achieving schools.

Ethical Considerations

The primary researcher is an assistant principal at the site where the participants work, and for this reason it is appropriate to carefully acknowledge any potential for ethical infractions which may have been present. The researcher is assigned employee evaluation, and the IRB application addressed the need for volunteers supervised by the researcher to be rejected from participation. The content of the interviews remained confidential and was not discussed with anyone other than the members of the researcher's doctoral dissertation committee. Identifiers were removed and pseudonyms were used with referring to participants. Local school endorsement was obtained from the principal following research guidelines set forth by the local school district. If at any time the principal or other school official felt as though the research

protocol was somehow compromised, or the research protocol was breeched, such personnel had the liberty to discontinue or to delay the research at their discretion.

Pseudonyms were used for the teachers, members of the school staff identified by the interviewees, for the school name, as well as for the name of the school district. It is possible that through this research, the interviewer will discover gaps or concerns in the execution and effectiveness of the current model used at the school for professional learning. Since this is an extreme example case study, it is possible, as exemplar models of collaboration emerge during the course of the research, that teachers at the research site may be encouraged to share their successes with others at local, district, state, or national professional learning conferences. Assurance will be made to each participant that information shared with the researcher will not be revealed, and all personal identifiers collected will remain completely confidential.

Risk and Benefits

The risk that there will be any negative impact on teacher participation in professional learning at the research site is low; although, there is potential to adding barriers between the administration and teachers at the school. As improvements in professional learning practices at the research site continue to progress it is possible participants in the study may question the confidentiality of their conversations with the researcher. For instance, many of the participants expressed a need for more frequent vertical team planning time to be embedded within the teacher time expectations for the school. Local school records indicate that in fact, vertical team meeting are now scheduled to occur one time per month whereas the previous two school years, this only occurred two times per school year. Confidentiality was maintained according to IRB approval and at no time were personal conversations shared with other members of the school

administration. Overall, there is a scarce level of risk to this research bearing any negative residual affects among the staff members of the school.

The benefit of this research is valuable to other schools seeking to improve their current professional learning structure with a focus on collaborative learning practices among teachers. Particularly schools with similar demographics and communities, may draw practices highlighted in the research which could equally benefit their teacher collaborative planning practices. As schools are added to the federal government's list of schools classified as a "needs improvement," each site will be required to develop an action plan to foster improvements. It is possible this research could benefit schools looking for practices from high achieving schools to include as a component of an action plan for improvement.

Currently the legislature in the state of Georgia has a sub-committee meeting monthly to determine how to best meet the professional learning needs of teachers. At the conclusion of this research there was a suspension of any requirements for professional learning hours to be earned by teachers seeking re-certification. The State's sub-committee is looking for low-cost practices to implement while still providing teachers with the valuable content needed to improve instruction.

Chapter Summary

A case study approach was used to examine the perspectives of 10 middle school teachers at a high performing school which had insights to share to inform this research. The teachers were asked to complete a professional profile sheet, participate in a one-on-one interview with the researcher and agree to a participant observation during the final six weeks of the data collection phase of the research. The participants were asked to share their personal opinions and experiences with regard to their own personal and professional learning. Teachers were chosen

for participation via voluntary means from a high achieving middle school in Georgia. The participants were specifically chosen because of their accessibility to the researcher because the researcher also works at the selected research site. This accessibility allowed a high degree of flexibility when scheduling interviews and observations. Throughout the study the researcher took measures to ensure trustworthiness was established using internal and external measures to establish validity and reliability.

Qualitative research methods were used for this study. Data were collected from the 10 participants during a one-on-one interview, a participant observation, and through the collection and examination of documents obtained from the participants, which were used during the formal meetings observed. Field notes were taken during all interviews and were used as a supplement. Interviews were digitally recorded and were transcribed as soon as possible on completion of the interview session. Constant comparative data analysis was used to determine if additional themes emerged and were then added to the interview guide if needed. The study began in March 2009 and concluded July 2010. Data collection, the review of the literature and data analysis occurred during this timeframe.

CHAPTER 4

FINDINGS

Never before in the history of education has there been a greater recognition of the importance of professional development for educators. Modern proposals, including *No Child Left Behind* and President Obama's *Blueprint for Reform* (U.S. Department of Education, 2010), call for restructuring, drastic reform, and for the transformation of schools with an emphasis on professional development as a primary vehicle to achieve efforts for needed change. With this increased recognition, however, has come increased scrutiny. Questions are being raised about the effectiveness of all forms of professional development in education. Along with these questions have come increased demands for demonstrable results. Legislators, policymakers, funding agencies, and the general public all want to know if professional development programs really make a difference. If they do, what evidence is there to show they are effective? By examining the learning which occurred among middle school teachers in a high performing school in the state of Georgia, this study sought to discover effective professional learning practices for the group of teacher participants.

To introduce the reader to the participants and the context of the study, this chapter includes a description of the contextual setting of the school district, the school, and the participant profiles. Next, the chapter provides a cross-case analysis of data derived from interviews, participant observations, and artifacts related to each of the research questions.

Purpose of the Study

The purpose of this study was to examine the learning which occurs among teachers in a high performing middle school in the state of Georgia. Teacher perceptions with regard to their personal learning experiences informed the research through one-on-one interviews and participant observations with middle school teachers employed at a high achieving middle school in the state of Georgia.

Research Questions

The research questions which guided this study include:

1. What do middle school teachers perceive to be the motivation to improve their teaching practice?
2. How do middle school teachers learn from one another during planned, unplanned, and spontaneous learning situations when grouped together by themselves or others during their school day?
3. What factors influence middle school teachers to participate in professional development during their workday with regard to the construction of their practice?

The participants in this study included 10 teachers who volunteered to participate from a high performing middle school located in the largest public school system in Georgia in the North-Metro area of the state. Interviews for the study began June, 2009 and concluded in May 2010. Through one-on-one interviews with 10 participants, participant observations, field notes, and artifact analysis, the data reflected the perspectives of teachers at a high performing middle school. Participants were interviewed one time for approximately 1 hour each.

The data from the interviews were categorized and coded. Patterns were noted and categories and sub-categories were determined from the perspective of each participant in regard

to their personal experiences related to professional learning with other teachers. Open-coding was first conducted to record the general impressions and initial thoughts were recorded in the margins of each transcript. Next, each "initial thought" was entered into a spreadsheet and was then narrowed down to a one word description or short phrase such as collaboration, responsibility, technology, or informal learning. These loose categories were not considered themes at this point in the analysis but were associated with one of the three research questions. A second, more in-depth review of the transcripts was conducted and color coding was used to associate data chunks with a research question. As each data chunk were reviewed, categories and sub-categories began to emerge. Some data chunks were "orphaned-out" for use with future research. In many instances initial coding was changed if the data chunk more readily associated with a different research question. Next, a peer review was conducted to ascertain if changes were needed to the initial coding and to recommend changes for association of each data chunk to a research question. Recommended changes were then reviewed with the researcher to determine final association and coding for the suggested changes.

During the third review of the data, data chunks were entered in a spreadsheet along with margin notes from the first two reviews of the data. Categories were sorted easily using filters in the spreadsheet and categories emerged more clearly across the interviews. In some cases, if the researcher could not unequivocally decide on a category, notes were made in the margin to address during peer review. To further validate the findings, artifacts and field notes were used in the analysis of the data. Additionally, member checks were conducted with each participant as needed. Corrections and/or clarification were provided to the researcher by participants and corrections were added as needed.

Context of the Study

The *No Child Left Behind* (NCLB) Act of 2001 requires that states ensure the availability of "high-quality" professional development. NCLB does not, however, address questions such as what constitutes high-quality professional development or how professional development should be made available to teachers. In an effort to inform policymakers as changes are modified and implemented in the coming years, it will be beneficial to understand how professional learning is perceived by teachers so the most effective decisions about teacher learning can be made.

As legislation begins to prepare for the reauthorization of NCLB, The U. S. Department of Education (2010) published *A Blueprint for Reform: The Reauthorization of the Elementary and Secondary Education Act* (ESEA). President Obama begins the report stating, "We must foster school environments where teachers have the time to collaborate, the opportunity to lead, and the respect that all professionals deserve" (p. 1). This report calls on states to form systems of evaluation to identify effective professional development to improve student learning. Additionally, the report calls for every teacher and leader to have, "Access to the preparation, on-going support, recognition, and collaboration opportunities he or she need to succeed" (p. 13). The plan presented in *A Blueprint for Reform* (U.S. Department of Education, 2010) requires high-quality and effective professional development and there is a suggestion for schools to restructure the school day to provide teachers with the time needed to collaborate and improve their practice (U.S. Department of Education, 2010).

Profile of the School District

This study took place in Sparks County Public School District (SCPSD), a large suburban school district, located approximately 20 miles Northeast of a large metropolitan city in Georgia. The Georgia Department of Education (GADOE) reports that Sparks County served 156,484

students during the 2009-2010 school year and SCPSD's website reports enrollment for the 2010-2011 school year to reach approximately 161,000 students. One in every five residents of Sparks County is served as a student in the public school system. Classified as the largest district in Georgia, SCPSD is composed of 130 total educational facilities—77 elementary schools, 25 middle schools, 19 high schools, and 9 special facilities. Overall in the school district, 50% of the students qualify for free or reduced lunch, 12% qualify for special education services, and 16% are classified as English Language Learners. The year in which this study was conducted, the per pupil expenditure was $8,063. Table 4.1 shows the comparison of the demographic make-up of the state of Georgia, Sparks County School District (SCSD), and the research site.

Table 4.1

Demographic Comparison for Percentage of Population 2008-2009

	State of Georgia	Sparks County	Edison Middle School
Asian/Pacific Islander	3	11	16
Black	38	28	17
Hispanic	10	22	5
Native American	0	0	0
Multi-racial	3	4	5
White	46	35	57
LEP	6	15	2
Economically Disadvantaged	53	46	17
Students with Disabilities	11	11	10

Significant differences exist between the research site when compared to the state and the school district in all sub-groups with the exception of Native-American, Multi-racial, and students with disabilities. This comparison is important to examine as the context of the study is explained to highlight the unique demographic make-up of the school when compared to the state and school district.

Profile of the School and Community

Edison Middle School first opened its doors to students in the fall of 1997 and has always been considered one of the highest performing middle schools in the school district and in the state. At the time of this study, Edison Middle School had been in operation for 13 years and was established to ease overcrowding at its sister middle school. Much of the faculty and staff from that school were transferred to Edison Middle School and in fact, 20 members of the original faculty members remained on staff at the time of this study. The school started out with extremely high test scores and this has remained consistent; however, as new middle schools began to open to ease crowding schools as Edison Middle School did, the competition to remain at the top has become increasingly difficult to maintain. When the school opened, the perception in the community, especially from the middle school which lost half of their student body, was that the best neighborhoods, defined by the housing market, were zoned to Edison Middle School, leaving the lowest performing and economically disadvantaged students at the older school. Historically, county land-use rezoning meetings have included a prominent showing from parents of students at Edison Middle School to ensure land was not zoned for attached housing.

The school has not changed significantly over the past five years demographically, although much of the community perception is that there has been a change in the clientele, which the data does not support. The data does show a slight trend in increased gifted enrollment, a slight increase in the Black population, and a slight decrease in the White population. Table 4.2 displays the changes in enrollment over the past five years.

One of the factors keeping Edison Middle School's demographics and socio-economics from shifting is due to the fact that there are no rental communities or apartment complexes

within the school's attendance zone. Edison Middle School's teachers are generally proud of their accomplishments as a school, and local school records indicate that although local participation is well above the required 20 hours of required professional learning, in general, they do not attend many staff development opportunities outside of the building unless mandatory attendance is required.

Table 4.2

2005-2010 Edison Middle School Student Data

	05-06	06-07	07-08	08-09	09-10
Enrollment	1,306	1,369	1,356	1,364	1,317
Asian/Pacific Islander	15%	15%	16%	16%	16%
Black	12%	14%	16%	17%	20%
Hispanic	6%	6%	5%	5%	5%
American Indian	0%	0%	0%	0%	0%
White	65%	62%	59%	57%	51%
Multiracial	2%	3%	4%	5%	1%
Special Education	11%	11%	11%	10%	11%
Gifted	27%	28%	31%	34%	36%
ELL	2%	1%	1%	1%	1%
Free/Reduced Lunch	12%	14%	14%	17%	24%

Improving student achievement in all academic subjects continues to be the primary goal at Edison Middle School, with a strong emphasis on the use of technology in all aspects of learning. Another crucial area of focus for quality improvement is professional learning. Each year, the faculty and staff complete thousands of hours of professional development designed to improve teaching and learning. The Edison Middle School faculty has twice received "Pay for Performance" awarded by the Georgia Department of Education for exemplary performance and collaboration. And in 2006, Edison Middle School was 1 of only 16 schools nationwide recognized as a recipient of a "2006 Intel and Scholastic Schools of Distinction Award." Edison

Middle School received the recognition in the program's "professional development" category. Each year, Edison Middle School continues to be recognized for outstanding academic achievement and consistently high test scores by the state of Georgia and the school district.

In 2004, the school was named a "Georgia School of Excellence" in the area of student achievement, and in 2005 and 2006, the Governor's Office of Student Achievement, in collaboration with the Georgia Department of Education, recognized Edison Middle School for improving and promoting excellence in student academic achievement. Edison Middle School was recognized by the Governor's Office of Student Achievement at the gold level in 2008 for the highest percentage of students meeting or exceeding academic standards on the Criterion-Referenced Competency Tests (CRCT)— one of only three middle schools in the state of Georgia to be honored at this level. Edison Middle School also earned recognition in 2006 from Standard & Poor's School Evaluation Service for closing the achievement gap between economically disadvantaged and non-disadvantaged students.

"Parental involvement, in almost any form, produces measurable gains in student achievement" (Dixon, 1992, p. 16). Since its inception, Edison Middle School has benefited from caring, involved parents, an active and dedicated PTSA, and supportive business partners in the surrounding community. All stakeholders, including the faculty and staff, share a common belief in the importance of helping each child reach his or her potential to thrive in the 21st century. Parent involvement is the cornerstone of Edison Middle School's culture of success and clearly this has an influence on the continued accomplishments of the students.

Edison Middle School posted a higher percentage of students meeting or exceeding standards on the CRCT when compared to the county and state averages for the 2008-2009 testing results. On the math section of the CRCT, 95% of 6th graders, 99% of 7th graders, and

96% of 8th graders met or exceeded the state standard. The percentage of students exceeding the standard on the CRCT in math remains one of the highest in the school system, with 47% of 6th graders, 74% of 7th graders, and 63% of 8th graders scoring in the exceeds category.

Likewise, the percentage of Edison Middle School students meeting and exceeding standards in reading and language arts on the CRCT surpassed county and state averages, with 65% of 6th graders, 56% of 7th graders and 69% of 8th graders exceeding state standards in reading. Additionally, 70% of 6th graders, 65% of 7th graders, and 66% of 8th graders exceeded state standards in language arts, recognizing the school as one of the highest percentages of students exceeding standards in reading and language arts in the county, and in fact, making it one of the highest performing schools in Georgia. Reading achievement increased over the previous year—65% of 6th graders achieved at the Exceeds Standards level, up from 57%; while the percentage of 8th graders achieving at the top level in reading jumped 19 percentage points, from 50% to 69%. See Table 3.2 which summarizes Edison Middle School's ranking, percent passing, with a comparison to the districts pass rate, and then the percentage Edison Middle School scored above the district average is included. Scores for the 2008-2009 CRCT are used for comparison for sixth, seventh, and eighth grade students.

Participant Profiles

A total of 10 teachers participated in the research from each grade level: 6th, 7th, and 8th. Participants taught Language Arts, Math, or Science. Table 4.3 displays the overall characteristics of the staff compared to the participant pool. It is important to note that the participant selection closely matches the larger group of teachers at the school.

Initially, data was arranged by grade level for analysis. Since schools are grouped and arranged by grade level, this seemed to be a logical grouping for data analysis. As the data began

to emerge, it was apparent to the researcher that there were more parallels in the data among the curriculum area teachers than there were amongst the grade level peers. Professional learning in particular was represented in terms of curricular interactions specifically when referring to formal learning opportunities.

Table 4.3

Edison Middle School Teacher Demographic Comparison to Participant Profiles

		School	Participants
Certification	T-4	34%	20%
	T-5	40%	30%
	T-6	26%	50%
Average Years Experience		13.8	20.6
Male		14%	10%
Female		86%	90%
White		90%	90%
Black		7%	10%

Table 4.4 displays the collective profiles of the participants. The group of participants holds a wide range of special certifications beyond the subject they are assigned to teach. Eighty percent of the participants are additionally endorsed in areas beyond a basic teacher certification including 2 Nationally Board Certified Teachers (NBCT), two Teacher Support Specialists (TSS), one Master Teacher, two hold Leadership Certification, eight hold the Gifted Endorsement, and one is endorsed as a Reading Specialists.

Most of the teacher participants hold multiple subject area certifications and it is not uncommon for teacher's assignment to change from year to year. Subject areas and grade level assignments are made by the principal and are based on current enrollment and student needs.

The current administration strongly believes that minimal changes should be made from year to year to build capacity among the teachers in each grade level.

Table 4.4

Teacher Participant Profiles

Name	Race	Grade	Subject	Total Years Teaching	Years at Site	Primary Certification	Additional Certification
Allyson	W	6th	LA	19	10	T-6: MS/ES LA/SS	Gifted/TSS/ Leadership
Alvin	W	7th	LA	10	10	T-5: 6-12 LA	none
Zorrest	W	8th	LA	30	11	T-6: MS/ES LA, SC, MA & SS	Gifted/NBCT/ Reading
Gina	W	8th	LA	17	9	T-4: grades 6-12 LA/Latin	Gifted
Amiee	W	6th	MA	27	13	T-4: MS MA	Gifted
Yolanda	W	7th	MA	13	3	T-6: MS/ES LA, MA, & SS	Gifted/MT
Sharyn	W	8th	MA	27	13	T-6: MS/ES MA & SC	Gifted/TSS
Valerie	W	6th	SC	9	3	T-5: MS/ES SC	none
Blanche	W	7th	SC	19	9	T-6: MS/ES LA, SC & SS	Gifted/NBCT/ Leadership
Barb	W	8th	SC	35	5	T-5: MS/ES LA, SC & SS	Gifted

MS=Middle School, ES=Elementary School, LA=Language Arts, MA=Math, SC=Science, SS=Social Studies, MT=Master Teacher, NBCT=National Board Certified Teacher, TSS=Teacher Support Specialist

Profile of Language Arts Teachers

A total of four language arts teachers were interviewed for the study. Two teachers taught eighth grade, one taught seventh grade, and one taught sixth grade. Three out of the four served as curriculum chairpersons for their subject and grade level during the tenure of the research. One teacher was male and three were female. The certification for the language arts teachers ranged from one teacher holding a Bachelors degree (T-4), one teacher holding a Master's level certificate (T-5), and two teachers holding a Specialist level certificate (T-6).

Three out of the four language arts teachers interviewed hold special certifications. Three are gifted endorsed, one is certified as a Teacher Support Specialist (TSS), one is reading endorsed, and one holds leadership certification and is a Nationally Board Certified Teacher (NBCT). Collectively, the language arts teachers interviewed have a total of 76 years teaching experience for an average of 19 years of experience. This group of teachers have taught at Edison Middle School for a range of 9 to 11 years, and all are certified for the subject area they teach. Two of the four hold elementary certification as well as subject areas beyond language arts. This is not uncommon in middle school settings because often teachers work on teams ranging from two to four teachers and are frequently required to teach a second subject area.

Allyson

Allyson has taught at Edison Middle School for 10 years and has always taught in this particular school cluster. Currently she teaches sixth grade language arts, serves as the grade level chair, and is the curriculum lead teacher for sixth grade language arts. Allyson taught at one of the feeder elementary schools prior to teaching at Edison Middle School and Allyson lives in the community. Along with her teaching credentials, Allyson holds leadership certification. She interviewed for an assistant principal opening three years ago at Edison Middle School and has

made it clear that she was only interested in becoming an administrator only if the position was as an assistant principal at Edison Middle School. If that did not happen then she is content staying in the classroom; as long as it is at Edison. Allyson is definitely an influential leader in her curriculum area as well as the grade level. She is not shy about sharing her opinions and has the ear of the assistant principal working with her curriculum area and grade level. She assists in planning grade level activities and is a member of the professional learning committee.

Allyson often oversteps her boundaries and speaks her opinion and conveys it to be the collective opinion of not only her curriculum area, but for her entire grade level. During her interview it was clear that Allyson has a strong bond with one particular teacher and together, the two force their procedures on the rest of the grade level. Allyson has served as the figure-head and grade level chair for eight years and she does not intent to give up that role. If given the opportunity, Allyson has the potential to be a very positive or very negative influence; this all depends on her personal perception.

Alvin

Alvin is the only male participant in the study. He is unique in the sample selection because he is the only participant who has only taught at Edison Middle School; including his student teaching experience. Currently he teachers seventh grade language arts and serves as the curriculum lead teacher. During the 10 years Alvin has taught at Edison Middle School, he has also been assigned to teacher social studies and science during years he was assigned to teach on a two or three person team. He considers himself “lucky” to be a member of the faculty and believes he has an influence on the culture of the school.

Alvin has always taught language arts at the seventh grade level. He shares strong opinions about how literacy should be taught and it is glaringly different from the other two

grade levels. Vertical planning is not common among the language arts teachers and when it does occur, Alvin does not seem to buy-in to the approach to literacy the other grade levels share. He is not afraid to share his opinions and is often seen late afternoons in the principal's office chatting with him about a variety topics related to the school. Unlike most of the other teachers in the study, Alvin is one of two teachers who participated who do not hold any additional certifications.

Zorrest

Zorrest has been teaching for 30 years and has spent the past 11 years teaching at Edison Middle School. Currently she teachers eighth grade language arts. Zorrest is proud of her status as the curriculum chair for eighth grade language arts. Her previous experience includes three year teaching fifth grade at an elementary school where she was responsible for every aspect of her students' learning; including art and PE. She referred to this experience as teaching self-contained. Zorrest then taught at a middle school for 16 years in a neighboring district where she became "pigeon-holed" in teaching 6th grade. She has taught at Edison Middle School for 11 years out of her 30 total years experience and has had the opportunity to teach at all 3 grade levels in middle school and has taught on 2, 3, and 4 member teams. Although Zorrest is certified to teach all four core subjects, she is quick to tell you that she is not a math teacher. Zorrest is a Nationally Board Certified Teacher and is additionally endorsed in reading and gifted education. She has strong feelings about the need for vertical teaming to be implemented at Edison Middle School and she sees the seventh grade teachers as a barrier to this becoming reality.

Gina

Gina is deeply rooted in the community and has no desire to ever leave the cluster she currently teaches in. At the time of the study, Gina taught both language arts and Latin and had

taught at Edison Middle School for 9 of her 17 years of total teaching experience. Her husband is a football coach at the feeder high school and Gina herself is a basketball coach at the high school as well. Both of her children attended Edison Middle School and now attend the feeder high school. Gina stayed at home when her children were infants and prior to becoming a mother, she taught Latin at the same high school they now attend. For the past four years Gina taught language arts on an eighth grade team where she also taught Latin co-mingled with the language arts curriculum. Under this model, student received an additional credit and the students were selected based on their language arts performance on standardized tests.

Prior to the current administration arriving, students who did not test in the gifted range but were at the top of their class otherwise were selected to participate in this selective team of teachers. During the tenure of this research Gina's teaching assignment changed for her to teach Latin and Journalism exclusively. This removed her from participation with the language arts curriculum for the 2010-2011 school year, therefore, was not observed participating in a curriculum planning meeting.

Profile of Math Teachers

A total of three math teachers were interviewed for the study; one from each grade level. All three of the teacher participants served as curriculum chair for their individual grade level and each holds special certifications in addition to their subject areas. All three are gifted endorsed, one is a Master Teacher (MT), and one is a Teacher Support Specialist (TSS). All three of the math teachers interviewed are female and all three are white. The certification for the math teachers include one of the teacher 's holding a Bachelors degree (T-4) and the other two teachers hold a Specialist level certificate (T-6).

Collectively, the math teachers interviewed have a total of 67 years teaching experience for an average of 22.3 years. Two of the math teachers interviewed have taught at Edison Middle School since it opened 13 years ago and the other has taught there for 3 years. All 3 are certified for the subject area they teach, and 2 of the 3 hold elementary certification as well as subject areas beyond math.

Amiee

Aimee has been teaching for 27 years and is 1 of the original staff members at Edison Middle School. Like 9 of the other 10 participants, Aimee serves as the curriculum chair for her subject and grade level. Currently she teachers sixth grade math on a four teacher team. Aimee has always taught sixth grade math and has worked on two, three, and four member teams of teachers over the years. Aimee is a leader who truly respects cross-generational grouping of teachers because she expressed that she feels like she is in a constant state of learning and wants to learn from different perspectives and different generational views.

Aimee is one of two participants that holds a Bachelor's degree. When asked why she never pursued a Master's degree she simply replied, "life." Near the beginning of her teaching career she had actually begun a Master's program but soon after she became a single mom and priorities in her life shifted. Aimee did find the time to become gifted endorsed and now teachers a group of high achieving sixth graders in an accelerated seventh grade math course. Aimee has enjoyed teaching this new prep but admits that it is difficult being the only teacher who teaches this subject in her grade level. She finds it difficult to plan because she does not have anyone to collaborate with in the building.

Yolanda

Yolanda does extensive staff development training at the district level and is committed to the success of her students as well as the teachers she works within the math department. Currently she teaches seventh grade math and serves as the curriculum lead teacher. Yolanda has taught at Edison Middle School for three years. The county professional learning Yolanda teaches focuses on teacher collaboration and incorporates observations of other teachers as a mechanism for learning the craft of teaching. She is a second career teacher and entered the field 13 years ago after a lucrative career in the business world. Yolanda sometimes lacks the interpersonal awareness needed to lead teachers in her direction, but she has a strong backing from county personnel to ensure her knowledge and passion are put to good use. Yolanda holds certification as a Master Teacher which she recently acquired. Additionally, Yolanda holds gifted certification but she doesn't allow this to stifle her passion to teach students with varying learning needs.

Yolanda was one of the two teachers who came to the interview session with prepared answers to the questions on the interview guide. She expressed an interest in pursuing an advanced degree beyond her specialist level degree but she does not want to do this in leadership. She is passionate about math instruction and is having a difficult time locating a Ph.D. program that does not require her to take a sabbatical from teaching.

Sharyn

Sharyn is entrenched in the culture of Edison Middle School from the past and the present. She has taught at Edison Middle School since it opened and she was one of the faculty members who moved from the sister middle school when it split. Sharyn pointed out in the interview that she has been in the cluster for 17 years and that she has a total of 27 years of

teaching experience. Prior to coming to Sparks County Public School District, Sharyn taught in an elementary school in a neighboring school district for nine years. Her passion is working with eighth graders, and Sharyn would like to teach at the high school level; however, her certification will not allow her to teach above the eighth grade level. Sharyn is definitely a teacher most everyone would classify as dedicated. She works long hours and spends a good portion of her weekends at the school.

After Sharyn's husband passed away suddenly mid-way through the present study, her behavior drastically changed. She took an extended leave from work and as she puts it, "put her life into perspective." Although she still spends long hours at school, she no longer spends weekends there. She quit all committees she had been a part of in the past and her only leadership position in the building is as math curriculum chair for the eighth grade.

Profile of Science Teachers

One science teacher from each grade level was interviewed for the study for a total of three. All three served as Curriculum Chairpersons for their subject and grade level during the tenure of the research and all of the science teachers interviewed were female. The certification for the science teachers ranged from one teacher holding a Specialists degree (T-6), and two of the science teachers hold a Master's level certificate (T-5).

Two out of the three hold special certifications. Two are gifted endorsed, and one of the two is additionally endorsed in Leadership and is a Nationally Board Certified Teacher (NBCT). Collectively the science teachers interviewed have a total of 63 years teaching experience for an average of 21 years. This group of teacher's has taught at Edison Middle School for a range of three to nine years, and all are certified for the subject area they teach, all three hold elementary certification and two of the three hold certification areas beyond science.

Valerie

Valerie is originally from Canada and at the time of her interview, had only taught in the U.S. for three years. She has a total of nine years of experience but she will be the first to tell you that the educational system is vastly different between the two countries. Valerie does not hold any special certifications and is only certified to teach science. Although she truly enjoys teaching at Edison Middle School, Valerie expressed that she is desperately homesick to return to Canada. She began her career teaching six years in Quebec in a high school where grades 7 – 11 attended classes. Her previous experience with collaboration in Canada was all conducted off campus at what Valerie referred to as the central office.

Unlike the other curriculum chairs, it was difficult to tell she was the curriculum lead teacher during the observation. She did not have an agenda and tends to let other, more veteran teachers, dominate the meetings. She does not seem to align her instruction with the other sixth grade science teachers and local school records indicated that she delivers a large portion of her instruction using worksheets. Valerie has had the highest failure rate in the entire school for the past two year in which the administration has been monitoring this piece of local school data.

Blanche

Blanche has been teaching for 19 years and has been at Edison Middle School for 9 years. She refers to Edison as a "teacher of the year" school because the caliber of teaching is at such a high level. Her previous teaching experience is all from Alabama where Blanche worked in a school where there was extreme poverty and lacked adequate funding to run the schools she taught in. Her first teaching experience was in the elementary school she attended as a child and Blanche even had the opportunity to teach alongside several of her former teachers which she described as an interesting experience. She holds certification as a Nationally Board Certified

Teacher, and additionally Blanche holds gifted endorsement and leadership certification. She is certified in science, social studies, and language arts and she is well respected by the faculty and the community.

Blanche lives within walking distance of the school and spends a great deal of her spare time working after school hours and on the weekends at the school. Many Friday afternoons will include an e-mail from Blanche to the staff to let everyone know when she will be in the building over the weekend and constantly reminds the staff that she can unlock the building over the weekend if anyone needs to get in to work. Blanche runs the after school detention program and the Saturday school program which has been used as an academic period of time students can use to get caught up on missing assignments. Like Allyson, Blanche interviewed for the assistant principal position opening at Edison Middle School but recently expressed that she no longer desires to be an administrator.

Barb

Barb has been teaching for a total of 35 year with the last 5 being at Edison Middle School. She is constantly looking for ways to improve her practice and is focused on creating a learning environment which is conducive to the 21st century learner. Barb has always taught in a middle school and has always taught science to eighth graders. Barb spent the first 20 years of her career teaching in South Georgia teaching eighth grade science in a large school district. The next 10 years she spent teaching in a neighboring district and then moved to Sparks County 5 years ago.

Barb reported that she has always held teacher leadership positions in the schools she has taught at and has a unique perspective on the changes in education over the past 35 years. Her career began teaching in total isolation and Barb had to seek out professional learning

opportunities for herself from college courses; never in her local school building. Now she feels as though she gains the professional learning she needs to support instruction; all at the local school.

Emergent Category Analysis

Data emerged during the data collection phase and during data analysis. Themes were generated from the data and sub-categories were explained to best represent a cross-section of the data. Categories were first arranged with each research question and where then further analyzed to extrapolate salient themes common among each category. Table 4.5 lists each category as it relates individually to each research question and first lists each category with a further sub-division of the categories into concise themes.

Categories were first established and then themes were gleaned from the categories to establish overall generalizations about the data that were collected. What is surprisingly absent across the data was the lack of teacher use of data to drive job-embedded learning practices. It seems logical that student level data would be a naturally occurring topic at curriculum discussions, but it was not. Teachers referenced the importance of data, but information did not reveal any specific practices related to student data analysis.

The findings will be presented in the context of the review of the literature related to the study and in relation to the categories and themes which emerged from the data. *Job-embedded Learning By Definition* presents the scope of understanding of the term and helps set the stage for the following sections of this chapter. The next three sections, *Motivation to Improve Practice*, *How Teachers Learn from one Another*, and *Influences on Participation in Professional Learning* each draw findings related to the research question. Following the finding

connected with each research question, the next section, *Influence of Relationships*, draws upon the data related back to the review of the literature review of relationship in the workplace.

Table 4.5

Research Questions and Emergent Categories and Themes

Research Questions	Emergent Categories	Themes
What do middle school teachers perceive to be the motivation to improve their teaching practice?	Personal Recognition Intrinsic desire to improve Passion for Teaching Student desire to learn Improve personal practices	Personal motivation
	Gains in student achievement Competition with other schools	Recognition for school
How do middle school teachers learn from one another during planned, unplanned, and spontaneous learning situations when grouped together by themselves or others during their school day?	Sharing best practices via technology Informal conversations in hallways and during lunch, viewing student work from other teachers, and visiting other classrooms	Informal learning
	Collegial Exchange of Ideas Weekly curriculum planning meetings Vertical Teams Creating common assessments Formal Conversations Peer Coaching – Watching others teach Book Studies	Formal learning
What factors influence middle school teachers to participate in professional development during their workday with regard to the construction of their practice?	Placement of classroom in the building Availability of technology Position of Authority within School	Systems provided
	Personal Commitment Relationships with colleagues	Personally controlled

Job-Embedded Learning by Definition

There are as many definitions of professional learning and it was important to begin each interview session asking each participant what their understanding of the term job-embedded learning meant to them within their own context. The personal understanding ranged from the simple to complex. Valerie stated, “It’s simply learning on-the-job.” Gina began her interview

defining it as, “Some sort of staff development during a planning period or before school.” Zorrest said, “It makes me think of learning as I do on my job or as I do my job. It’s provided at my job as opposed to just going to a college or a class outside of school.” Aimee stated:

> I think it’s learning while you’re on the job. Learning while you are actually participating in something. To me, I think it means learning something that’s important to what I’m doing and I think is going to make an impact on what I do.

Barb’s personal understanding of the term did not have anything to do with her personal learning, rather she related it to the learning her students take away from her class stating, “The way I see it, job-embedded learning is training students to work in the workforce.” It is interesting to note that Barb is the most veteran teacher interviewed with a total of 35 years of teaching experience. Her perception of the term could relate back to her initial training which most likely did not focus on her own personal learning but rather solely on what the students would learn in her class. She was trained to believe that it was her job to teach; not learn.

Two of the teachers interviewed, Allyson and Yolanda, came prepared with typed responses to the questions on the interview guide (see Appendix A). Allyson had done an internet search for the term job-embedded learning and Yolanda provided a personal definition gleaned from her work as an instructional coach and the master teacher training. Allyson took some printed papers out of a folder when she was asked what her understanding of job-embedded learning was, and she stated:

> To me it’s staff development but it’s staff development where you are actually learning as you go rather than setting aside a specific time. Not where you are all going to meet and you’re going to you know have this staff development once every blue moon. It happens all the time without even knowing it. I like the idea of it because it’s more on the job. Basically it’s just as you’re going along kind of thing so I like it. Basically it’s a lot of collaboration, there’s a lot of people that have the same concerns and the same wants and the same things. They have the same vision of what they think should be going on in the classroom and that’s what I think job-embedded learning is.

Yolanda is certified as a Master Teacher and she is also actively involved in delivering instruction to math teachers across the district where she emphasizes the benefits of watching and learning from other teachers as they are actively teaching with students in their classrooms. Yolanda begins her lengthy definition stating:

> Job-embedded learning is professional learning that happens within the context and the hourly commitment that we have during the job, so it wouldn't be going to a staff development outside of the building. I also feel that it's not just within the day, our work today, but it's within our actual work environment with kids. That's what I feel it should be. I don't really see curriculum meetings as really being true job-embedded learning, I mean I know it technically probably is, but to me if there's not a kid in a room, then to me it's not as much job-embedded, because what I do is work with kids. I think the more that it can get to be authentic to their actual jobs, the more it is job-embedded, true job-embedded learning.

Yolanda summed up her definition stating:

> I think job-embedded learning is really the only learning that really sticks. I think "authentic" is the only word I can think of. It's the only word that brings true meaning to me when I think about the job-embedded learning I do.

Although Yolanda and Allyson came prepared to respond to the questions on the interview guide (see Appendix A), they both related their definitions back to their own personal experiences related to their own context.

When asked to define the term job-embedded learning some teachers did not necessarily define it in terms of the learning they do with others, but rather learning they acquire through their own personal interactions with students and their own reflections. Alvin shared a powerful connection between his interactions with students and co-workers in terms of his constant cycle of improvement stating:

> My understanding of job-embedded learning is simply the learning that you do while you are working. Paying attention to what you are doing and what is happening around you. Your interactions with your students. Paying attention to how they are reacting to what you are doing. What's working – what's not. Also your interactions with your co-workers and even administration. It's fully up to me because it's just how I approach my job. I think that probably the aspect of it that falls by the way side most often is "pointed

> purposeful reflection" on these conversations or on these experiences. It's just paying attention to what I'm doing and trying to learn from it. You know- making 2nd period better than 1st, making Tuesday better than Monday, making next year better than this year. So it's like a cyclical reflection of your teaching practices. For me it goes beyond teaching practices. I mean for me I truly believe that I'm a life-long learner. I mean learning is what I love to do so obviously on my job it's more about teaching practices than other things.

Alvin expressed a profound connection with an emphasis for the need for educators to engage in what he referred to as "pointed purposeful reflection" to make meaning out of the tasks throughout your day as you interact with students and co-workers.

Blanche's understanding focused on her personal reflection and she seems to be practicing the same "pointed personal reflection" as Alvin referred to. She stated, "It's stopping long enough to reflect of something that you have done and make some notes somewhere and then maybe later that afternoon, after the kids are gone, think about how you maybe could have done it differently." Sharyn is in a constant state of learning from everything she does and from every interaction which occurs during her day. She stated:

> I guess as I'm teaching I'm always learning. I learn through staff developments of course but I'm learning mostly through people that I teach with; no matter what subject; so it's like you are in a constant process of learning. To me job-embedded learning means that I'm learning as I go along even more. I learn from my students you know; what works best for certain students; what doesn't work best. I guess basically that it's – it's just everything you do during your day. You know you learn from your administrators; you learn from everybody. You learn from your custodial staff. You learn from everybody.

Although her definition only mentioned one instance of formalized learning; staff developments; Sharyn is clearly maximizing her learning in every interaction which occurs during her work day.

The definitions among the teachers widely vary in what their understanding of job-embedded learning is to them, but there was consistency throughout most of the data with an emphasis placed on their individual personal responsibility for their own learning. No one

referenced someone else as being responsible for their learning. Each of the participants takes responsibility for producing the learning which occurs for them during their day.

Motivation to Improve Practice

Common themes emerged during data analysis and it is evident that the teacher participants are influenced to improve their teaching practice from a number of sources. The first theme which emerged was surrounding the teacher's interactions with the students in their own classroom. Teachers are motivated to increase their student's knowledge and they draw energy from the students in their classrooms. Zorrest's first thought about her personal learning returned to the learning she experiences from the students in her class. Zorrest stated:

> My biggest learning is just kind of reading the kids, as I'm up there teaching, getting a reading from them as far as do they, are they understanding? Is what I'm doing working? Have I hooked them? That's a big part of what I learn, I guess, from the kids, as I'm teaching, I just kind of watch them and read them to see if they get it. I'm learning if my lesson was successful or not, that kind of learning.

Gina, another language arts teacher, is also motivated to continuously improve her craft through the feedback she receives from her students on a daily basis. Gina commented that she too, found the most valuable learning to come from the students and through the strong relationships she establishes with them. Gina stated, "I feel like great teaching is the relationship you establish with students. And it's your way of presenting the material and your ideas and the things you're willing to accept in a classroom."

Allyson agrees that the greatest learning she does is directly from her students and it motivates her to be a better teacher. She stated:

> I learn from the kids and I really think as a teacher you have to really listen to what the kids are saying. I tell the kids all the time that I learn from them as much as they learn from me.

Allyson also talked about her personal motivation to participate in job-embedded learning and gave concrete examples as to how and why she continues to participate. Allyson explained:

> Being able to collaborate with people and hear what other people are doing has helped me change my way of thinking. And it's pretty much an everyday thing. I'll come away from a conversation – just a random conversation in the hallway with somebody and they will say well I tried this and it was really, really great and you might want to look at that. And it works. So I think it's changed my whole way of thinking and I think as teachers we cannot rely on what worked in the past. You have to adapt to your current situation so I think that's what job-embedded learning really does. Improving my personal practice is my motivation to participate so I can teach my kids in the best way possible.

Teachers in the study explained a variety of reasons to account for what motivates them to participate in job-embedded learning. When asked about why teachers participated Sharyn stated, "I participate in it because I'm very passionate about teaching. I don't like the word teaching at all. I really don't. I don't want to just be a teacher. I want to inspire my kids to *want* to learn." Blanche is equally passionate about teaching and learning and it is clear what motivates her to improve her teaching practice. When asked what motivates her to participate in job-embedded learning Blanche stated:

> Because I love teaching! I love everything there is about teaching. I love to learn. I think that job-embedded should not be – it is not a requirement. I f you are true to your trade and you love what you are doing. You're always going to learn and we as teachers are always going to be motivated to keep on learning for the sake of the students we teach. If you don't, and there are teachers that don't, they just go through the motions, if you don't participate in job-embedded learning then it's time for you to get out!

The motivation Blanche expressed is powered by her desire to impart her new knowledge. It is obvious that she is in a perpetual state of learning herself and her own personally generated motivation is clearly what inspires her to improve her practice.

Barb referred to the learning she experiences from her students in relation to the way the world is continually changing. She will explain to anyone who asks that her 35 years of teaching experience and training has not kept up with the demands of today's learners and Barb draws

motivation to continually keep up with her students by keeping her practices innovative and up-to-date. She explained how the students she teaches now do not hesitate to bring their own knowledge into the classroom and that Barb expressed that she learns from them on a daily basis. Mostly Barb learns how to best teach the 21st century learner and is constantly motivated to bring innovative technology in to her classroom to keep her own students engaged; she is motivated to increase their knowledge to compete in a technology-driven global society.

Competition to remain the highest ranked middle school in the school district, personal recognition, and the positive perception that their teaching influences student achievement were common among the interviews conducted and revealed this as being a common source of motivation to improve practice. Gina is clearly motivated by the competition which exists among the top performing schools in the district. Gina stated, "Our writing scores aren't as good as one of the local middle schools; they beat us! Beat us in our writing scores. We always win! They had a little bit more in the exceeds." That motivated the teachers to formulate a two year plan to ensure the writing scores for Edison Middle School remained at the top.

Training was done across all grade levels during the school day by teachers who had proven track records of successful writing scores, and the literacy coach led the initiative to implement writing across all curriculum areas, including elective course teachers. This was evident in every classroom across the building as all teachers were using the same graphic organizers, color coding systems, and scoring rubrics when teaching writing to all students in every class.

Common writing rubrics were used but not without strategic training and planning. Writing had to be a school-wide focus but the training for all teachers was critical to increasing student scores. Teachers were given release time during the school day on two different days to

learn how to use the rubric. They each brought a piece of work to score and they scored the writing from other teachers and then compared scoring with their peers to review consistency in scoring. If scores were different they were provided the time to discuss why they evaluated an element of the writing with a different score. The scoring was not the only element that was addressed; the teachers all needed to know how to actually teach all of their students to write using the common elements established school-wide.

Strategic planning and model teaching by the literacy coach, Samantha Riggins, in language arts, science, and social studies classes across grade levels, provided the systems the teachers needed to accomplish their goals. This was completed by winter break of that year and beginning in January, math and elective teachers were able to refer to the lessons taught to the students in their academic classes as they presented writing prompts to their students. This delay in training did not excuse this group of teachers from direct instruction of the school-wide writing model, rather it simply required them to rely more heavily on instruction their students received in content area classes. All teachers had an open exchange of ideas during this time and classrooms across the building had open door policies. Teachers were give bright pink signs to hang on their classroom door when they were teaching an element related to writing.

Teachers agreed school-wide that they needed to be in each other's classrooms more frequently and agreed among themselves and through their plans for improvement, that they would view others teaching writing at least four times each semester. Release time was not provided for observations; rather teachers used their planning periods to seek out opportunities to watch each other teach writing. If they were interested in watching someone on the same grade level they sought a teacher from a different grade level to cover their class (and they returned the favor) so they could see others teaching their same subject and grade level peers.

Based on the drive to be the best and to outscore other middle schools in the district, language arts teachers at Edison Middle School executed a two year plan to ensure the writing test scores for the school remain at the top. Initially, this change in practice derived from competition with other schools to be at the top of standardized test scores and school rankings. Gina described her experience through reflection on the specific group of students she taught during this school-wide initiative and she explained the changes she saw during this time stating:

> What was interesting to me was the kid that was borderline meets – you know – he just barely met who you were able to push to the exceeds. I had so many of those kids that it clearly made a huge difference that you know maybe someone who doesn't teach them that just doesn't notice it but I noticed I huge jump from the practice writing test to the final one after we did all of those interventions and observations. Which is again, out of a pre-planning meeting where we came up with some common goals when we saw we had slipped to number two.

Yolanda really believes in the power or observing teachers teaching and she learns so much from those experiences. She is motivated to improve her practice by watching how teachers interact with their students during a lesson. Yolanda stated:

> To me if there's not a kid in a room, then to me it's not as much job-embedded, because what I do is work with kids. I think the more that it can get to be authentic to their actual jobs, the more it is job-embedded, true job-embedded learning. I am motivated to improve and learn in observations more from what I see teachers maybe not doing sometimes as much as I do from what I see them doing. That's kind of my take on it. It really needs to be very open like to what we do every day, the closer can get to that I think the more learning that happens for the teacher.

Math, science, and language arts teachers all draw personal motivation through the competition generated by the desire to improve standardized test scores and became motivated to implement new teaching ideas through observations of other teachers actually teaching writing lessons.

With the beginning of the next school year the principal recognized teachers with the "Principal's Award for Outstanding Gains in Student Achievement." This was not only done for writing, but for reading, English/language arts, math, science, and social studies. He included all

teachers in his calculations and analyzed improvements in reading and writing for all teachers. There was surprise when a health teacher was recognized for improvements in reading and the computer science teacher showed marked improvements in writing for his students. Numerous teachers for special education students were recognized for greatest gains and this became a new motivation for teachers to focus their teaching on school-wide goals. They began the year with a renewed sense of motivation as they used planning time during the first two weeks of time to set their goals for the year.

As the data were analyzed, sorted, and coded, it became clear that the teachers at Edison Middle School share common motivators to improve their teaching practices through the participation in job-embedded learning. There is a clear motivation to not only improve the standardized test scores for their own students, but the ownership in school-wide data by all teachers to remain as the highest achieving school in the district provided motivation to work together through job-embedded learning to ensure student success. The added component of recognition from the principal additional motivated individual teachers motivated the teachers to continue to work in sync instead of closing their classroom doors and continuing to just do what they have always done.

How Teachers Learn from One Another

Throughout the constant comparative analysis of the data, the researcher discovered that teachers share common ideas about the typical ways middle school teachers learn on-the-job. The data reveal that there are both planned and unplanned opportunities during their day for learning from each other. Similar experiences existed among all 10 participants. Learning occurs through sharing materials, reviewing data together, and in both planned and unplanned meetings. An excerpt from Gina's interview reads:

> We are really good about having an idea and then another person says 'why don't we do this" or "let's tweak it this way" and over the years we've gotten some projects and learning units that are very good and especially I think that our writing scores will attest to that now. We merge our own teaching ideas into one great big idea that pulls in the best ideas for all of the teachers in the room.

Common curriculum planning, which occurs on a weekly basis, provides the time during the school day for teachers in the same grade level and in the same curricular area to work together with a common goal in mind. This time is embedded during the school day and provides the time needed for teachers to share ideas and create learning units using the best teaching practices and ideas of all of the teachers through an open exchange of ideas. This protected time has morphed over the past nine years, from what one teacher described as just a time they were required to all be in the same room for an hour a month with no focus on learning. Allyson described it as more of a social time than anything else. She stated:

> I remember it was my 2nd or 3rd year here we began to meet once a week. That's when we first started doing this whole thing of common planning. And we would go in there and it was pregnancies; it was where are we going to have dinner; it was telling jokes; it was the BIGGEST waste of time!

Now, Allyson describes what happens very differently. There is an agenda for every meeting and it is driven by common themes. Allyson described the meetings that occur now stating:

> The main way that we do it here at Edison is our collaborative planning where we have weekly planning and we're sitting down and we're talking about what works – what doesn't work – where do we want to go – what is the vision – what do we see happening in the future?

Common instructional calendars are followed and common assessments are developed and analyzed during these meetings. The agendas help the meetings to remain focused on common goals and allow the teachers to accomplish their common tasks with a high level of efficiency. Alvin sums up what he considers a good curriculum meeting to be as one in which, "You always want a good meeting to always have an agenda and a time frame." He continues stating:

> I bring the agenda and I determine it to some degree with the focused agenda created by the administration, although I leave it open to some degree for concerns or issues. I think it's still important for them to bring things that they want to bring to the meeting too.

Unlike the other participants in the language arts curriculum group, Alvin leaves a portion of his agenda open-ended to allow time for teachers to bring up concerns. He said he would like to say that the open-ended sharing that occurs was for best practices but he explained that it usually turns into a grip-session; allowing the teachers to vent about something the administration has changed. Change for this group is never perceived as improvement; rather it is typically viewed as a negative.

Aimee described her curriculum planning meetings as a time for sharing ideas. In the past, she felt as though she was simply a conduit of information between the administration and the teachers in her curriculum area and it was simply passing along directives and dates. Now Allyson describes weekly curriculum planning stating, "Now it's more of a collaborative thing than it was in the past. It's more that I just kind of facilitate as the curriculum leader. I respect the other teachers I work with so much." Barb shares a similar view as to what happens in the eighth grade science meetings. She does admit that some participants need a little encouragement to engage in the learning, but Barb sees the responsibility for the actual event of learning and an exchange of ideas to be everyone's responsibility.

Vertical team meetings seemed to be an area in which at least half of the teachers agreed there was a need for significant improvements. This was most evident among the language arts teachers interviewed. The sixth and eighth grade teacher are collectively on board with the vertical concept but the seventh grade seemed to be working in isolation with how each level delivers instruction to teach. Zorrest expressed her frustration with the seventh grade stating:

> I feel like that seventh grade teacher are our big stumbling block to getting the vertical team going. Sixth grade's on board –everything I brought to sixth grade is –ya know –

> taking the initiative –are you interested in this? We all do DGP we all do grammar alike – look what we are doing with writing –could y'all write something [pause] not take what we are doing in 8th grade, but kind of modify it for 6th grade so when they see it in 8th grade it's not new? We aren't there with seventh grade. There is a huge disconnect.

Alvin, the seventh grade language arts curriculum chair, certainly recognizes the need for more vertical meetings and in fact, seems to be a proponent of strengthening this concept within the school. He does not seem to be aware that he is causing frustration within his curriculum area. He reflected on the need for vertical teaming stating:

> You know in education you don't pick up where the last group left off you kind of overlap a little bit and that's fine –but I don't want to spend 9 weeks teaching something they spent 9 weeks learning in 4th grade and sixth grade –so you know. . . doing it – having vertical meetings [pause] and doing it more often –and having some very specific goals in mind is what we need more of here. And again –I wouldn't hold it necessarily to just language arts. Just it would need to happen more often and I think you would need you establish some goals before hand. And obviously when we do meet there ARE some specific goals –I don't mean to imply that there aren't –but I think what you need to do is have the understanding that the meetings are going to happen more often. You've got meeting goals but you have overarching goals for what you are trying to achieve throughout the year or whatever. That didn't happen this year for whatever reason.

Allyson referenced the need for more vertical planning time but rather in her own context. She seemed genuinely interested in learning what the seventh and eighth grade teachers need from the sixth grade teachers to better prepare them for the curriculum.

Two of the three science teachers also mentioned the need for more vertical teaming to gain consistence but interestingly none of the math teachers recognized this as an organized system within the school. There was mention of preparing the students for high school and the need to "know where they come from," as Sharyn phrased it, but there was not a significant reference to vertical teaming by any of the math teachers.

Formal meetings are not the only times teachers learn from one another to improve their practice. A great deal of informal learning takes place during their workday. This type of learning cannot be planned, rather the teachers in the school need to have an intrinsic desire to

improve their practices and craft knowledge. Blanche learns from other teachers in the hallways, when she looks at student work displayed in the halls or in other teacher's classrooms and she explained how you may notice specifics when you stop by a teachers room to say hello. Blanche describes ideal informal learning stating:

> I think you need to be naturally curious. I don't think everybody probably is as curious as they should be! But also I think that you are stronger at it if you don't like to do the same thing all the time. You know if you are one of those people that need change, then in order to change you're going to have to work a little bit harder at it.

Yolanda discussed her informal learning experiences to include dropping by another teacher's classroom in the morning to see if she could get ideas from them about up-coming lessons. Yolanda also said, "A lot of it happens over lunch though and you're just sitting there when you're all together." Just that time to sit and talk over lunch provides her with opportunities to learn informally from her colleagues. Gina agrees that, "A lot of professional learning happens in the halls." Zorrest referenced the sharing of materials over e-mail or through the use of shared folders on the server to be an important part of the informal learning the teachers participate in at Edison Middle School. Her colleagues are constantly sharing their ideas and activities with each other; they do not wait for planned meetings to occur. Zorrest stated, "It just happens all the time without even thinking about it or planning for it."

Valerie learned about a piece of instructional technology that she didn't know existed when she was just stopping by another teacher's room to say hello. Valerie described this stating:

> I happened to be in someone's room and I saw the, do you know what an ELMO is? It's that flatbed projector that projects on to – I had no clue what it was – I was like ELMO? What the heck does that do? And she said, "Oh look it's really cool!" And I mean right there and then someone showed me and I was like Oh okay! Just by walking into their classroom I was like, oh okay. I think I can use that. How am I going to use that?

Throughout the 2009-2010 school year, teachers were provided the opportunity to participate in book studies of their own choice. Teachers were grouped heterogeneously according to the books

they selected to read and this topic came up repeatedly during the interviews as a positive learning experience in which teachers learned from one another in groups that do not naturally occur. Teachers seemed appreciative of the opportunity to participate in a book study group that was not pre-determined but was based solely on their interest in a particular book.

Blanche compared her previous school's embedded learning experiences in stark contrast to what is offered at Edison Middle School. When asked about the differences between the two sites Blanche stated:

> And the difference is first of all, here, staff development is embedded. It's in everything we do and it's all during the year and then there's also other opportunities. The school I came from – in 17 years I was there we never read a book with the school as a whole. We never did anything with books like we do here. You learn so much from not only the books themselves but from the other people you are meeting with. We are from all over and there is so much we learn from each other that we wouldn't have if we hadn't had the book studies.

Allyson talked about not only the learning opportunities embedded in the weekly collaborative planning time but she described how the book study opportunities gave her the chance to choose books of specific interest and how they fit in to her classroom. Allyson stated:

> Right now I think that the main way that we do our embedded learning here at Edison is our collaborative planning you know where we have that weekly planning and we're sitting down and we're talking about what works and what doesn't work. Where do we want to go? What is the vision? What do we see happening in the future? I think also the book studies that we have been doing here are the same kind of thing because we got to chose books that we were very much interested in that really fit into what we wanted to do in our classrooms.

Amiee referred to the staff at Edison Middle School with specific reference to her book study group as, "A special group of people to be able to feel comfortable enough to open up and discuss things that can really help each other." She really enjoyed the book studies and she learned a great deal from simply listening to the other members and learning how they handle challenging situations from their students. It was an avenue which provided her personal

validation. Aimee referred to her experience of 27 year and the possibility that she may be "out of touch" with today's learners.

The book study group Aimee participated in reminded her that our 21st century learners require a different approach sometimes and the cross-generational group she was assigned to helped her find different approaches to engage the learners in her class. This has translated over to her curriculum group and she feels just as comfortable with that group as she looks for feedback when she is struggling to teach a concept. Aimee said, "

> The math group I'm with –I have no problem saying to them, and I've been teaching forever –this concept is not getting in, I don't know what I'm doing. What should I do? Listening to them and taking their ideas and their suggestions and stuff is what makes our learning so productive during the time we have during the day.

According to Aimee's perception, the sixth grade math curriculum group seems to work together to problem solve when their students are struggling to grasp a concept. They do not hesitate to change the way they may present a topic to their class if someone has a better way of teaching it.

Influences on Participation in Professional Learning

There are a number of factors which play in to what essentially influences teacher participation in professional learning. Responses included physical location of classrooms in the building, their own personal commitment to the process, and personal relationships among teachers. Other factors discussed during interview sessions indicated that their own personal position of authority within the school as a curriculum leader had a strong influence on their participation and the availability of technology added to the list of influences.

Several teachers commented on the fact that simply the layout of the building has an influence on the level of participation in job-embedded learning. Sharyn stated:

> I think the placement of us all being together in the building is really going to increase the informal learning you know. This year we were split on two communities and it really

> kept us from all of the informal learning that we do every single day without even thinking about it.

Gina's past experiences with building placement were based on subject area grouping in the building and she said that it really influenced the learning she did among her teammates. Gina explained this stating:

> When I first started here the subjects were grouped together better. So two language arts teachers were together and two science teachers were together back to back and so you were always right next to someone who taught your subject. So you were able to share equipment if necessary. This was especially helpful to the science teachers because of labs. One year I remember them setting up a lab in one room and then rotating their different classes through that room and the teachers were able to work together to get it done. If they hadn't been right there together I don't see how that could have worked. If you wanted to have a speaker you could open up walls and share a speaker. Things like that were good for our learning together. This year has been hard with the grade level split in the building but I was still near another language arts teacher. That was a big help. You know there are lots of things you can do when you are so close to each other and the teacher learning just happens.

Building placement came up repeatedly in the interviews and at least one participant from each subject area brought up proximity to being a solution to spark more informal learning during the workday. Yolanda stated, "I think proximity is important, like last year. Last year was my first year in seventh grade and I was also the curriculum leader and Tina was down in community C and the rest of us were back up here in this community but we were more spread out, so it was a little hard to do that sharing if you weren't in a formal curricular meeting." The teachers have experienced positive influences from the simple planning of placing classrooms together so more frequent informal learning can occur and teachers were more apt to share ideas and materials for instruction if it just meant walking next door.

The availability of technology is definitely a system set up in the school which influences the teacher's participation in job-embedded learning. With the use of the shared teacher drive on the server, the teachers are always sharing what they are currently teaching and they are

constantly “stealing” from one another as well. Valerie explained the use of the shared resources stating:

> In our meetings someone will say –okay can you put it on the shared drive and it’s like it just happens. We are all putting our stuff out there and then we are constantly e-mailing our stuff to each other. We all like to have things electronically so that way we can add and tweak and then share it back with the person who first shared it and they are like –oh that’s so cool! Thanks for doing that and adding that –it’s really good and has really changed how we do things.

The use of technology has made sharing materials second nature for the teachers and it seems to be an especially important tool for the curriculum chairpersons to use to share materials with the others in their department. The position of being the curriculum chair brings with it an additional influence to participate than others in the school may have. Technology plays a big part in how they communicate new information to the members of the department. Zorrest explained her role and influence to participate as curriculum chair in conjunction with the use of technology stating:

> I pretty much generate a lot of the learning just because I’ve taught it and I’m always looking for new stuff and of course because I see that as my job. Like when we, when I taught Anne Frank, you know, I always, I go online and see what I can find, that’s another way I learn, just to see if there is anything new out there. Then I put it all on the shared drive or I send it over e-mail if it’s something I find on-line when I’m at home. I’m always reading stuff, and it just happened when I was reading the paper, I found one little tidbit about the lady who helped Anne, and you just read, I do a lot of reading and then I try to share with them because they look at me, I think more to be sharing things than me, I mean, I like to learn from them, but I think they come to the meeting with the expectation that I am going to start out the sharing. So I always try to have something that I can give them and it is always there on the shared drive for them to use and work with to make it how it works for them for their students.

Yolanda sees her responsibility as a curriculum chair as, “Being a facilitator and more of a coach role but to definitely give them what they need to be successful.” Barb does not always see her role as being easy and she explained that sometimes you have to use your influence to get people to participate stating:

> I think it's a shared thing in our meetings but it doesn't always work that way you know. The only thing with curriculum sometimes is that you have to push people a little bit to do what you feel like they need to do and there have been times in meetings where I've had to ask, you know, somebody to participate but I think that's my job and role you know. I make sure things are getting done and I know that's what I'm expected to do so I take a lot of ownership in it. I do it because that's what's expected of me and I do a good job of it I think. I can get people to do it and do it right for the kids.

Not only does Barb see that her role as curriculum chair carries a weight to respond and produce but she feels personally responsible for her own learning as well as the learning of others.

What influences the teachers at Edison Middle School to participate in job-embedded learning during their workday? For the group of teachers interviewed at this school considered "high achieving," the consensus was that they all share both personal motivation to participate and a desire to bring positive recognition to the school. The categorical reasons teachers included as their motivation to improve their practice include public recognition for their accomplishments, a desire to improve their own craft, and a personal passion for what they do to ensure student success. The teachers are equally motivated through competition to remain at the top academically not only in the state, but also within the largest school district in the state of Georgia.

Influence of Relationships

As much as school administrators would like to think that the systems they set-up for teachers to work as collaborative teams, the learning will does not always occur. Teachers can go through the motions of meeting together but it collegial and congenial interactions among teachers are not an expectation of the learners, then learning can be impeded. Positive relationships subsequently create a culture where learners are more open and honest to communicate and learning thus occurs at more frequent rates (Barth, 2006). All interviews addressed the impact of both positive and negative relationship and how they affect the learning

which occurs during their learning experiences. Sharyn is a proponent of nurturing the positive relationships among the teachers she works with to try and combat the pessimism that exists. She states:

> I think we unfortunately have a lot of pessimism. You know I think you need the relationship first and then you're more apt to listen to the person. Unless maybe you just respect them because they're really superior…you might not need – you don't always I guess have to have a relationship, but if you have a relationship I think it makes you more willing to listen to what they have to say. I use positive vibes and try getting excited over the positives instead of the negative.

Several teachers mentioned the influence the administration has on the way relationships are fostered among the teachers. Specifically, making decisions that change systems previously set up in the building. For instance, a past practice was to change grade levels and teammates from year-to-year without a conversation to help teachers understand why a change is necessary. Allyson shared:

> I think we've had principals – leadership teams here in the past that did not understand the importance of cohesiveness on a team. You need to give teachers time to adjust to one another and to learn from one another and to figure out their role in the classroom. And we would change up all the time. You know we would – it would be fruit-basket turnover you know – one year you would be teaching sixth and the next year you'd be teaching eighth and it was just almost at a whim there was really no rhyme or reason to it. And I think that for Nick – planning to try and keep as many teachers together is a wonderful thing and I think that he's heard us loud and clear when we've talked about that. Because I think that a team that works together has worked well together in the past and so they understand what they want from each another.

The barrier created through the simple lack of communicate was something that teachers seemed to resent and it could have been a simple fix and bridge to positive relationships if the past administrative team had simply taken the time to explain why some changes were needed to best serve the students. Alvin discussed relationships as a potential barrier to successful job-embedded learning. He stated:

> An obstacle to job-embedded learning is individual's pre-dispositions… to how positive or negative they are about things in general – about life in general-about decisions that

> are made – about things they are asked to do – things that they have to do – umm – everybody always feels so rushed- and so pushed – and you know all this – and…so there's push-back – there's resistance – umm…to things maybe…I would like…maybe …for us to do. We're edging in that direction I would like to move a little more quickly and it's difficult at times.

Although Alvin seemed hesitant to fully disclose his full thoughts about the barriers some relationships seem to be creating within the school he did want to make sure it was known that he feels as though progress is being made toward more positive interactions amongst the teachers and the administration. Yolanda recognizes the need for relationships to be established to have a positive influence on other teachers she mentors. She states:

> You can't mentor someone, either formally or informally, coach someone. If you don't have a relationship, it's going to feel threatening to them, it's going to be intimidating, so you have to set that up ahead of time and actually plan time to build that relationship.

She sees relationships as something that can be planned for through positive interactions in a non-threatening way. Amiee sees the relationships she establishes with her fellow teachers as a positive in her day stating:

> I truly feel that if you have respect for somebody and you think that they – like in my opinion I love Elanie, I always knew she was a great teacher because I saw her interact with the dance girls and the mascot. I would see how she interacted with the kids. But then you get to see her as a teammate, doing things together with them, meetings when we're out there together and planning things for the kids. It just builds on that, I had such respect for her to start with. Lisa is the same way. I think Lisa is a wonderful teacher. She's like a grandmother to everybody, even to us who are leading her! I think she's got great ideas, I've observed in one of her curriculum meetings. I was observing Allyson, but she has great ideas that she loves to share and loves to help people too. I think if you have a respect for somebody that just makes you want to listen to them, it's like you're sitting at the edge of your chair, "tell me more!"

Clearly the mutual respect formed in relationships in the building has had an influence on why teachers continue to participate in job-embedded learning as opposed to just going through the motions of checking off items on an agenda. Of course the relationships are not all positive, but some of the negative influence participation as well and Allyson ramps-up her responsibilities

when she thinks there is a teacher not doing their part or even if she thinks they are in the wrong profession. She described this stating:

> I've had some [pause] some very, very [pause] difficult teammates and worked with some people who have been encouraged to move on. And some that are no longer teachers because they were in the wrong profession. You know that maybe you need to go somewhere else. Because you know teaching [pause] it's a fulltime job but it's also something that you don't just leave the school and just forget about.
>
> You know it's not just like a 9 to 5 job where you are just jotting things down in a notebook or whatever and then you leaving for the day and that's it! You have to love it and you have to do it for the kids. I love it and I love the people too. That's what makes it worth it. I love the people I work with but it you aren't pulling your weight then you are going to know about it and you aren't going to be around for very long. At least not here!

Not only do the teachers feel a personal responsibility and commitment as an influence in why they participate in job-embedded learning but they also take responsibility of others and do not appear to tolerate others not participating in their meetings. They clearly exhibit a level of personal control over how they interact with the other teachers in the building and how they personally chose to participate in job-embedded learning or not.

Interactions, positive or negative, definitely influence how and why the teacher participants learn during their school day. Teachers with positive dispositions toward each other appeared to work together in a more congenial and collegial relationship as opposed to adversarial relationships. There was certainly evidence that teachers understand that they have control over the types of relationships they create and maintain amongst themselves.

Observation Analysis

Participants were observed during a formal professional learning activity within their workday. All of the participants observed were acting as curriculum leaders for each of their areas and led the meetings. Of the 10 participants who were interviewed, 1 was not observed due to the fact that her teaching assignment changed for the school year in which the observations

took place. At the conclusion of the 2008-2009 school year Gina taught Language Arts. During the 2009-2010 school year, when participant observations occurred; she was assigned to teach Latin. Gina is the only Latin teacher at the school, therefore, the researcher was not able to observe her participation in a formalized learning meeting of the same nature as the other participants.

To gain perspective in the content of formal learning time in the school, one aspect of the research included participant observations conducted with 9 of the 10 participants. Participant observations took place over a five week period during the last six weeks of the school year. Table 4.6 provides an overview of the participants present during the observation, the length of time each group met, and percentages of each participant's contributions to the collaborative planning meeting. Additionally, this table notes the percentage of comments made by each participant which were considered on-topic or off-topic, and whether an agenda was used to guide the meeting.

Seventy-eight percent of the meetings attended had formal agendas and all of the meetings observed were held in the curriculum leader's classroom. All meetings observed had every teacher required to attend present and all had at least one special education teacher participate. An assistant principal was present at 67% of the meetings and none of the meetings observed had the principal present. The average length of meetings was 26 minutes and ranged from 15 to 35 minutes in length. There were six or seven participants in each meeting and one participant, Gina, was not observed due to her change in her teaching assignment from the previous year. This data were further extrapolated to calculate the expected number of participation hours each teacher participating in curriculum planning meetings would attend.

Table 4.6

Summary of Formal Observations by Participant

Name	Grade/ Subject	# of participants	on-topic	off-topic	% of contributions	Duration	Agenda
Allyson	6th – LA	6: 4 LA/1 sped/1 AP	92%	8%	32%	35 mins	Yes
Alvin	7th – LA	6: 5 LA/1 sped	85%	15%	47%	15 mins	Yes
Zorrest	8th – LA	7: 5 LA/1 sped/1 AP	89%	11%	21%	35 mins	Yes
Amiee	6th – MA	6: 4 MA/1 sped/1 AP	100%	0%	39%	15 mins	No
Yoland	7th – MA	7: 5 MA/1 sped/1 AP	100%	0%	32%	30 mins	Yes
Sharyn	8th – MA	6: 5 MA/1 sped	59%	41%	37%	30 mins	Yes
Valerie	6th – SC	7: 4 SC/2 sped/1 AP	67%	33%	28%	25 mins	No
Blanche	7th – SC	7: 5 SC/2 sped	83%	27%	20%	20 mins	Yes
Barb	8th – SC	7: 5 SC/1 sped/1 AP	93%	7%	19%	30 mins	Yes
		Averages	85%	16%	31%	26 mins	78%

LA= Language Arts Teacher, MA= Math Teacher, SC= Science Teacher, sped= Special Education Teacher, AP= Assistant Principal

Using the data from the participant observations, 26 minutes was used to determine the number of hours set aside in the school day for teachers at Edison Middle School to participate in collaborative planning time. It is important to note that teachers are expected to meet at least 50 minutes per meeting so the average meeting time of 26 minutes per meeting is most likely not an accurate reflection of the actual meeting time per group. According to local school records, a total of 34 meetings were initially planned on the school calendar for curriculum area teachers to participate in meetings. Of the 34 planned, 5 were cancelled by administration for various reasons; typically for weeks with standardized testing. Through the use of available documents; curriculum meeting agendas; of the 29 meetings teachers were expected to attend there should have been 14.7 hours of collaborative curriculum planning during the 2009-2010 school year. The scheduled amount of time expected by administration, based on 50 minute meetings should have been a little over 24 hours of planning time. Table 4.7 displays this data based on the

available documents. Curriculum chairs were instructed to save meeting agendas to a specific location on the shared drive on the local school server. Of the nine curriculum chairs who participated in the study, two did not save any of their agendas to the designated location; therefore, there were not any materials available to be analyzed as a part of the document review.

Table 4.7

Document Analysis of Agendas Available for 2009-2010 School Year

Participant	Grade	Subject	Agendas for # of required meetings[a]	Number of Agendas	Hours of Participation for School Year[b]
Allison	6th	Language Arts	62%	18	7.8
Alvin	7th	Language Arts	86%	25	10.8
Zorrest	8th	Language Arts	24%	7	3.0
Amiee	6th	Math	--	--	--
Yolanda	7th	Math	28%	8	3.5
Sharyn	8th	Math	28%	8	3.5
Valerie	6th	Science	--	--	--
Blanche	7th	Science	59%	17	7.4
Barb	8th	Science	72%	21	9.1

[a]*Percentage based on the required 29 meeting.* [b]*Based on average of 26 minutes per meeting.*

The observation dates ranged from April 12, 2010 to May 17, 2010. All occurred after spring break with four of the meetings occurring prior to CRCT and five observations took place after CRCT. The contribution of each participant in the meeting were noted on the participant observation log (see Appendix C) with a plus (+) or minus (-). The + sign indicated that the contribution was on-topic and - indicated the conversation was off-topic. Curriculum leaders were on-topic for an average of 85% of their contributing conversations. And contrastingly were only off-topic for an average of 16% of their personal comments. On average, 31% of contributions to on-topic discussions were made by the curriculum leaders.

Document Analysis

Documents were gathered from the curriculum meetings observed and an analysis of meeting agendas across all curriculum areas was done to extract commonalities among and across subject areas. All agendas were crafted from the same template and included the same sections. Each agenda listed the participants present, curriculum leader items, calendar review, instructional best practices, upcoming assessments, and notes from the administration. All meetings observed did not use an agenda. According to local school records, curriculum lead teachers were instructed to save all agendas to a specific folder on a shared folder on the school server.

Table 4.7 displays the number of agendas by subject and grade that were saved according to directions. Also displayed in this table is the average number of participants in attendance for the meeting agenda available for analysis. All included at least one participant from the special education department. It was unclear how many meetings were attended by an administrator. Of the seven participants with documents available to analyze, only two included items under Best Practices; all had topics listed under the headings: Curriculum Leader Items, Calendar Review, Upcoming Assessments, and News from Administrator.

Agendas were all titled “CIA Meeting” which stands for Curriculum Instruction and Assessment. Although the agenda template provided specific focus to the meetings, the agenda’s analyzed were not consistent among the curriculum areas. For instance, the seventh grade language arts meeting used the agenda to take notes on during the meeting while the agenda was projected on a Smart Board. At the end of each meeting the finalized copy with the working notes was saved to the shared folder on the server for everyone to reference as needed. This

meeting has a strong focus on assessments and typically no items under instructional best practices.

The sixth grade meeting had items listed in this category but it was not discussed at the meeting. The eighth grade language arts group focused heavily on the instructional calendar and again, did not include any items under instructional best practices. In Math, the sixth grade teachers were very rushed and did not use an agenda, although reassurance was made that they always have an agenda to follow. This was most likely due to the fact that this final observation was conducted during post-planning.

The seventh grade Math meeting followed a detailed agenda but a copy was provided after the meeting, with extensive notes filled in following the conclusion of the meeting. The eighth grade math teachers appeared to have never seen an agenda before (the meeting observed was in April) and one teacher even commented about the CIA title because they did not know what it stood for. This is evident in the low number of formal agendas available for review.

The document analysis revealed that first of all, the curriculum chairs do not use the shared folder on the server to save agendas from week-to-week. Documents analyzed revealed that all meetings were attended by those who were expected to attend; including special education teachers and administrators. The local school calendar of meetings indicated that curriculum meetings were supposed to take place each Monday school was in session. The documents analyzed did not indicate that this occurred as planned on a weekly basis, however, when considering the data from the interviews, it is clear that the teachers at Edison Middle School meet and plan together on a frequent basis; whether formally planned or during unplanned spontaneous meeting times throughout the building.

Case Summary

The findings in this chapter were grounded in the context of the review of the literature as it related to the study, and in relation to the categories and themes which emerged from the data. *Job-embedded Learning By Definition* presented the scope of understanding of the term and set the stage for the following three sections of this chapter. Next, the findings were presented as they related to each research question in three sections, *Motivation to Improve Practice*, *How Teachers Learn from one Another*, and *Influences on Participation in Professional Learning* each analyzed. Following the finding connected with each research question, the next section, *Influence of Relationships*, draws upon the data related back to the review of the literature review of relationship in the workplace. The final sections of this chapter included an analysis of the observation data and documents reviewed for the present research.

Edison Middle School provides an environment for their teachers to develop their personal and collective craft as teachers via specific systems set up to optimize collaborative learning. The teacher leaders interviewed for the study are highly motivated to simply teach. They work together in collegial, collaborative learning groups to constantly improve their personal craft and they feel equally responsible for improving the craft of others. The data revealed that the school administration and teacher leaders in the building have taken proactive steps to ensure frequent, effective, job-embedded learning is occurring on a daily basis. Just as good teaching constitutes good learning, the same is true of effective systems of professional learning; the result is good learning. Time for common planning is scheduled and somewhat formulaic in nature. The curriculum area leaders use a template to guide the weekly meetings and they are charged with the task of preparing and reviewing the agenda with their supervisory assistant principal prior to the meeting for additions or deletions. Although this is what is

expected, it does not typically occur. For the most part, the teacher leaders are left to operate in isolation when preparing for the weekly curriculum meetings.

While the teachers at Edison Middle School allude to challenges in their collaborative work; specifically when referring to adversarial relationships, these comments did not dominate the data and did not emerge as a theme. In general, the teacher leaders at Edison Middle School share the responsibility for student success, and overall, the shared responsibility for student success and personal learning provided evidence in the findings that high levels of collaboration during formal and informal meeting times will continue to occur on a daily basis.

The ongoing practices of the teachers at Edison Middle School with regard to job-embedded learning, was similar to the attributes of effective professional development programs are comprised of. Characteristic of ideal team learning practices were present in the findings and the literature review in this area assisted the research in pulling out effective versus ineffective practices in place at Edison Middle School. Relationship in the workplace were deemed a factor in the influences on teacher participation and this segment of the research will be woven in to the discussion of the findings in Chapter 5.

CHAPTER 5

DISCUSSION

This chapter draws connections and applications from the findings presented in Chapter 4, and suggest how the findings might inform policy at the local, district, and state level. The discussion will draw connections between each research question and the major findings within the scope of this research. In this discussion, an extensive examination of current and proposed legislation will be presented to build background knowledge, pointing out significant findings, which can then draw broad connections to local policies and legislation in Georgia. The initial discussion will first connect findings to the reauthorization of *The No Child Left Behind Act of 2001*; then to House Resolutions currently in subcommittee review.

The remaining sections in this chapter will discuss the findings situated around each research question as they connect to the major findings and the literature reviewed. First, connections will be extrapolated from the findings and the literature, to pinpoint the sources of motivation for teachers at Edison Middle School to improve their practice. Next, the discussion will lead to the connections in the literature to the most prominent findings with regard to the most effective ways teachers learn from one another during the workday at Edison Middle School. The final section of this chapter will be associated with the third research question, and guide a discussion drawn from the major findings from the study centering on specific factors and systems set up at Edison Middle School, which influence teachers to participate in job-embedded learning.

The purpose of this study was to examine the learning which occurs among teachers in a high performing middle school in the state of Georgia. Research dictates that effective professional development must be directly connected to daily work with students, related to content areas, organized around real problems of practice instead of abstractions, continuous and ongoing, and able to provide teachers with access to outside resources and expertise (Borko, 2004; Darling-Hammond et al., 2009; Fiszer, 2004; Graham & Ferriter, 2010; Joyce & Showers, 2002; NCEA, 2006; NSDC, 2009; Roland, 2007; Wei et al., 2010; Whitford & Wood, 2010; Zepeda, 1999, 2008). Professional development should take place within a professional community, a team or network, or both (Bryk et al., 1999; Gordon, 2004; Graham, & Ferriter, 2010; Gregory, & Kuzmich, 2007; Hord, 2008; Levine, 2010; Lieberman & Miller 2008; Skerrett, 2010; Whitford & Wood, 2010; Yendol-Hoppey, 2010; Zepeda, 1999, 2008). The present research amplified the need for such practices and the literature reviewed, highlighted the key systems needed, to not only motivate teachers to participate in meaningful job-embedded learning, but to also work together collaboratively through the implementation of successful team learning practices and collegial workplace relationships.

To further define the study, Edison Middle School was chosen as the research site because the scope of the research was narrowly focused on practices at a high-performing middle school in the state of Georgia. For the purpose of this study, the research site is defined as high-performing in the context of the district and the state of Georgia. 2008-2009 AYP results places the research site as the overall top ranking middle school in all performance areas except for sixth grade reading, which was ranked second. All results placed the school within the top seven performing middle schools in the state of Georgia.

To gain a better understanding of the professional learning practices of the teachers at Edison Middle School, the following research questions guided this study and framed the major findings:

1. What do middle school teachers perceive to be the motivation to improve their teaching practice?
2. How do middle school teachers learn from one another during planned, unplanned, and spontaneous learning situations when grouped together by themselves or others during their school day?
3. What factors influence middle school teachers to participate in professional development during their workday with regard to the construction of their practice?

There is an extensive research-base including best practices for effective professional learning programs; however, few include actual perceptions of teachers to guide practice. Changing practice is a difficult and long-term proposition that cannot be remedied by going off to a workshop (Hess, 2008; Lieberman & Miller, 2008; Miretzky, 2007). Teachers need to practice change and continually work with others on mending the problems they encounter (Darling-Hammond, 1997). To impact student learning, staff groups must engage in structured, sustained, and supported instructional discussions, which acknowledges the significance of the relationship between instructional practice and student work. Future research is needed in this area to influence policy related to the most meaningful forms of professional development for teachers with a linkage to teacher perceptions about the most effective practices.

Reauthorization of No Child Left Behind and Current Legislation

What influence does policy, such as NCLB, have on local school practice? Teachers at Edison Middle School work in tandem with the local school administration to focus on systems

that can improve practice, but there is scant evidence from the present study to render teacher awareness of how NCLB affects their daily practices. NCLB requires high-quality and effective professional development, but fails to define components of such a system. The review of the literature presented in Chapter 2 analyzed research that specifically identified characteristics of effective professional development systems.

Gordon's (2004) research includes findings that teachers operating in collaborative learning environments refer to their practices as "a way of life"(p. 6) to describe the job-embedded learning systems in which they participate in on a daily basis. The teachers at Edison Middle School personify what it means to live the job. One of the major findings in the research show that this high-performing school employs only highly-qualified teachers as defined by NCLB, and clearly the extent of participation in job-embedded learning activities would meet the vagueness of NCLB's requirement to have effective professional development.

Arne Duncan, presently the U.S. Secretary of Education, is aggressively working toward a timely reauthorization of the *No Child Left Behind Act 2001*. He stresses the need to be solution-driven in what happens next, as policy is positioned to address this federal law which was set for reauthorization in 2007. President Obama has vowed to make the main federal education law a priority for reauthorization in 2010, but that has yet to be accomplished. A collective sigh could certainly be heard from teachers and district administrators alike, when Mr. Duncan alluded to the 100% proficient requirement to be eliminated, with the pending revisions, to be met by all schools by 2014. This component of NCLB has been the albatross of this policy leaving this unrealistic goal to be timed out by new legislation. The research reviewed this to be a particular stress for teachers (Markow & Cooper, 2008) as they struggle to find time during the workday to collaborate with fellow teachers.

NCLB provides a definition for professional learning in the General Provisions section of Title IX, Part A – Definitions; Section 9101(34):

(34) PROFESSIONAL DEVELOPMENT- The term professional development' —

(A) includes activities that —

(i) improve and increase teachers' knowledge of the academic subjects the teachers teach, and enable teachers to become highly qualified;

(ii) are an integral part of broad school-wide and district-wide educational improvement plans;

(iii) give teachers, principals, and administrators the knowledge and skills to provide students with the opportunity to meet challenging State academic content standards and student academic achievement standards;

(iv) improve classroom management skills;

(v)(I) are high quality, sustained, intensive, and classroom-focused in order to have a positive and lasting impact on classroom instruction and the teacher's performance in the classroom; and

(II) are not 1-day or short-term workshops or conferences;

(vi) support the recruiting, hiring, and training of highly qualified teachers, including teachers who became highly qualified through State and local alternative routes to certification;

(vii) advance teacher understanding of effective instructional strategies that are —

(I) based on scientifically based research (except that this sub-clause shall not apply to activities carried out under part D of title II); and

(II) strategies for improving student academic achievement or substantially increasing the knowledge and teaching skills of teachers; and

(viii) are aligned with and directly related to —

(I) State academic content standards, student academic achievement standards, and assessments; and

(II) the curricula and programs tied to the standards described in subclause (I) except that this subclause shall not apply to activities described in clauses (ii) and (iii) of section 2123(3)(B);

(ix) are developed with extensive participation of teachers, principals, parents, and administrators of schools to be served under this Act;

(x) are designed to give teachers of limited English proficient children, and other teachers and instructional staff, the knowledge and skills to provide instruction and appropriate language and academic support services to those children, including the appropriate use of curricula and assessments;

(xi) to the extent appropriate, provide training for teachers and principals in the use of technology so that technology and technology applications are effectively used in the classroom to improve teaching and learning in the curricula and core academic subjects in which the teachers teach;

(xii) as a whole, are regularly evaluated for their impact on increased teacher effectiveness and improved student academic achievement, with the findings of the evaluations used to improve the quality of professional development;
(xiii) provide instruction in methods of teaching children with special needs;
(xiv) include instruction in the use of data and assessments to inform and instruct classroom practice; and
(xv) include instruction in ways that teachers, principals, pupil services personnel, and school administrators may work more effectively with parents; and

(B) may include activities that —

(i) involve the forming of partnerships with institutions of higher education to establish school-based teacher training programs that provide prospective teachers and beginning teachers with an opportunity to work under the guidance of experienced teachers and college faculty;
(ii) create programs to enable paraprofessionals (assisting teachers employed by a local educational agency receiving assistance under part A of title I) to obtain the education necessary for those paraprofessionals to become certified and licensed teachers; and
(iii) provide follow-up training to teachers who have participated in activities described in subparagraph (A) or another clause of this subparagraph that are designed to ensure that the knowledge and skills learned by the teachers are implemented in the classroom. (U.S. Congress, 2001)

A goal no Nation has ever attempted is a quality education for all students by an absolute date. By school year 2013-2014, NCLB requires states to ensure every child in the Nation, regardless of race, income, or disability, will achieve at grade level. What states, policymakers, and educators equally realize, is that the requirement for 100% proficiency by all schools for all students is, in fact an unachievable goal.

Through an extensive search of currently proposed legislation, it was discovered that there is not one phrase from the General Provisions section of Title IX, Part A – Definitions; Section 9101(34), which defines professional learning, in NCLB, is not used in any of the proposed changes to this section of the law. The framework of NCLB is intended to build the capacity of teachers at the local school level, which seems ideal, because it appears to empower

local school leaders, however, but some of the unintended consequences of this accountability policy presents obstacles for realizing its underlying goals.

Although accountability is designed to put pressure on educators to change practices and improve achievement, teachers have reported high levels of stress in the face of demands for fast-paced improvement of student outcomes (Markow & Cooper, 2008; Valli & Buese, 2007) and have identified staying on schedule with district instructional pacing guides and preparing students to take high-stakes tests as key sources of pressure (Certo, 2006). External pressures placed on teachers to produce increases in student achievement, undoubtedly experience lower levels of peer collaboration, because time is redirected toward teaching skills exclusive to standardized test results.

In the present study, teachers faced the same requirement and the pressure directed at the teachers at Edison Middle School was at the opposite end of the spectrum as the demands they felt to remain at the top academically. Scores for Edison Middle School have always outscored the other 24 middle schools in the district, and this carries with it expectations that their students will continue to outperform others. The data were clear, that this group of teachers respond aggressively to competition. This was evident in the findings and emerged as a strong category presenting across numerous interviews. For instance, all of the language arts teachers interviewed mentioned the school-wide writing initiative to regain the number one position in the school district for performance level on the eighth grade writing assessment. This was drawn from the competition of a new school which had outperformed Edison Middle School in the first year it was opened by a mere three points in the exceeds category. Although this pressure serves as motivation to improve practice in the present study, it is not likely that this same form of motivation exists at schools not meeting Adequately Yearly Progress (AYP) year-after-year.

In terms of professional development specifically, the accountability systems within NCLB have had both negative and positive consequences. Local school systems must submit professional development plans to the State Department of Education but NCLB does not provide prescriptive guidelines for such plans. For example, one common way of addressing the immediate demands of the accountability system has been for schools to adopt an external school reform model, such as *High Schools That Work, Learning Focused Schools,* or *Success for All.*[3] Although some schools have had success with these models (Borman, 2005), the professional development offered across models varies substantially in terms of quality and flexibility (Rowan, Camburn, & Barnes, 2004).

Often, States or school systems adopt one of these popular models to circumvent the actual process needed to develop a plan to meet the needs of the teachers and students in their district. The SCSD has not adopted a specific reform model, rather they have developed model teaching strategies, which all schools in the district follow to guide best instructional practices. The flexibility to adopt a personalized professional learning protocol for the school system, allowed SCSD to analyze the needs within the district and to make thoughtful decisions about professional learning for their teachers. Unfortunately, all school systems do not have the means or drive to develop such an extensive program for professional learning.

The language used by the NSDC in the proposed definition from this esteemed organization, has had a significant influence on two House Resolutions presently in sub-committee discussion. Table 5.1 provides and extensive side-by-side analysis of NSDC's proposed definition, Title 20 Section 70 Subchapter IX Part A SS 7801 SEC. 6.: Professional Development defined, Section 6 of *Great Teachers for Great Schools Act* –H.R. 5218, and

[3] *High Schools That Work, Learning Focused Schools,* and *Success for All* are popular school reform models available for purchase by individual schools, local school districts, or states

Section 6 of *Teacher and Principal Improvement Act* –H.R. 5366. Both H.R. 5218 and H.R. 5366 make use of language from NSDC's definition; however, the definition of professional development in the *Teacher and Principal Improvement Act*, uses more of the verbiage from NSDC's definition than the *Great Teachers for Great Schools Act*.

NSDC's definition of professional learning has had a significant influence on policy as the proposed Amendments to Section 9101 (34) of the *Elementary and Secondary Education Act*, the *No Child Left Behind Act of 2001,* are beginning the first stages of reauthorization. The most promising alignment comes from the H.R. 5366 –*Teacher and Principal Improvement Act* was introduced May 18, 2010 and was referred to sub-committee June 29, 2010. Table 5.1 displays these proposals side-by-side in an effort to highlight key omissions from the NSDC's proposed definition and House Resolutions currently in sub-committee.

In the context of this study, it is essential to note that this Act does not use the term job-embedded; rather, it refers to this type of learning in broad terms as the need to provide "an effective mechanism" to accomplish the goals of professional development. When addressing frequency, this Act elaborates on NSDC's loose suggestion of "several" times per week to read "multiple" instead and expands this to require this to occur "during the regular school day among established, collaborative teams." This fits with the definition of job-embedded learning established for the scope of the present study; however, the specific term is absent from this proposed change to legislation.

The *Great Teachers for Great Schools Act* - H.R. 5218 to amend ESSA was introduced May 5, 2010 and referred to sub-committee May 27, 2010. This suggested change to policy lacks alignment with NSDC's definition, S. S. 7801, and H. R. 5366 with no mention of who is responsible for improving student achievement and does not mention the need for alignment of

professional development to be aligned with standards. Later in these proposed changes there is a clearer alignment with NSDC's definition, but like the *Teacher and Principal Improvement Act,* there is no mention of job-embedded learning, rather they refer to this practice as simply the need to set up an "effective mechanism" for this to occur.

H.R. 5336*: Teacher and Principal Improvement Act* of the 111th Congress was introduced May 18, 2010 and was referred to the subcommittee on *Early Childhood, Elementary, and Secondary Education* on June 29, 2010: This proposed house resolution seeks to amend Title II of the *Elementary and Secondary Education Act of 1965* (ESEA) to create a new Part E: Building School Capacity for Effective Teaching and Leadership. If passed into law, this new provision would provide sub-grants to local educational agencies (LEAs) to improve teacher and principal quality through a system of teacher and principal induction, professional development, and evaluation that is developed, implemented, and evaluated in collaboration with local teacher, principal, and school leader organizations and preparation programs.

Teacher and Principal Improvement Act S.3242, sponsored by Senator Reed, and the *Great Teachers for Great Schools Act of 2010* H.R. 5218, sponsored by Representative Polis, were both referred to the respective houses' education subcommittees. Should these bills become law, they will redefine professional development in ESEA to provide a clear definition of high-quality professional development and incentivize schools to implement the requirements at a high level.

Words and phrases noted in bold in Table 5.1 indicate where there are differences across these four proposals. Gaps in the table are present where alignment is missing. This serves as a visual reminder of the omission of verbiage from one proposal to the next. This is particularly

Table 5.1

Definition of Professional Learning - Comparison of Proposed Legislation to NSDC's Proposed Definition

National Staff Development Council's proposed definition	Title 20 Section 70 Subchapter IX Part A SS 7801 SEC. 6. PROFESSIONAL DEVELOPMENT DEFINED.	Section 6 of *Great Teachers for Great Schools Act* - H.R. 5218	Section 6 of *Teacher and Principal Improvement Act* - H.R. 5366
(34) PROFESSIONAL DEVELOPMENT— The term "professional development" means a comprehensive, sustained, and intensive approach to improving teachers' and principals' effectiveness in raising student achievement.	(34) PROFESSIONAL DEVELOPMENT- The term 'professional development' means a comprehensive, sustained, and intensive approach to improving teachers' and principals' effectiveness in raising student achievement **that--**	(34) PROFESSIONAL DEVELOPMENT- The term professional development' —	(34) PROFESSIONAL DEVELOPMENT- The term 'professional development' means comprehensive, sustained, and intensive **support, provided for** teachers, principals, **school librarians, other school leaders, and other instructional staff,** that—
(A) Professional development fosters collective responsibility for improved student performance and **must be** comprised of professional learning that is:	(A) fosters collective responsibility for improved student performance; '(B) **is** comprised of professional learning that--		(A) fosters collective responsibility for improved student learning; **(B) is designed and implemented in a manner that increases teacher, principal, school librarian, other school leader, paraprofessional, and other instructional staff effectiveness in improving student learning and strengthening classroom practice;**

Table 5.1 *continued*

National Staff Development Council's proposed definition	Title 20 Section 70 Subchapter IX Part A SS 7801 SEC. 6. PROFESSIONAL DEVELOPMENT DEFINED.	Section 6 of *Great Teachers for Great Schools Act* - H.R. 5218	Section 6 of *Teacher and Principal Improvement Act* - H.R. 5366
			(C) analyzes and uses real-time data and information collected from-- (i) evidence of student learning; (ii) evidence of classroom practice; and (iii) the State's longitudinal data system;
(1) Aligned with rigorous state student academic achievement standards as well as related local educational agency and school improvement goals;	(i) is aligned with rigorous State student academic achievement standards as well as related local educational agency and school improvement goals;		(D) is aligned with-- (i) rigorous State student academic achievement standards developed under section 1111(b)(1); (ii) related **academic and school improvement goals of the school,** local educational agency, **and statewide curriculum; (iii) statewide and local curricula; and (iv) rigorous standards of professional practice and development;**
(2) Conducted among educators at the school and facilitated by well-prepared school principals and/**or** school-based professional development coaches, mentors, master teachers, or other teacher leaders;	(ii) is conducted among educators at the school and facilitated by well-prepared school principals and school-based professional development coaches, mentors, master teachers, or other teacher leaders; and		

Table 5.1 *continued*

National Staff Development Council's proposed definition	Title 20 Section 70 Subchapter IX Part A SS 7801 SEC. 6. PROFESSIONAL DEVELOPMENT DEFINED.	Section 6 of *Great Teachers for Great Schools Act* - H.R. 5218	Section 6 of *Teacher and Principal Improvement Act* - H.R. 5366
(3) Primarily occurs **several** times per week among established teams of teachers, principals, and other instructional staff members where the teams of educators engage in a continuous cycle of improvement that,	(iii) primarily occurs **several** times per week among established teams of teachers, principals, and other instructional staff members where the teams of educators engage in a continuous cycle of improvement that--	(E) primarily occurs **multiple** times per week **during the regular school day among established collaborative** teams of **teachers, principals, school librarians, other school leaders, and other instructional staff, by grade level and content area (to the extent applicable and practicable), which** teams engage in a continuous cycle of professional learning and improvement that—	(E) primarily occurs **multiple** times per week **during the regular school day among established collaborative** teams of **teachers, principals, school librarians, other school leaders, and other instructional staff, by grade level and content area (to the extent applicable and practicable), which** teams engage in a continuous cycle of professional learning and improvement that--
(i) Evaluates student, teacher, and school learning needs through a thorough review of data on teacher and student performance;	(I) evaluates student, teacher, and school learning needs through a thorough review of data on teacher and student performance;	**(i) identifies, reviews, and analyzes--(I) evidence of student learning; and (II) evidence of classroom practice;**	**(i) identifies, reviews, and analyzes-- (I) evidence of student learning; and (II) evidence of classroom practice;**

Table 5.1 *continued*

National Staff Development Council's proposed definition	Title 20 Section 70 Subchapter IX Part A SS 7801 SEC. 6. PROFESSIONAL DEVELOPMENT DEFINED.	*Great Teachers for Great Schools Act* - H.R. 5218	Section 6 of *Teacher and Principal Improvement Act* - H.R. 5366
(ii) Defines a clear set of educator learning goals based on the rigorous analysis of the data;	(II) defines a clear set of educator learning goals based on the rigorous analysis of the data;	(ii) defines a clear set of educator learning goals **to improve student learning and strengthen classroom practice** based on the rigorous analysis of evidence of **student learning and evidence of classroom practice**;	(ii) defines a clear set of educator learning goals **to improve student learning and strengthen classroom practice** based on the rigorous analysis of evidence of **student learning and evidence of classroom practice;**
(iii) **Achieves** the educator learning goals identified in subsection (A)(3)(ii) by implementing coherent, sustained, and evidenced-based **learning** strategies, **such as** lesson study and the **development** of formative assessments, that improve instructional effectiveness and student achievement;	(III) **achieves** the educator learning goals **based** identified in **subclause** (II) by implementing coherent, sustained, and evidence-based **learning** strategies, **such as** lesson study and the **development** of formative assessments, that improve instructional effectiveness and student achievement;	(iii) **develops and implement**s coherent, sustained, and evidenced-based **professional development** strategies to meet such goals (including **through instructional coaching,** lesson study, and study groups organized at the school, team, or individual levels); (iv) provides **learning opportunities for teachers to collectively develop and refine student learning goals and the teachers' instructional practices** and **use** of formative assessment	(iii) **develops and implements** coherent, sustained, and evidenced-based **professional development** strategies to meet such goals (**including through instructional coaching**, lesson study, and study groups organized at the school, team, or individual levels); (iv) provides learning opportunities for **teachers to collectively develop and refine student learning goals and the teachers' instructional practices** and the **use** of formative assessment;

Table 5.1 *continued*

National Staff Development Council's proposed definition	Title 20 Section 70 Subchapter IX Part A SS 7801 SEC. 6. PROFESSIONAL DEVELOPMENT DEFINED.	Section 6 of *Great Teachers for Great Schools Act* - H.R. 5218	Section 6 of *Teacher and Principal Improvement Act* - H.R. 5366
(iv) Provides **job-embedded coaching or other forms of assistance** to support the transfer of new knowledge and skills to the classroom;	(IV) provides **job-embedded coaching or other forms of assistance** to support the transfer of new knowledge and skills to the classroom;	(v) provides **an effective mechanism** to support the transfer of new knowledge and skills to the classroom **(including utilizing teacher leaders, instructional coaches, and content experts to support such transfer); and**	(v) provides **an effective mechanism** to support the transfer of new knowledge and skills to the classroom **(including utilizing teacher leaders, instructional coaches, and content experts to support such transfer); and**
(v) Regularly assesses the effectiveness of the professional development in achieving identified learning goals, improving teaching, and assisting all students in meeting challenging state academic achievement standards;	(V) regularly assesses the effectiveness of the professional development in achieving identified learning goals, improving teaching, and assisting all students in meeting challenging State academic achievement standards;		
(vi) Informs ongoing improvements in teaching and student learning; and (vii) that may be supported by external assistance.	(VI) informs ongoing improvements in teaching and student learning; and (VII) may be supported by external assistance; and		

Table 5.1 *continued*

National Staff Development Council's proposed definition	Title 20 Section 70 Subchapter IX Part A SS 7801 SEC. 6. PROFESSIONAL DEVELOPMENT DEFINED .	Section 6 of *Great Teachers for Great Schools Act* - H.R. 5218	Section 6 of *Teacher and Principal Improvement Act* - H.R. 5366
		(vi) provides opportunities for follow-up, observation, and formative feedback and assessment of the teacher's classroom practice, on a regular basis and in a manner that allows each such teacher to identify areas of classroom practice that need to be strengthened, refined, and improved.	(vi) provides opportunities for follow-up, observation, and formative feedback and assessment of the teacher's classroom practice, on a regular basis and in a manner that allows each such teacher to identify areas of classroom practice that need to be strengthened, refined, and improved;
(B) The process outlined in (A) may be supported by activities such as courses, workshops, institutes, networks, and conferences that:	(C) may be supported by activities such as courses, workshops, institutes, networks, and conferences that--		
(1) **Must** address the learning goals and objectives established for professional development by educators at the school level;	(i) address the learning goals and objectives established for professional development by educators at the school level;		
(2) Advance the ongoing school-based professional development; and	(ii) advance the ongoing school-based professional development; and		

evident in the two House Resolutions currently in sub-committee review in which there are major chunks of text from the NSDC definition used. When viewing the proposed changes to

legislation side-by-side with NSDC's definition, there is hope that NCLB will be reauthorized with a clear alignment to what research dictates to be clear, consistent practices, while requiring effective and meaningful professional development to take place in all public schools.

With an emphasis on building local capacity, specifically through targeted resources for professional development and school-wide reform initiatives (U.S. Congress, 2001), NCLB set out to enable the creation of a strong political dynamic between school districts and other constituents to provide educators with influence to control the implementation of innovative approaches to instruction and assessment (Banilower, Heck & Weiss, 2007; Hess & Petrilli, 2007). Local districts, including SCSD, receive funding through NCLB, specifically through Title II, Part A, to provide financial means for states to apply for grants to specifically address Teacher Quality. Public district financial SCSD received $3,405,091 from this grant during the 2009-2010 school year. Of the federal funding received by SPCD this accounts for 7.2% of the revenue generated from federal funding. The Fiscal Year 2011 budget for SPCD depends on the same level of funding from Title II, Part A, but it is unclear if funding will be discontinued or reallocated in the coming years as NCLB is reauthorized.

Taking into account the short history of NCLB, this overview provided the foundation for the connection of the findings to inform local and state policy to apply for sub-grants to assist in funding professional learning implemented at the local school level. The findings from this research can provide timely information to guide local, district, state, and federal policy formation as.

Specific examples can be drawn from the literature review to focus on ways to increase teacher motivation, systems that can be set up in schools to foster positive and productive professional learning in schools, and factors that influence participation in systems set up for

positive professional learning experiences. Next, connections will be drawn from the major findings in the research to the literature reviewed to reveal the primary sources of motivation for the teacher at Edison Middle School to improve their personal teaching practice. Then the discussion will lead to the connections in the literature to the most prominent findings with regard to the most effective ways teachers learn from one another during the workday at Edison Middle School. The final section of this chapter will guide a discussion drawn from the major findings from the present study centering on specific factors and systems set up at Edison Middle School, which influence teachers to participate in job-embedded learning.

Motivation to Improve Practice

What do middle school teachers perceive to be the motivation to improve their teaching practice? The present study revealed levels and sources of motivation that cannot be "canned" into any federal guideline. Systems for motivation beyond what the teachers personally controlled included systems set up to reward and recognize increases in student achievement using a scaled growth model. The teachers from Edison Middle School responded enthusiastically to the recognition, and this served as an additional motivator, propelling them to examine the student level data at a deeper level to focus instructional practices. Competition to remain the highest ranked middle school in the school district was a clear source of motivation. They are not only motivated by the competition from other high-performing schools, there was also a clear motivation to not only improve the standardized test scores for their own students, but there was an ownership in the school-wide data by all teachers, as they persevered to remain the highest achieving school in the district.

The categorical reasons teachers included as their motivation to improve their practice include public recognition for their accomplishments, a desire to improve their own craft, and a

personal passion for what they do to ensure student success. Personal recognition, and the positive perception that their teaching influences had on student achievement were common among the interviews conducted and revealed this as being a common source of motivation to improve practice. What can be put in place to increase teacher motivation to improve personal professional practices? Although the interview data did not reveal that the teachers were motivated financially to participate in job-embedded learning, 9 of the 10 participants are in fact paid a stipend to serve as a leader for their curriculum area.

An analysis of local school records indicated that each of the participants receive a yearly stipend of $1500 and this could serve as a source of motivation for the curriculum chairs to fulfill their personal responsibility of guiding the job-embedded learning practices among the grade level curriculum areas. The teachers in the present study were externally motivated to increase test scores of their students through competition with other high achieving schools in the district.

In the SCSD, where the study was situated, schools are financially compensated through a Results-Based Evaluation System (RBES) in which schools are ranked against each other to determine grants for local schools. Since the RBES was put in to place by SCSD, Edison Middle School has received this additional $70,000 incentive grant to use at their discretion. Funding allocated from the local school district has funneled funds to offer stipends for teacher leaders in the building and to teachers who deliver professional development during job-embedded times.

A recent source of federal funding provided by *Race to the Top,* is situated to provide financial compensation for teachers across the State. This $4 billion federal fund may become just the source of motivation needed to set up systems of job-embedded learning within the

school day through competitive grants. Georgia has already qualified for this funding with SCSD leading the charge to apply for these funds.

Race to the Top funds will provide competitive grants to States that:

1. Create the conditions necessary for comprehensive education innovation and reform;
2. Implement ambitious plans in four education reform areas described in the American Recovery and Reinvestment Act of 2009 (ARRA):
    a. Standards and Assessments,
    b. Data Systems to Support Instruction ;
    c. Great Teachers and Leaders, and
    d. Turning around the Lowest-Achieving Schools
3. Achieve significant improvement in student outcomes, including making substantial gains in student achievement, closing achievement gaps, improving high school graduation rates, and ensuring that students are prepared for success in college and careers.

President Obama announced the winners of the *Race to the Top* grant in a speech to the nation, August 9, 2010. He stated:

> I want to commend some of the teachers unions across this country who are working with us to improve teaching -- like the Delaware Education Association, which is working with state leaders as part of their Race to the Top efforts, not only to set aside 90 minutes of collaboration time a week to improve instruction, but to strengthen teacher development and evaluation. That's the right way to go. So, for anyone who wants to use *Race to the Top* to blame or punish teachers–you're missing the point. Our goal isn't to fire or admonish teachers; our goal is accountability. It's to provide teachers with the support they need to be as effective as they can be, and to create a better environment for teachers and students alike.

This funding will now become part of the operating budget for school systems across the state of Georgia.

The intent of NCLB was to provide motivation of public posting of individual school data, but did not anticipate the push back from local schools. Teachers became frustrated with the push to improve overall test scores for the school but individual student growth was not taken into consideration and teachers were in turn not motivated to teach the most at risk students.

McDonnell (2005) postulated that standards alone, with information from assessments, are not sufficient to motivate educators to change their practices or to motivate students to learn to higher standards. Although this is not the only source of motivation for the teachers in the present study, it does serve as a concrete measure the teachers equate with personal accomplishment. Ultimately, under NCLB, public reporting of test scores is the accountability system in place but there are no stipulations in place to cultivate new practices that would ultimately improve instruction and lead to higher student achievement.

How Teachers Learn from One Another

How do middle school teachers learn from one another during planned, unplanned, and spontaneous learning situations when grouped together by themselves or others during their school day? At Edison Middle School, the list of ways teachers learn from one another during their day is extensive. Fiszer (2004) contended that, "Effective professional development requires modeling, practice in simulated and actual settings, and structured, open-ended feedback about performance observed during actual practice" (p. 2). The research findings revealed that the teachers at Edison Middle School are using many of the effective professional development practices identified in the literature, but systems are still needed to increase the accessibility for teachers to actually view fellow teacher's actively practicing their craft. Edison Middle School has used a system of peer observation in the past when the school was collectively working to improve test scores, but all of the references in the data were directed to past practices.

For schools that attempt to create their own school reform design, the professional development required for teachers to develop new teaching goals, curricula, and lessons can be prohibitively time-consuming (Cockburn, 1994; Ezarik, 2002, Khorshedd, 2007). On the other hand, pressure from the accountability system has also been shown to foster the creation of learning communities within schools; learning communities offer a powerful form of daily professional development to teachers who collaboratively plan lessons, share innovations, and develop strategies for struggling students (Louis & Marks, 1998; Stein, Smith, & Silver, 1999; Zepeda, 1999, 2008). Although the pressure of the accountability system has caused schools and teachers to target professional development hours directly to improving instruction, the response of district's and local schools responses to this pressure have resulted in vastly different types and quality of professional development experiences for teachers. In the present study, the teacher learning teams function as a professional learning community, although this is not a specific model the school professes to use.

The present study's findings revealed that there are specific systems needed to ensure successful job-embedded learning takes place. Whitcomb et al. (2009) suggested that, "Professional development programs should be situated in practice, focused on student learning, embedded in professional communities, sustainable and scalable, and both supported and accompanied by carefully designed research" (p. 208). While some teachers are more naturally gifted than others, all effective teaching is the result of study, reflection, practice, and hard work. A teacher can never know enough about how a student learns, what impedes the student's learning, and how the teacher's instruction can increase the student's learning. Professional development is the only means for teachers to gain such knowledge.

The present study revealed the teacher learning at Edison Middle School occurred during structured and unstructured times throughout the workday. Much of this learning occurred because the teachers shared common motivation to improve personal practice. These learning conversations were not contrived; rather they were genuine in individual desire to advance their personal teaching practice. Whether students are high, low, or average achievers, they will learn at higher levels, if their teachers regularly engage in high-quality professional development.

The findings revealed that the systems for teachers to collaboratively plan and learn must be set up in the school. This occurs informally through casual conversations in hallways and during lunch, while viewing student work from other teachers, and visiting other classrooms; all of which involve a collegial exchange of ideas. More formalized learning occurs during weekly curriculum planning meeting, which included teachers collaboratively creating common assessments and planning for school-wide initiatives at vertical team meetings. These setting provide a platform for formal conversations to occur.

Teachers at Edison Middle School voluntarily participate in the peer coaching program which allowed teachers to watch their colleagues teach, and to give and receive feedback from peers in a non-evaluative manner. This past year, books studies were conducted in conjunction with peer coaching which further fostered professional conversations around current literature through teacher-led book studies.

Recent publications from researchers and educational practitioners (Graham & Ferriter, 2010; Little, 2006; McLaughlin & Talbert, 2006; Stoll & Louis 2007; Whitfield & Wood, 2010; Yendol-Hoppey, 2010; Zepeda, 2008) have increasingly stressed the need for investing extensive efforts into developing collaborative professional learning communities within schools as a central strategy for improving teaching and student learning. It is evident in the findings that

Edison Middle School has set up successful systems designed to sustain effective professional learning based on the available research about ideal professional learning programs.

Factors Needed to Set-up Successful Job-Embedded Learning

What factors influence middle school teachers to participate in professional development during their workday with regard to the construction of their practice? Fiszer (2004) stressed that there must be a school-wide cultural shift from isolation to a continual design of collaboration to sustain the learning that directly affects classroom practice. The teachers in the present study have been empowered to work within systems set up to promote positive teacher interactions and learning. This empowerment is set up within the teacher leadership model practiced at the school. Time and time again, the data were clear that the curriculum chairs have authority within their meetings and they consider themselves personally responsible to foster and lead the learning that occurs at their weekly meetings.

Improvement in student achievement cannot occur without changes in student learning, and improving student learning depends on the ability of teachers to address specific content students must learn and to tailor instruction to meet individual students' learning needs. Responses to accountability policy involve the implementation of reform practices. However, any education reform initiative must require learning on the part of teachers and school administrators who must implement the reform; the ultimate goal of educational reform is to change the status quo.

Teacher learning serves an important function in the accountability system by fostering the capacity to achieve the instructional changes necessary to enable students to achieve proficiency on content and performance standards. Written accountability policy, namely, NCLB, reflects this capacity-building function of professional development, calling for

professional development activities that improve educators' knowledge regarding, the core academic subjects that the teachers teach, as well as, effective instructional strategies, methods, and skills, and use of challenging State academic content standards and student academic achievement standards, and State assessments, to improve teaching practices. Additional factors teachers expressed the need for to generate a higher level of participation is first, consideration of the placement of classrooms in the building. Teachers want to be in close proximity to one another so the likelihood of more frequent unplanned, spontaneous learning can occur.

For the nine participants in the study who served as curriculum chair, each drew from their position of authority within school as a source of influence on their participation. They typically felt as though they were responsible for generating the learning topics and to be the facilitator during formal meeting. In particular, Zorrest admitted that she felt obligated to give the teachers in her department all of the materials to deliver instruction. Personal commitment to the process of job-embedded learning presented multiple times across the data. The teachers at Edison Middle School feel responsible for their own learning and it is evident in the passion and enthusiasm they exuded during the interview and observation sessions.

All interviews addressed the impact of both positive and negative relationship and how they affect the learning which occurs during their learning experiences and relationships proved to be a major finding as an influence for participation. Several teachers mentioned the influence the administration has on the way relationships are fostered among the teachers. Specifically, making decisions that change systems previously set up in the building. Clearly the mutual respect formed in relationships in the building has had an influence on why teachers continue to participate in job-embedded learning as opposed to just going through the motions of checking

off items on an agenda. Of course the relationships are not all positive, but some negatively influence participation as well.

A review of seminal and current research and literature, with a focus on successful professional learning practices, team learning behaviors, and workplace relationships provided insight to inform inevitable policy changes with regard to teacher professional development. The research reviewed on successful professional learning practices confirmed that the findings gathered at Edison Middle School by the researcher reveals that job-embedded learning practices are operating at an optimal level for success.

Ten years ago an educational summit was commenced to address where our nations educational system should be by the year 2000 (Goals 2000). This group of influential leaders set goals for our nation to return to a time when the recognition as being the best nation, in terms of the educational system, was a part of American culture. Goals 2000 carried little to no media coverage and that is what makes the recent educational summit different; in fact, it was totally driven by media.

The week of September 25, 2010 marked the beginning of an Educational Summit simply called *Education Nation*. The conversations are between the media, government officials, teachers, administrators, parents, and students. Media has had the power to thrust the educational crisis our Nation is experiencing and with the aid of digital media, including social networking sites, the public attention may be what is needed to push reauthorization to occur with the 112th session of Congress.

Accountability policy, and especially NCLB, has benefited professional development by ear-marking resources for teacher learning, encouraging innovative solutions to achievement deficits, and focusing teachers on students they might otherwise ignore (Louis et al., 2005).

However, unintended consequences of accountability policy—such as a narrowing of the curriculum and emphasis on rote procedural understanding—simultaneously pose great challenges for professional development and underscore its importance for achieving accountability goals (Valli & Buese, 2007). The rapid, powerful changes that accountability requires have the potential to motivate research and development in professional development to look for new effective approaches. However, the nature and quality of standards and assessments have a major role in determining the effects of accountability on how teachers teach.

CHAPTER 6

SUMMARY, DISCUSSION OF THE FINDINGS, AND IMPLICATIONS

The purpose of this study was to examine the learning which occurs among teachers in a high performing middle school in the state of Georgia. For the purpose of this study, a high performing school is defined in the context of the district and state in which it is situated. Data used to determine Adequate Yearly Progress (AYP) for the 2008-2009 school year placed the research site as the overall top ranking middle school in all performance areas except for sixth grade reading which was ranked second. Teacher perceptions related to their personal learning experiences informed the research through one-on-one interviews and participant observations with middle school teachers employed at a high achieving middle school in the state of Georgia.

The study was guided by the following overall research questions:

1. What do middle school teachers perceive to be the motivation to improve their teaching practice?
2. How do middle school teachers learn from one another during planned, unplanned, and spontaneous learning situations when grouped together by themselves or others during their school day?
3. What factors influence middle school teachers to participate in professional development during their workday with regard to the construction of their practice?

So what makes a great teacher? What has this research added to the literature base? While this research was underway, the Bill and Melinda Gates Foundation were conducting a large scale study to validate the voice of teachers and to draw attention to the need for teachers to

participate in education reform. This research adds a personal, more in depth examination of teacher perceptions for a group of teachers working at a high achieving school that will ultimately benefit from *The Race to the Top* funds. The findings from the present study do not necessarily reveal any new practices that will change the way professional development is executed in local schools; rather it validates the need for systems to be set up in local schools to facilitate the implementation of successful job-embedded learning practices. Even if systems are set up via policy, be it local, state or federal, the "rubber meets the road" in the classroom where teachers are delivering instruction.

Summary of the Research Design

Qualitative research methods were used for this study and a case study methodology was used to gain personal perceptions of the participants. Case study methodologies were used to conduct this study and it is often difficult to determine a casual relationship or to generalize to other populations or settings from this form of research. The data reflected the practices of theses teachers at a school that continues to be recognized for high levels of student achievement from the district and the state of Georgia.

The theoretical frame for this study was rooted in social constructivism. The underlying focus this construct offers is a perspective which sees individuals' lives as being multi-faceted and social, and shaped by the personal construction of meaning and identity formation. Personal perceptions were examined by the researcher through a phenomenological lens. The study was designed to examine the details surrounding the specific perspectives of teacher's feelings, thought processes, and emotions that are difficult to extract or to learn about through more conventional research methods.

Current and prominent literature, and seminal and recent research was reviewed to ground the researcher's perspectives, first, with regard to the historical developments affecting professional learning over the past 25 years. Next, the review centered on successful professional learning practices, which was examined along with effective team learning behaviors, and the affect of relationships in the workplace. All facets of the review assisted in developing an initial understanding of how these areas of research could direct the methodology of the research. A qualitative case study was identified to be the most applicable method to examine the actual perceptions of practicing teachers with regard to their teaching practice.

Data sources collected and analyzed included:

1. Transcription from a singular one-on-one interview with each of the 10 participants;
2. Observation notes from a singular participant observation of 9 of the 10 participants;
3. Artifacts collected throughout the research, including agendas and minutes from curriculum planning meetings, local school and district financial records, professional learning logs stored at the local school, teaching certificates, standardized test results, and school-wide calendars.
4. Field notes were taken before, during, and after all interviews and observations.

Constant comparative data analysis was used to determine if additional themes emerged and were then added to the interview guide if needed. The study began in March 2009 and concluded July 2010. Data collection, the review of the literature, and data analysis occurred during this timeframe.

Yin's (2009) research design for case study research was followed, which established a specific, cyclical research design. The steps in the process included planning, designing, collecting data, analysis and review of the data, the drawing of conclusions from the research and

then sharing the results. The data reflected the practices of theses teacher participants at a school that continues to be recognized for the high level of student achievement produced. A case study approach was used to examine the perspectives of 10 middle school teachers at a high performing school which had insights to share to inform this research.

The teachers were asked to complete a professional profile sheet, participate in a one-on-one interview with the researcher, and agree to a participant observation during the final six weeks of the data collection phase of the research. The participants were asked to share their personal opinions and perspectives about the learning experiences present within the workday with regard to their own personal and professional exchanges. Throughout the study, the researcher took measures to ensure trustworthiness was established using internal and external measures to establish validity and reliability.

Summary of the Study

The literature and research reviewed in Chapter 2 provided historical perspectives about teacher professional learning focusing on the need for positive structures that support learning for students and their teachers. Part of the structure provided by the *No Child Left Behind Act of 2001* emphasizes the need for teaching methods to be research-based that are proven to yield higher levels of learning (U. S. Congress, 2001). An extensive search of the existing body of research illuminated the need for the use of job-embedded learning practices and the early research (Little, 1982; Rosenholtz, 1989) compared high achieving and low achieving schools, which showed a correlation between collaborative teacher practices and higher student achievement. Recent research (Whitcomb et al., 2009) shares a great deal of “how-to” guidelines and examples of ways to set up successful professional learning, but there is little to no data to support their recommendations.

Teachers want and need collaboration to feel valued and productive (Coopersmith, 2009; Scholastic and The Bill and Melinda Gates Foundation, 2010), but NSDC and Scholastic's large scale analyses do not reveal the actual practices that directly affect student achievement. This research hopes to add a new dimension to the existing body of research by providing actual teacher perspectives from middle school teachers at a high performing middle school with recommendations for schools to set up systems to allow for this type of learning exchange to occur.

There is an expanding body of research examining professional learning practices in relation to student achievement. It was challenging to make connections between the present study and student achievement, because the students are and have always been, considered high achieving in terms of standardized testing performance. It is striking that the present legislature in Georgia has suspended requirements for PLU requirements and that they are seeking alternate means to accomplish meaningful professional learning with little to no funding.

Even the professional learning at Edison Middle School requires funding. All of the teachers, with the exception of one, who participated in the research, are paid a stipend of $1500 to serve as a teacher leader for their curriculum area. As in most professions, meaningful training does not exist without some amount of monetary investment. Although it may appear that the professional learning at Edison Middle School runs without funding, this is not the case. According to local school records, the professional learning budget is a mere $18,500. This must cover the costs of professional leave for observations and planning days, conference fees, and a large portion of the budget is dedicated to paying teachers for preparation time for sessions they teach as formalized learning during the school day, and to purchasing books for professional development.

A case study approach was used to examine the perspectives of 10 middle school teachers at a high performing school which had insights to share to inform this research. The teachers were asked to complete a professional profile sheet, participate in a one-on-one interview with the researcher, and agree to a participant observation during the final six weeks of the data collection phase of the research. The participants were asked to share their personal opinions and experiences with regard to their own personal and professional learning. Teachers were chosen from a high achieving middle school in Georgia to participate. The participants were specifically chosen because of their accessibility to the researcher because the researcher also works at the selected research site. This accessibility to the participants of the researcher allowed a high degree of flexibility when scheduling interviews and observations.

Data were collected from the 10 participants during a one-on-one interview, a participant observation, and through the collection and examination of documents obtained from the participants, and district and local school records. Field notes were taken before, during, and after all interviews, and were used as a supplement as needed. Interviews were digitally recorded and were transcribed as soon as possible on completion of the interview session. Constant comparative data analysis was used to determine if additional themes emerged and were then added to the interview guide if needed. The study began in March 2009 and concluded July 2010. Data collection, the review of the literature, and data analysis occurred during this timeframe.

Discussion of the Findings

Lave and Wenger (1991) described situated learning by referring to the specific interactions between people as they normally occur. Situated learning is clearly a complex component in the learning which occurs at Edison Middle school. It is embedded within the

learning activities, formal and informal, which are unmistakably a part of the school culture. Whitcomb, et al. (2009) suggested that, "Professional development programs should be situated in practice, focused on student learning, embedded in professional communities, sustainable and scalable, and both supported and accompanied by carefully designed research" (p. 208). As the data were analyzed, cross-case findings emerged into categories first and were then narrowed even further into themes. The significant findings will be presented in the next three sub-sections with a focus on why, where, and how job-embedded learning occurs for the teachers at Edison Middle School during their workday.

Why does Learning Occur?

The teachers at Edison Middle School were eager to share their thoughts about the systems set up at their school because they exhibit a sense of pride in being a part of the overall success of the school. So why do the teachers participate? The findings connected to all three research questions provided significant evidence as to why these teachers participate. One of the major findings showed that the teachers share a true passion for teaching. They want to impart their knowledge on the students in their classroom and they take ownership in the success of individual student as well as the school. This was evident across participants as they described the personal commitment to improve their own practice.

One of the major findings of the present research centers on what motivates teachers to improve their own teaching practice. Teachers in the study expressed personal motivation to improve with the need for recognition for student gains, and an intrinsic desire to improve their own practice. They repeatedly expressed a personal passion for teaching, and a strong desire for their students to learn from them. They also expressed a more global motivation for Edison

Middle School to received notary recognition through gains in student achievement and through a healthy competition with other high achieving schools in the district.

The findings of this research concluded that there are external and personal influences on why teachers actually participate in job-embedded learning. Findings indicated that external systems can be set up to promote a greater probability that this type of collaboration will occur on a more frequent basis. One simple finding indicated that the mere placement of classrooms in proximity of same subject area teachers provided simple access for informal, unplanned learning among teachers. The availability of technology from the local school and the school district influenced the teachers to share information on a more frequent basis. Additionally, teachers were influenced to participate in job-embedded learning because of their personal position of authority within the building. The greatest influence on participation seemed to come from the participants personal commitment to their own learning and their personal relationship with colleagues influenced them to participate as well.

Drive to participate and improve was additionally fueled by competition to remain at the top academic rankings in the district and in Georgia. The data repeatedly demonstrated that a rival school in the district was a source of motivation to determine ways to bolster student achievement; which is a difficult task when you are already poised as the top performing middle school in the district.

Where does Learning Occur?

The data indicated that the question of "where" to be specifically significant related to the second research question. Teachers at Edison Middle School are in a constant state of learning as it is situated not only in planned meetings, but as it is situated in the everyday, informal conversations and interactions they share with their colleagues on a daily basis. Another

prevalent finding from the research provided evidence that teachers are in a constant state of learning in formal and informal settings during their workday. Informally, teachers learn through collegial conversations, through sharing materials via technology, and during spontaneous conversations throughout the building and the school day. Formally, teachers learn amongst themselves during planned curriculum meetings, vertical team meetings, book studies, and peer coaching, while creating common assessments.

Their informal learning occurs via a variety of interactions throughout the day including conversations in the hallways and during lunch, while viewing student work from other teachers, and just dropping by a neighboring teacher's classroom for casual conversation. The data indicated that these informal conversations, whether intended to or not, typically resulted in some type of learning.

The formal learning that occurred was situated in planned common planning times with others in the same grade level and curriculum area. Formal conversations at these planned meeting centered on topics presented and discussed during professional learning opportunities and occur on a frequent basis due to the number of meeting scheduled during the school day, multiple time a week. The data showed that other types of learning situated during the workday included book studies and peer coaching. During these collegial conversations the teachers plan instructional calendars and common assessments working off of the strengths and ideas within their peer group.

How does Learning Occur?

Although the data analysis from the interview sessions, document analysis, and observations consistently reflected quality interactions, such as active learning, collegial conversations, and an emphasis on content area planning, there was relatively little variation in

the substance of the content covered and the specific nature of teachers' activities. For instance, most professional learning activities observed and documented in the agendas analyzed amongst the language arts teachers focused on construction of unit tests, and time was spend dividing up the work. All meetings had a high level of participation with at least five participants at each meeting observed, and in general, conversations at the meetings remained on topic and focused with the guidance of the agenda.

So how do the teachers at Edison Middle School learn during the workday? Through cooperative, collaborative planning; this is a part of the school culture at Edison Middle School. The data revealed that the teachers do not feel as though the time set aside during their day takes away from the time they need to build and sustain collegial relationships amongst themselves. Teachers at the research site do not go in their classrooms, close the door, and then work in isolation; rather they take advantage of unstructured and spontaneous meeting times to build relationships and maximize the time set aside during the day for authentic professional exchanges to occur.

Social constructivist theory provides a perspective which views individual lives as being multi-faceted and socially shaped by the personal construction of meaning and identity formation (Kim, 2001). The second research question for the study relates to this theory as the teachers discussed the influences on their participation during their workday with regard to the construction of their practice. The social aspect of the relationships built amongst the teachers was of significant influence on the level of participation and influences were multi-faceted as teachers discussed in particular the lack of cohesion in vertical teaming in language arts. Hargreaves (2003) argued that policies sometimes get in the way of collegiality by putting too many requirements and restrictions preventing teachers from the time to grow the necessary

relationships needed to forward the shared work of schooling. At Edison Middle School, the "how" is rooted in the collegial relationships established among the teachers.

Categories and themes emerged throughout the study as interview transcripts were reviewed, and observation data were analyzed to reveal what motivated the teachers to participate in job-embedded learning, how and when learning activities occurred during the school day, and what factors influence their participation. These findings serve as a reminder that, for professional development to function in the accountability context, its structure must facilitate meaningful and collegial interactions among teachers to build content knowledge and to ensure a cyclical state of continuous improvement. The participants clearly want their students to be successful and they want to be personally recognized for gains in student achievement. Competition between Edison Middle Schools desire to remain the highest achieving middle school in the district served as a strong motivation for most of the teachers to improve their personal practice.

Research tells us that an outstanding teacher is the most important school-related factor influencing student achievement. If our Nation's mission is to provide high achievement for all students, then principals must first hire well-educated teachers who have a passion for teaching and a thirst for continuous improvement. These teachers must remain steadfast in their commitment to examine student work and apply that knowledge to improve both teaching and learning. However, independent master teacher that may be proceeding in different directions will not lead to high achievement for all students in a school. During the past 10 years, educational practice has moved away from teachers who viewed their work as independent "subcontractors" within a school and toward teams of teachers working together to provide the best possible learning.

Implications

There are numerous possibilities when considering the areas in which implications for the future lie with regard to future research, practice, and policy. The job-embedded learning practices of teacher's are significant as it relates to policy because of the current political arena surrounding educational reform. Broader implications include examining how other schools with the commonality of being classified as high-achieving, practice job-embedded learning. The findings of this study may or may not relate to other high-achieving schools but implications for future research and current practice can certainly be drawn from the findings presented from this study. More study is needed to determine how ideal systems present in one school can be replicated in another. Discussion for implications will include ideas to frame possible future research to expand upon the findings from this research, implications for practice will be discussed next, and in closing, policy implications will be discussed.

Future Research

Because Edison Middle School students are high-achieving, the community has not changed significantly over the past 13 years, and there is little teacher turn over there would be challenges to emulate the systems set up for job-embedded learning as a prescriptive program. However, within the scope of the present research, the findings highlighted ideal systems of job-embedded learning. Future research could include a similar study in a high-achieving school with vastly different demographics to determine if similar job-embedded learning practices exist in other school with trend data similar to Edison Middle School. Because the research was situated in a large urban school district, to reach beyond the scope of this study to future research, it would be informative to examine the practices at high achieving schools in rural districts as well. Future research might include a cross-case analysis with a similar methodology through parallel

data collection methods in schools different demographically and with schools located in rural or intercity locations.

The scope of this research only included qualitative measures; the current research could actually be expanded to include quantitative measures. Surveying teachers at high achieving schools across the state could be conducted to reveal what motivates and influences them to participate in job-embedded learning, and what systems are set-up in their schools to achieve this during their school day. Results from high achieving urban and rural districts could then be analyzed, resulting in a quantitative analysis of the results.

The Bill and Melinda Gates Foundation in conjunction with Scholastic recently conducted a survey of over 40,000 teachers nationwide and teachers overwhelmingly believe that it is their job to engage students through differentiation of instruction. This study also recognize the fact that there need to be systems set up within their school to facilitate the type of learning that needs to occur among teachers to support needed changes in approach to instruction to create and mold 21st century learners. Through the use of focus groups to develop the survey tool, this large scale study found teachers to believe that the frequent use of student performance data should be used to identify students for intervention, to differentiate instruction, alter lesson plans, and to open discussions among teachers.

The most important factors influencing whether a teacher is satisfied with their position and location is displayed in Table 6.1. Most teachers surveyed in this study desire a supportive leadership in the school (96%) and most recognize the importance of time set aside in the school day to collaborate with one another (89%). It is desirable for professional development to be relevant to their personal and school goals (85%) and teachers want to work in a friendly collegial environment (82%).

Table 6.1

Views on Factors Influencing Teacher Retention

	Absolutely Essential	Very Important
Supportive Leadership	68%	28%
Time to Collaborate	54%	35%
Relevant Professional Development to personal and school goals	45%	40%
Collegial Work Environment	42%	40%

This table, adapted from *Primary Sources* (Scholastic and The Bill and Melinda Gates Foundation, 2010) reminds researchers and local practitioners that teachers desire time to collaborated during their day. This type of mixed methods research could further expand to include case studies of schools deemed high performing as the present research has done.

A study by Blank, de las Alas, and Smith (2007) sheds additional light on the extent to which professional development programs deemed high quality by state education leaders are aligned with the features of professional development necessary in the accountability environment. This along with the present study can assist in informing further research to include identification of specific attributes of job-embedded learning programs which could be used to inform policy.

The grouping of teachers according to subject and grade level was deemed important in the findings of the present research. Although this study does not allow for the examination of trends over time and focused only on practices at this one particular school, it provides powerful findings that professional development programs driven by motivation to remain a high-achieving school, can provide areas which can be easily replicated in future studies.

Future research should also include a larger scope within the literature review to examine the specific practices present in schools which are classified as high achieving. As sub-grants become available in the state of Georgia through Title II funds, there is a viable opportunity for the state to broaden the scope of this research to include input from classroom teachers if H.R. 5336*: Teacher and Principal Improvement Act* is passed it to law. A new Part E: *Building School Capacity for Effective Teaching and Leadership*. Would be added, if passed into law, and this new provision would provide sub-grants to local educational agencies (LEAs) to improve teacher and principal quality through a system of teacher and principal induction, professional development, and evaluation that is developed, implemented, and evaluated in collaboration with local teacher, principal, and school leader organizations and preparation programs.

Practice

Regardless of changes to legislation, there are significant implications for practice that can be gleaned from the present study. When reflecting on the findings of the research in relation to each of the research questions, specifically research questions two and three, there are clear examples within the teacher daily practice that can be implemented at a local school or even district wide, if motivation to improve practice exists. First, local school administrators can prioritize and protect collaborative planning time for teachers. Efforts were made at Edison Middle School to set up systems for collaborative planning to occur. The simple act of advanced planning on the part of administration can have a huge impact and set the tone for the school year if teacher learning is viewed as a priority through the eyes of the teachers.

Setting up the systems, however, is not enough to ensure job-embedded learning occurs. It must be monitored through an ongoing process for continuous improvement to transpire. It is critical to publish and follow school-wide plans for collaboration to allow for grade level,

curriculum area planning, and vertical collaboration to allow teachers to interact with their peers in a collegial environment. Systems exist at Edison Middle School which could be replicated in to practice at most any school. A focus on collaboration and the scheduling of protected time during the school day is an attribute of the collaborative learning time at Edison Middle School and the teacher leaders are the force behind implementation of these practices. To foster optimal teacher interactions to occur on a frequent basis, informally and formally, consideration should be given to the placement of classrooms in the building, allowing teachers to informally collaborate on a more frequent basis.

Fiscal priorities are another area which can be translated in to practice. Budgetary decisions are set in June for the following school year and flexible funding is dedicated to stipends far beyond the allocations from the school district. Local flexibility allows principals to designate funds specifically to mirror the job-embedded professional learning opportunities in practice at Edison Middle School.

Policy

Use teacher voices to influence the next steps to policy reform. While educators and policymakers alike recognize that quality teaching matters in students' academic success, this study suggests that the primary pathway to ensure that educators are learning together collaboratively to continuously improve their practices and produce stronger student learning, is given insufficient attention in local, state, and national policies. The positive implication for policy reform is that this can be changed through the collective actions of those who care most about students' success.

According to Coopersmith's (2009) summary of the *Schools and Staffing Survey* (SASS) *2007-2008*, regular, full-time public school teachers in the United States spend an average of

52.8 hours per week on all school-related activities, which includes 30.2 hours per week delivering instruction to students. This leaves 22.6 hours a week that teachers spend meeting their responsibilities above and beyond the direct instruction they provide in their classrooms. This powerful finding indicates that teachers do have the time built in to their workday and with some clear-cut standards for professional development this additional time should include prescriptive forms job-embedded learning activities while still allowing teachers time during their day for unplanned, informal learning.

Although the scope of the present study did not include the amount of time spent in learning activities for the teachers throughout the day, Coopersmith's (2009) analysis provides evidence on a more global scale showing that teachers do, in fact, have time built in to their workday to participate in job-embedded learning activities. It is now up to policymakers to emphasis "use of time" to be part of the new guidelines structuring effective professional learning practices.

With the end of the 111th Congress on October 29, 2010, it is clear that the reauthorization will be left to the 112th Congress and will have to wait until after the November elections. A one week lame duck session of Congress will reconvene November 15, 2010 for the week prior to Thanksgiving break, but as it stands, the reauthorization of NCLB has not made it on to any of the available agendas for the closing weeks of this session of Congress. It is uncommon for the Congressional session to roll in to the next calendar year but it has happened in recent years. In fact, the 2nd session of the 110th Congress ran from January 3, 2008-January 3, 2009, and the first session of the 111th Congress began just 3 days later.

If the 111th Congress does not end the session failing to address educational reform, this may, in fact, have a strong upside for reform advocates. Until now, the conversation around

ESEA reauthorization, and other proposed education reforms has been very much a conversation at the top, carried out in forums by professional advocates. Lasting reform; however; reform that closes the achievement gap and promotes an equitable system of education for all children, will require bringing into the conversation the people for whom will benefit: the teachers, parents, and students, especially in low-income and minority communities.

During the final days of the current election cycle, a cycle in which incumbents are especially vulnerable and challengers especially hopeful, a cycle in which, candidates are listening to their constituents more carefully than ever it would be an ideal time for the public to engage their members of Congress in meaningful commitments to educational reform. Uncovering teacher perspective of those who have experienced successful systems of job-embedded learning activities will provide policymakers with vital information to influence guidelines for establishing effective systems of professional learning which positively influence student learning outcomes.

Concluding Thoughts

Teacher professional learning should be easily accessible and a regular part of a teacher's workday. According to the 2009 *MetLife Survey of the American Teacher: Collaborating for Student Success*, increased teacher collaboration has the potential to improve school climate and teacher career satisfaction. Additionally, the survey reported that two-thirds of teachers who responded to the annual survey (67 %) believe that increased collaboration among teachers and school leaders would greatly improve student achievement and 69 % of the teachers polled believe that their voices are not heard in the debate on education. The goal of large scale survey conducted by Scholastic and the Bill and Melinda Gates Foundation, *Primary Sources* (2010)

was to place the views of our nation's public school teachers at the center of the discussion on education reform.

As our nation grapples with how to dramatically improve student academic achievement, we must ask ourselves—if teachers are left out of the conversation on school reform, can the movement ultimately succeed? There seems to be a breakdown between what is intended in policy that governs education and what is actually happening in the classroom – the education reform needs to start in the classroom with the best teachers.

Bring the best teachers to the table with policymakers to assist in identifying practical and effective ways and means to improve public education. Teachers want to collaborate and professional communities vary in significant ways. Not all of them are associated with improved student outcomes. Some may be "weak" professional cultures in which teachers feel a sense of collegiality but their practice remains private. Others are "strong" in that teachers actively collaborate and share a set of commitments regarding teaching and learning. Two types of strong professional communities have been identified. One is tradition-oriented. Here, teachers unite to preserve their preferred conceptions of subject and pedagogy even in the face of student failure. The other type takes a more dynamic and innovative stance.

In such communities, teachers routinely question teaching practices that are ineffective with students, develop shared expertise, feel collective obligations for student success, and exhibit a willingness to change. The types of professional communities associated with student success are the strong and innovative ones that develop a shared responsibility for student learning and achievement. Collegiality and unfocused staff cooperation are not enough to make a difference. Recent experimental studies (e.g., Garet et al., 2008; Glazerman et al., 2008) have failed to find effects of professional development on student achievement, so questions remain

about what works to address the myriad challenges teachers face and to allow teachers to build capacity to foster increased student learning.

A body of research over the past two decades has reached consensus on a few key features of professional development: content focus, active learning opportunities, coherence with other initiatives, sustained duration, and collective participation. The review of the literature on successful professional learning practices, the influence of team learning behaviors, and the significance of workplace relationships has underscored the importance of systems, internal and external, to be set up so teachers have the means to collectively improve their teaching practice. The knowledge imparted by the participants in the study provide a springboard for continuous improvements at the local level and does provide evidence that if teachers are motivated to improve their practice, then it will occur.

In response to the need for stronger guidelines for professional development, there is evidence to support the need to build systems and initiatives that incorporate key features of effective professional development and address the challenges of the accountability environment. These initiatives need to be able to be implemented in real school settings in a way that allows teachers to build their knowledge and skills for classroom practice, which plays a central role in student achievement.

As a local school leader, this study has confirmed and validated a great deal of the work that is done on a daily basis in a local school. As the final conclusions of the present study were being finalized, Edison Middle School has begun to meet monthly as a vertical team. The professional learning plan for the year began with a needs assessment and job-embedded sessions have been set up during the school day on a monthly basis for teachers to gain knowledge in areas they have deemed of most value. The scope of this research did not go

beyond the research site which has been acknowledged as a limitation; however, the value of the findings can hopefully inform others as they look to teacher perspectives to inform practice.

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APPENDIX A

JOB-EMBEDDED LEARNING INTERVIEW QUESTION GUIDE

Job-Embedded Learning Interview Question Guide

1. What is your definition of Job-Embedded Learning?
2. What does Job-embedded learning “look like” for you right now at your current school?
    a. When does it occur?
    b. Who participates?
    c. Are there defined roles? If so, what are they?
3. What do you see as your personal responsibility for job-embedded learning?
4. What changes do you think could be made to enhance the way job-embedded learning is implemented at your school?
5. Have you had any experiences at other schools with job-embedded learning that are different than what you currently participate in at your current school? If so, how have these experiences differed?
6. How do you think job-embedded learning has contributed to your personal growth as a professional?
7. When you think about “on-the-job learning” or job-embedded learning in terms of your job, do you see it as something you do because it is required or do you participate for other reasons?
8. What influences why you participate in job-embedded learning?
9. What motivates you to participate in job-embedded learning?

APPENDIX B

PARTICIPANT PROFILE: JOB-EMBEDDED LEARNING

Participant Profile: Job-Embedded Learning

Teacher Name: _____ Pseudonym Assigned: _____

Gender: _____ Male _____ Female

Total years experience teaching: _____

Total years teaching at current location: _____

Total year teaching middle school: _____

Current Grade Level taught: _____ years experience teaching this grade level: _____

Previous teaching level (elementary, middle, or high) experience and years: _____

_____

Subject(s) currently teaching? _____

Previous subjects taught? _____

APPENDIX C

PARTICIPANT OBSERVATION FORM

Participant Observation Form

Participant:_____ Date:_____

Start Time:_____ End Time: _____

Description of the Setting:_____
_____

Who else was present/interacting with the participant during the observation period:

Person interacting with Participant	Role (teacher, student, parent, administrator, clerk etc.)	What was this person's contribution to the learning activity?

Was the learning formal or informal? Formal _____ Informal _____
Did the researcher interact with the participants? Yes ____ No ____
If yes, what was the nature of the interaction?

_____

_____

describe the learning activity (if any):

_____

_____

_____

_____

Additional Research Notes (use the back for additional notes if needed): _____

_____

_____

APPENDIX D

PARTICIPANT CONSENT FORM

Dear Interested Participant,

Thank you for your interest in participating in a qualitative research project conducted for dissertation research in the Lifelong Education, Administration and Policy Department at the University of Georgia. For this research, I will be conducting interviews with educators to examine perceptions of job-embedded learning in schools. The research will be supervised by the graduate advisor:

Dr. Sally J. Zepeda

You understand that your participation is voluntary. You can refuse to participate or stop taking part at anytime without giving any reason, and without penalty or loss of benefits to which you are otherwise entitled.

The purpose of this qualitative research study is to learn about teacher perceptions on how job-embedded learning is defined in their school. There is a significant gap in the research and there is a need to expand information to inform researchers about specific teacher perceptions with regard to job-embedded learning. Job-embedded learning is referred often in the literature as on-the-job training in the business sector. Little is written about job-embedded learning in the pre-K sector. All information obtained will be treated confidentially.

For this study, you will be asked to orally respond to a list of questions during a conversation with the researcher and these conversations will be digitally audio recorded. A list of the questions will be provided once an interview has been scheduled with the researcher. Participants will be requested to participate in one 60 minute interview session at the convenience of the participant and be willing to be observed during one 60 minute session during the school day when they are participating in a job-embedded learning activity. Participants will also be asked to fill out a participant profile indicating educationally relevant information.

For this project, I will conduct, transcribe, and analyze audio-taped interviews with educators willing to assist with my research. All interviews will be recorded digitally and will be destroyed at the conclusion of the research period. No current risk can be anticipated as none of the teachers who will participate will be supervised by the researcher. Moreover, participation is voluntary. Participants will be given the opportunity to express their personal perceptions related to their experience with job-embedded learning and will assist in identifying areas in need of improvement or additional development. Through reflection and the sharing of information, the participants might gain a deeper understanding of their own practices that support job-embedded learning.

You are free to withdraw your participation at any time should you become uncomfortable with the research project. No individually-identifiable information about you, or provided by you during the research, will be shared with others without your written permission. You will be assigned a pseudonym and this will be used in future publications. The master list/code key will be destroyed upon the completion of the initial phase of research. All identifiers will be converted to pseudonyms and wiped from digital and paper records after the completion of the

first typed transcription record is produced. If you have any questions or concerns, feel free to contact the researcher at (XXX) XXX-XXXX.

The investigator will answer any further questions about the research, now or during the course of the project. I hope you will enjoy this opportunity to share your experiences and viewpoints with me. Thank you very much for your help.

Sincerely,

Stefanie C. Wynne
Graduate Student, University of Georgia

I understand that I am agreeing by my signature on this form to take part in this research project and understand that I will receive a signed copy of this consent form for my records.
Please sign both copies, keep one copy and return one to the researcher.

_____ _____
Signature of Researcher Date

_____ _____
Signature of Participant Date

Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu

APPENDIX E

OFFICIAL CODE OF GEORGIA 160-3-3-.10

Code: GAD(3) 160-3-3-.10 PROFESSIONAL LEARNING UNIT (PLU) PROGRAM APPROVAL.

(1) DEFINITIONS.

(a) **Comprehensive School Improvement Plan (CSIP)** – the comprehensive plan of a school system or a school that directs all educational activities and informs all educational decisions, for all programs and all funding sources, state and federal. This plan represents the school system's comprehensive, integrated plan for school improvement. The CSIP comprises the basis of the system's Consolidated Grant Application.

(b) **Contact hours –** actual clock hours of formal instruction received during the preparation phase of a Professional Learning Unit (PLU) activity. Such contact may also include time spent in on-line computer courses where actual contact time can be verified. Contact may also include supervised practicums that are an integral and necessary part of an instructional program. Contact hours shall not include activities required for on-the-job assessment or mastery verification or non-class time to develop or produce class assignments.

(c) **Mastery verification -** an evaluation conducted during the preparation phase [see paragraph (1)(e) below] to determine whether participants have mastered the objectives of a PLU activity. Mastery verification may be completed in lieu of on-the-job performance.

(d) **On-the-job performance -** an evaluation conducted after the preparation phase of a professional learning unit credit activity to verify that the intent of the formal instruction has been implemented on the job.

(e) **Preparation phase -** formal instructional phase for professional learning unit credit based on contact hours of instruction.

(f) **Prior approval** – the approval of the Professional Learning Advisory Committee of a school system, or its designee, for a system employee to participate in a PLU activity for the purpose of the renewal of a Georgia professional certificate or to meet the requirements for paraprofessional certification.

(g) **Professional learning** – learning opportunities that are aligned with the approved CSIP of a school or school system.

(h) **Professional Learning Advisory Committee -** a representative committee that advises and assists the system (or program/agency) coordinator in the assessment of professional learning needs, determination of priorities, content and quality of activities, evaluation of the program and modification of the CSIP (in the case of a school system) and the Professional Learning Unit (PLU) Credit Plan.

(i) **Professional Learning Unit (PLU) -** unit of credit based on 10 contact hours of formal instruction or its equivalent (preparation phase) and on verification that the intent of the formal instruction has been implemented on the job (on-the-job performance phase) or by mastery verification conducted during the preparation phase.

(2) PROFESSIONAL LEARNING UNIT (PLU) CREDIT PLAN. A local school system, or any public or private agency, or private school, may submit a plan to offer professional development programs for professional learning units (PLUs) to the Department for review and approval. A local public school system, regional education service agencies (RESA) or other statewide entities approved by the Department may, through the action of their Professional Learning Advisory Committee, approve individual professional learning activities for PLU credit for paraprofessionals, teachers and administrators. All other providers of professional learning activities for PLU credit shall submit each individual credit activity/course/program separately to the Department as an addendum to their PLU Credit Plan for approval through the processes delineated in this rule. Each school system, RESA or approved statewide entity shall develop three-year professional learning unit plans. For public school systems these PLU plans will be included in the school system's CSIP. The Department shall approve all three-year plans and conduct formative assessment of their progress. This plan shall be reviewed and updated annually by the applying organization. Local public school systems shall also review and update related budgets. For public school systems, assurances as to the content and execution of such plan shall appear in the system's consolidated application submitted for approval to the Department annually on a date specified by the Department. Professional Learning Unit (PLU) Credit Plans shall include the following.

(a) A list of student goals and corresponding educational improvement practices toward which PLUs will be directed.

1. Public school system goals and improvement practices shall be based upon the annual assessed needs of system certified personnel identified through an analysis of student data, the individual personnel evaluation process, an annual evaluation of system instructional programs, or other priorities set by the local school system or mandated by the State Board of Education or state law.

2. A non-school system applicant shall present criteria and procedures for gaining prior approval from a public school system for an individual or group to participate in activities for PLUs in order to meet the requirements of (2)(a)1 above before non-school system provider shall keep documentation of such approval on file for at least five (5) years following the delivery of the PLU activity. Such documentation shall include an indication of which of the restrictions on earned PLUs [paragraph(4)(b) of this rule] apply to the individual for each activity

(b) Procedures for conducting both external and self-assessment of the professional learning needs of education personnel.

(c) A description of the components of each PLU activity planned for PLU credit. As a minimum, these components shall include:

1. Goals of the PLU activity.

2. A description of how the goals of this activity will affect students, particularly student achievement.

3. Competencies (knowledge, skills and attitudes) to be demonstrated in this PLU activity.

4. Dates for the PLU activity (or the number of days and hours per day when specific dates are not known).

5. Instructor(s) and qualifications. If specific instructors are not known, the qualifications expected of an instructor(s) of the particular activity.

6. Location(s) of the PLU activity (where applicable).

7. Strategies, e.g. lecture/demonstration, hands-on activities, field or group work, simulations, practicum.

8. On-the-job performance verification (when, who and how) or mastery verification. If mastery verification is chosen, the description shall include a rationale explaining why mastery verification is being used instead of on-the-job performance.

9. Criteria and procedures to verify that the individual has completed the preparation phase at an acceptable level and has earned PLUs.

(d) For public school participants, prior approval by the system Professional Learning Advisory Committee, or designee, shall be received before participation in any professional learning activity for which PLU credit is sought. This approval indicates that the Professional Learning Advisory Committee, or its designee, has judged the quality and content of the PLU activity to be acceptable and that the activity is aligned with either the system CSIP or the individual's school CSIP. When the public school system is the provider of a professional learning activity, formal approval of the activity by the Professional Learning Advisory Committee constitutes automatic "prior approval." In the case of a non-school system provider, a prior approval form shall be obtained from each public school participant and filed as part of the PLU activity records. The form shall include such information as indicated by the Department in state guidelines for PLU credit. Only that system's Professional Learning Advisory Committee or designee may grant prior approval for an individual from its school system to participate in a professional learning activity.

(e) Procedures of the Professional Learning Advisory Committee appointed by the local board of education or superintendent. (In the case of RESAs or other approved statewide entity; the appointing authority shall be an appropriate governing body.) The advisory committee shall, at a minimum, ensure that each approved PLU no matter its origin, i.e. school system, RESA, college, other private or public provider, or the state, has been judged by the committee to be of high quality and appropriate content and that it will enable participating personnel to contribute to their school's annual CSIP and/or the system's annual CSIP. The committee may place such

other restrictions on programs and activities it deems appropriate for PLUs under that system's Professional Learning Unit (PLU) Plan. Non-school system applicants are not required to organize an advisory committee.

(f) Procedures for conducting an objective on-the-job performance verification regarding the demonstration of competencies set forth in the individual or group PLU plan or procedures for conducting an objective mastery verification.

(g) Designation of a local school system or agency person to coordinate the program for PLUs.

(h) A description of records and record keeping system to document and verify recommendations for PLUs. As a minimum, records shall include:

(i) A copy of the most recently approved Professional Learning Unit (PLU) Credit Plan. In the case of public school systems, this would be the PLU credit portion of their system's CSIP.

(ii) A copy of the letter of approval for the PLU Plan.

(iii) A list of all PLU credit activities approved by the Professional Learning Advisory Committee for school systems, RESAs and approved statewide entities. The list for other providers is of PLU credit activities approved by the Department. The list maintained by providers other than school systems, RESAs and other approved statewide entities shall include approved activities for the previous five

(5) years, including the date approved by the committee (or the Department) and the professional practices and competencies to be developed in each activity.

(iv) Non-school system providers shall also retain the original letter of approval for each PLU.

(i) Procedures for participant appeals.

(3) ALTERNATIVE PROFESSIONAL LEARNING UNIT (PLU) CREDIT PLAN. A local public school system, or an individual school through the system office of the Superintendent of Schools, may submit for approval an alternative to the Professional Learning Unit (PLU) Credit Plan. The primary purpose of this option is to encourage the development of alternatives to the state definition of Professional Learning Unit (PLU) [see paragraph (1)(i) above] and to encourage the development of professional learning that is designed to more directly meet high standards of school improvement and student success through professional learning. At a minimum, the alternative plan shall include the following:

(a) If on behalf of an individual school, a cover letter from the local Board of Education and the Superintendent in support of the school's alternative plan.

(b) A list of student goals and corresponding educational improvement practices toward which the alternative practices will be directed. These goals and improvement practices shall be based at least upon the annual assessed needs of certified personnel and paraprofessionals identified through an analysis of student data, the individual personnel evaluation process, and an annual evaluation of system/school instructional programs.

(c) Address each of the "Georgia Standards for Professional Learning." [adopted November 2003, see www.k12.ga.us] This may be in the form of current practices in the school/system that address a standard, or the school's/system's mid/long range plan to address a standard.

(d) A description of policies and procedures for awarding PLUs.

(e) A description of records and record keeping system to document and verify recommendations for PLUs.

(f) Procedures for participant appeals.

(g) A rationale for how this alternative will benefit students and the system/school staff.

(4) PLUs. The minimum for one PLU activity shall be 10 contact hours (one PLU). Training activities for more than one PLU shall be in multiples of 10 contact hours. Partial PLUs or fractions of PLUs may not be awarded. No more than eight contact hours of instruction shall be conducted per day with a maximum of four PLUs earned per week.

(a) **Exception to Contact Hours.** An exception shall be any single special requirement enacted into state statute for renewing a professional certificate. Such special requirements may earn PLU credit either through contact instructional hours as defined above or through the development and defense of a portfolio of material demonstrating the competencies defined in the special requirement and/or such other evidence as may be required in the specific legislation. The number of PLUs for a special requirement will be negotiated between the Department and the state legislature or its designee. PLUs under this exception shall meet all other requirements described in this rule. Portfolio development and defense shall not earn PLUs in any other circumstance.

(b) **Restrictions on Earned PLUs.** PLUs shall be earned by an individual only in the following four categories:

1. Field(s) of Certification

2. School/System/Individual Improvement Plan

3. Annual Personnel Evaluation

4. State/Federal Requirements

(c) **Alternative Weighted PLUs.** In order to encourage the direct integration of knowledge and skills gained from professional learning experiences into classroom or work place practice and to emphasize the expectation that new knowledge and skill will impact students, the following PLU weight system is offered to (not required of) public school systems as an add-on to their Professional Learning Unit (PLU) Credit Plan.

1. Standard PLU credit (10 contact hours) will earn one (1) PLU.

2. Evidence of the use of the professional learning in the classroom/work site will earn two (2) PLUs.

3. Evidence of the use of the professional learning in the classroom/work site and student impact linked to the professional learning activity will earn three (3) PLUs.

This alternative weighted PLU option is not required of school systems but is suggested to encourage system employees to make the most of their professional learning experiences. A school system may choose to implement paragraphs (c)1 and 2 alone. No school within a school system or an individual within a school system may choose this alternative unless the school system has adopted it. If a school system chooses to adopt this weighted system, criteria for what will constitute "evidence," procedures for collecting such evidence and procedures for recording weighted PLUs shall be included in the Professional Learning Unit (PLU) Credit Plan for approval by the Department. This alternative is not available to paraprofessionals, nor is it available to non-school system certified teachers or administrators.

Authority O.C.G.A. § 20-2-167(a)(3); 20-2-182(h); 20-2-204; 20-2-210; 20-2-217; 20-2-230; 20-2-231(c); 20-2-232.

Adopted: November 13, 2003 Effective: December 8, 2003

APPENDIX F

HR 5218: GREAT TEACHERS FOR GREAT SCHOOLS ACT OF 2010

H.R. 5218: Great Teachers for Great Schools Act of 2010

111th CONGRESS
2nd Session
H. R. 5218

To amend the Elementary and Secondary Education Act of 1965 to provide for school improvement and professional development for teachers, principals, instructional staff, and other school leaders, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Introduced May 5, 2010

Referred to the Subcommittee on Early Childhood, Elementary, and Secondary Education May 27, 2010

Mr. POLIS of Colorado (for himself, Mr. BERMAN, Mr. CARNAHAN, Mr. CONYERS, Mr. COURTNEY, Mr. ELLISON, Mr. GRIJALVA, Mrs. KIRKPATRICK of Arizona, Ms. NORTON, and Ms. RICHARDSON) introduced the following bill; which was referred to the Committee on Education and Labor

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A BILL

To amend the Elementary and Secondary Education Act of 1965 to provide for school improvement and professional development for teachers, principals, instructional staff, and other school leaders, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the 'Great Teachers for Great Schools Act of 2010'.

SEC. 2. REFERENCES.

Except as otherwise expressly provided, whenever in this Act an amendment or repeal is expressed in terms of an amendment to, or repeal of, a section or other provision, the reference shall be considered to be made to a section or other provision of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 6301 et seq.).

SEC. 6. PROFESSIONAL DEVELOPMENT DEFINED.

Section 9101(34) (20 U.S.C. 7801(34)) is amended to read as follows:

'(34) PROFESSIONAL DEVELOPMENT- The term 'professional development' means a comprehensive, sustained, and intensive approach to improving teachers' and principals' effectiveness in raising student achievement that--

'(A) fosters collective responsibility for improved student performance;

'(B) is comprised of professional learning that--

'(i) is aligned with rigorous State student academic achievement standards as well as related local educational agency and school improvement goals;

'(ii) is conducted among educators at the school and facilitated by well-prepared school principals and school-based professional development coaches, mentors, master teachers, or other teacher leaders; and

‘(iii) primarily occurs several times per week among established teams of teachers, principals, and other instructional staff members where the teams of educators engage in a continuous cycle of improvement that--

‘(I) evaluates student, teacher, and school learning needs through a thorough review of data on teacher and student performance;

‘(II) defines a clear set of educator learning goals based on the rigorous analysis of the data;

‘(III) achieves the educator learning goals based identified in subclause (II) by implementing coherent, sustained, and evidence-based learning strategies, such as lesson study and the development of formative assessments, that improve instructional effectiveness and student achievement;

‘(IV) provides job-embedded coaching or other forms of assistance to support the transfer of new knowledge and skills to the classroom;

‘(V) regularly assesses the effectiveness of the professional development in achieving identified learning goals, improving teaching, and assisting all students in meeting challenging State academic achievement standards;

‘(VI) informs ongoing improvements in teaching and student learning; and

‘(VII) may be supported by external assistance; and

‘(C) may be supported by activities such as courses, workshops, institutes, networks, and conferences that--

‘(i) address the learning goals and objectives established for professional development by educators at the school level;

‘(ii) advance the ongoing school-based professional development; and

‘(iii) are provided for by for-profit and non-profit entities outside the school such as universities, education service agencies, technical assistance providers, networks of content-area specialists, and other education organizations and associations.’.