RELEVANCE AND COLLABORATION: SPECIAL EDUCATION TEACHERS' PERSPECTIVES ON COMMON CORE PROFESSIONAL DEVELOPMENT AND ITS IMPACT ON TEACHING

by

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(Under the Direction of Janette R. Hill)

ABSTRACT

The purpose of the study was to explore the participants' perspectives on knowledge and skills learned from professional development and its perceived impact on their classroom practice linked to Common Core State Standards. Professional development was the major focus for the study since much of the available literature supports the need for professional development to assist with teachers' ability to understand and accept the change in order for it to be implemented. However, the needs of special education teachers and professional development activities addressing Common Core State Standards have not been thoroughly investigated. The following research questions guided this study: 1) What are the special education teachers' perspectives on the professional development activities designed to assist them in implementing Common Core State Standards? 2) How do special education teachers' perspectives on the relevance of professional development impact how they implement Common Core State Standards in their classrooms? Elementary school sites were visited, and special education teachers were interviewed and observed during professional development activities and instructional times during this case study. Data from the interviews were transcribed, open coded, and then analyzed in search of common themes. The data identified major themes of relevant PD, collaboration and teacher motivation with sub-themes of appropriate grade level

focus, autonomy, communication with general and special education teacher, changes in teaching practice and strategies for teaching CCSS. The findings indicated there is a need for relevant professional development for special education teachers and increased autonomy in professional development activities. Findings further indicated a need for instructional leaders to create collaborative relationships with general education teachers and special education teachers as a primary source of professional development. Implications for future search focus on the impact of collaboration and instructional changes, teacher motivation and autonomy in professional development and the impact of high stakes testing in relation to teacher stress and motivation.

INDEX WORDS: Professional Development, Adult Learning Theory, No Child Left Behind, Special Education, Common Core State Standards, Highly Qualified, Race To The Top, Georgia Performance Standards, Individuals with Disabilities Education Act, American Recovery Reinvestment Act, Special Education

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DEDICATION

This is dedicated to my wife and son for whom I will always be grateful for their love and support. You were the inspiration behind this journey and the force that kept me moving forward when it became daunting. For Maxwell, persistence and patience are the examples that I hope you have witnessed on the days when I had to choose work over play. For Donna, thank you for being there from start to finish. You held this dream for me when I did not know that I could anymore.

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INTRODUCTION

The demands of systemic reform, which include high standards, aligned curriculum, and new approaches to assessment, generate new expectations for today's teachers (Corcoran, 1995). Within the past ten years, a number of reform measures have placed the issue of teacher improvement and professional development in the spot light. Two of the most recent legislative mandates with specific implications for special education teachers have been No Child Left Behind (NCLB, 2001) and Individuals with Disabilities Improvement Education Act (IDEIA, 2004). Part A of Title I of No Child Left Behind (2001) required states to ensure 100% of all teachers in core academic subjects (English, language arts, mathematics, science, foreign language, civics and government, economics, arts, history, and geography) be "highly qualified" by the end of the school year 2006-07.

To meet the criteria for "highly qualified", special education teachers demonstrated subject-matter expertise, held state certification, and possessed a bachelor's degree (NCLB, 2001). For special education, this means that teachers are required to be experts in the field of special education as well as to demonstrate competence in the subject areas that they teach (White & Mason, 2006). Jones and West (2009) state that teachers must be trained to consider all aspects of a student's life in determining "what to teach, how to teach it and how you will know when it has been taught" (p. 71). Special education teachers must also have a profound understanding of disabilities and to be able to identify and implement teaching strategies to increase student learning (Jones & West, 2009). The passage of NCLB (2001) and reauthorization of IDEIA (2004) has led to the debate about how to define and measure special education teacher improvement (Brownell, Sindelar, Kiely, & Danielson, 2010).

Within the past five years, additional educational reforms have been put forth addressing student achievement, assessment and teaching college and career-ready standards. In 2009, President Obama signed the American Recovery and Reinvestment Act of 2009 (ARRA) that provided funding for strengthening teacher education and improving teacher quality through the Race to the Top (RTTT) Funds (Department of Education, The Economic Recovery Act of 2009). The funding, provided incentives for education, was distributed through competitive grants issued to states after submitting proposals for improving teacher education and teacher quality (Crowe, 2011). Therefore, states desiring to increase funding for education were eager to provide teacher improvement programs and initiated plans for developing highly qualified teachers.

The ARRA provided further incentives for states to adopt Common Core State Standards (CCSS). States that were unable to meet the mandates set forth in NCLB were offered a waiver under the condition that states either adopt the CCSS or establish their own set of career and college ready standards (Dillon, 2011). By 2013, 45 states had applied for the RTTT grant monies and, in doing so, had agreed to adopt the new CCSS standards. It is worth noting that, as of 2013, only 21 of the original 46 applicant states had been awarded RTTT funds.

Such reform-driven expectations require teachers not only learn new ways of teaching, but also be given opportunities to acquire and practice the new knowledge and skills needed to implement these reforms and inherently impact teachers and their practice as they seek to comply with the policies (Corcoran, 1995; Rothman, 2011). As a result, there has never been a greater recognition of the need for the construction of professional knowledge, practice and continued professional development of America's teachers (Guskey & Huberman, 1995; McCormack, Gore & Thomas, 2006).

Statement of the Problem

In addition to meeting "highly qualified" standards, special education teachers are in a double bind as they being held accountable for the progress of their students within the context of the general education curriculum without the extensive training in curricula as their general education counterparts (Gehrke & McCoy, 2007). NCLB (2001) requires student to be served in their least restrictive environment (LRE) and be proficient in mathematics and reading by 2014 as determined by reported test results at designated grade levels. The National Council for Exceptional Children (2009) reported that 53.7% of students with disabilities spend approximately 80% of the school day in general education settings. With slightly over half of the of the students with disabilities spending a majority of the school day within the general education setting, there is a need for special education teachers to serve in inclusive settings (Connelly & Graham, 2009). Thus, special education teachers face additional and intensive pressures to support students in an inclusive setting while improving specific academic content and skills for students with disabilities (Mathur & Rutherford, 1996).

Research also indicates special education teachers experience difficulties with defining their roles within inclusion models. Ambiguity in professional roles, not only affect teacher job satisfaction, but have a significant impact on teacher effectiveness with students (Billingsley, 2004). Special education teachers with beliefs incongruent with the inclusion model tend to seek other positions as some special educators struggle with the changing roles and responsibilities (Billingsley, 2004). Morvant, Gersten, Gillman, Keating, and Blake (1995) found that inclusion creates role dissonance and/or conflict for some teachers due to inadequate support from general education teachers. As the role of special education teachers continues to change from resource

room instructors to collaborative co-teachers and inclusion specialists, ambiguity leads to frustration and burnout (Embich, 2001; Klingner & Vaughn, 2002; Weiss & Lloyd, 2002).

Additionally, studies have demonstrated that, particularly for beginning special education teachers, there were express concerns regarding the ambiguity of their roles as teachers (Leko & Smith, 2010; Fuchs, Fuchs, Stecker, 2010). Research suggests that the curricular and instructional expectations placed on special education teachers are often more ambiguous than those placed on general educators and that they are often defined in multiple, conflicting ways (Billingsley, 2004; Mastropieri & Scruggs, 2001; Zabel & Zabel, 2001). With regard to curriculum, special education teachers are often responsible for teaching multiple subjects across multiple grade levels, yet most do so without adequate resources for determining how this instruction should look (Kilgore & Griffin, 1998).

Another issue for special education teachers is the achievement of students with disabilities. Curriculum was once delivered on a pre-determined appropriate achievement level of a student. Despite the concerns of general educators, administrators and special educators alike, this practice is becoming a procedure of the past (Brandes & Crowson, 2009). More students are now receiving instruction based on grade-level competencies as opposed to instruction dictated by achievement level.

Although numerous negative attitudes and oppositions to inclusion exist (Brandes & Crowson, 2009; Estell, Jones, Pearl, Acker, & Farmer, 2008), access to the general education curriculum, in the general education classroom, is intended to improve the academic success of students with disabilities. Levinson (2011) documented the widening gap in Massachusetts between students in special education and students in general education. Levinson (2011)

comments that the outcomes of recent legislation attempted to address achievement gaps fell short, noting: “the rising tide did not raise all boats” (p. 1).

Even though the education of students with disabilities has been the focus of federal law and policy for more than four decades, the performance by students receiving special education continues to lag behind their nondisabled peers in performance in core subjects. The Nations Report Card (NAEP, 2009) reported that 64% of students with disabilities failed to meet basic criteria in reading and math, compared with only 23% of nondisabled students who failed to meet basic criteria in the same subject areas. Fourth-grade students with disabilities scored at proficient levels of attainment or higher on the 2011 reading and math portions of the NAEP at less than half the rates of students without disabilities. In addition, students with disabilities have substantially higher dropout and lower graduation rates than students without disabilities.

In Georgia, test scores from the spring of 2008, 2009, and 2010 indicate that an average of 40% of third and fifth grade students with disabilities failed to meet criteria on the state Criterion Referenced Competency Test (CRCT) used to measure Annual Yearly Progress (AYP) in Georgia. In the same time period, 90% of the nondisabled students met or exceeded criteria (Georgia DOE, 2010). In middle grades, the gap increased. Fewer than 3% of nondisabled students failed to meet expectations on the CRCT, but over 40% of students with disabilities failed to meet expectations (Georgia DOE, 2010).

How to support teachers’ learning across the setting of teacher professional development (PD) and the classroom is at the very core of every PD effort (Ball & Forzani, 2009; van Es & Sherin, 2010). Well-planned professional development will improve the abilities and skills of special education teachers, move schools one step closer to alignment with the school improvement plan, and enable special education teachers to improve teaching and learning

(Thornton, Peltier, & Medina, 2007). However, there are issues that continue to plague professional development. Economic difficulties within many school systems, professional development has often been stifled, canceled, or focused on isolated strategies to address achievement deficits rather than collaborative activities that provide both strategy and content development (Geer & Morrison, 2008; Honawar & Olson, 2008). McEwan (2009) explained, "professional development is still regarded as something that people go to or have done to them…often considered to be a one-time event"(p. 49).

Additionally, research on professional development (PD) with special education teachers has been slow to develop (Greenwood & Maheady, 2001; Rosenburg & Sindelar, 2001). Studies in special education tend to focus on: (a) the shortage of special education teachers (Buck, Polloway, & Robb, 1995;Conderman, Stephens, & Hazelkorn, 1999; Weichel; 1999), (b) induction and mentoring programs for early special education teachers (Fantilli & McDougall, 2009), (c) attrition rates (Ingersoll & Smith, 2003; Leko & Smith, 2010) and (d) teacher preparation programs (Leko & Smith 2010; Vail, 2005).

Efforts to systematically document the processes and effectiveness of professional development in special education have been limited in number. Research conducted with special education teachers (Carlson, Chen, Schroll & Klein, 2003; Griffin, Winn, Otis-Wilborn & Kilgore, 2003) indicated that professional development and mentoring programs were critical to special education teachers' retention and job satisfaction. However, special educators indicated that professional development opportunities were only occasionally provided, or failed to address topics/issues significantly relevant to them (Carlson et. al, 2003; Griffin et al., 2003; Council for Exceptional Children, 2009; Mayton, Wheeler, Menendez, and Zhang, 2010).

There was a belief that professional development was not directed, systematic, and/or relevant. In the end, there is a substantial gap in our knowledge regarding the processes, forms, or components of professional development efforts that are effective for special education teachers to succeed in the classroom (Rosenburg & Sindelar, 2001; Griffin, Winn, Otis-Wilborn & Kilgore, 2003;Sindelar, Brownell, & Billingsley, 2010; Boutot and Myles, 2011).

Purpose of the Study

With the assessments for Common Core State Standards (CCSS) expected in the year 2014-2015, there are many unanswered questions surrounding curriculum and pedagogy. Special education teachers will require support and professional development to ensure they are prepared to change their pedagogy and design lessons that reflect the higher levels of critical thinking and reasoning required by the standards (Gewertz, 2013). Since CCSS expects that teachers will develop higher levels of reasoning and critical skills necessary to implement standards, it was both practical and illustrative to study special education teachers as they prepared to transition from Georgia performance Standards to Common Core State Standards. The purpose of the study was to explore the participants' perspectives on knowledge and skills learned from professional development and its perceived impact on their classroom practice linked to Common Core State Standards. Research questions that informed this study were:

1. What are the special education teachers' perspectives on the professional development activities designed to assist them in implementing Common Core State Standards in their classrooms?
2. How do the special education teachers' perspectives on the relevance of professional development impact how they implement Common Core State Standards in their classroom?

Theoretical Framework

A consistent theme in educational reform calls for teacher professional development practices to be linked with the body of knowledge on adult learning because it is understood that the most powerful and effective professional development results will come from connecting the two fields (Galbo, 1998). Glickman, Gordon, and Ross-Gordon (2007) note that "the use of such readily available and potentially rich knowledge about human growth can be extremely valuable to those who work with adults." (p. 51)

Adult learning is based on the belief that adults need to (a) know the relevancy of why they are learning new information, (b) be self-directed and autonomous, (c) make and have connections between new learning and previous life experiences, and (d) be goal oriented, task centered, and problem solvers (Caffarella & Barnett, 1994; Hiemstra, 1993; & Knowles, 1968). These assumptions are important considerations when designing differentiated adult learning opportunities. Knowles (1968) stated that adults have plenteous life experiences that should be considered as factors in the learning process. Danielson and McGreal (2000) agreed and stated, "The principles of adult learning show that when people use self-assessment and self-directed inquiry in professional development, they are more likely to sustain their learning, in more disciplined ways, than when outsiders impose professional development requirements" (p. 25).

Additionally, change for teachers through professional development, involves more than just enhanced knowledge, it requires a belief in the process and recognition that learning and development are essential (Bowring-Carr & West-Burnham, 1999). Fullan (1991) has written extensively on education change and coined the phrase, "change is a process, not an event" and suggested that "educational change is technically simple and socially complex" (p.62). Fullan (2001) also noted that educational change depends on what teachers do and what teachers think.

For some teachers "change is slow and an uncertain process with some elements of teachers' knowledge and practice more easily changes than others" (p.115). Adult learning theories and teacher change theory provided a framework for examining and understanding adult learning experiences and were useful in recommending meaningful, effective guidelines for adult academic experiences. These theories were examined here because of their relevance to professional development as a learning opportunity for teachers as adult learners. The research and theoretical base adult learning provides can inform creators of professional development in ways to better educate their targeted audience.

Significance of the Study

Seed (2008) asserted that with all the recommendations and strategies affirmed by NCLB (2001), these efforts neglect to address the conditions for improving teachers. Professional development plays a crucial role in meeting current educational standards for accountability, student learning, and teacher improvement (Abdal-Haqq,1998; Cotton, 2003). This study was grounded in the idea that professional developers must recognize that the design, delivery, and intended outcomes of learning activities are to serve the interests of the client (Bredeson, 2002). Furthermore, Bredeson (2002) suggests that when PD is designed and delivered without clear purpose or consideration of teachers' interests and needs, it most often results in teachers who become resistant, cynical, and frustrated by professional development designs created and imposed without their input (p. 667). Meaningful professional development should include strategies and content (Garet, Porter, Desimone, Birman, & Yoon, 2001). Consequently, understanding how to support activities that serve the interests and needs of special education teachers is critical to providing PD experiences that conform to the criteria of high quality professional development, and that strengthens the individual and collective

practices of special education teachers (Billingsley, 2005). This study was designed to provide a better understanding of the relationship between special education teachers' unique needs and the contexts in which they work arrived at through an analysis of their perspectives. Ultimately, this study was designed to benefit professional developers as they design and deliver PD specific to the needs of today's special education teachers.

Summary

Though the expectations for all teachers are complex, the responsibilities of special education teachers are multidimensional. Special education teachers must understand the legal mandates and requirements specific to special education, ensure general educators are utilizing appropriate modifications and accommodations for special education students, comply with all of the necessary paperwork, manage their case load of students, monitor their students' progress, access the general education curriculum for their students (Gehrke & McCoy, 2007; Otis-Wilborn, Winn, Griffen, & Kilgore, 2005; Ingersoll & Smith 2004). Continued educational reforms add to the plethora of changes now faced by special education teachers. Coupled with reform demands and the need to increase student achievement of students with disabilities, special education teachers must continue to rely on professional development to meet their needs. The information provided in this chapter describes the need for understanding the perspectives of special education teachers as they begin the process of curricula transition from Georgia Performance Standards (GPS) to Common Core State Standards (CCSS). Chapter Two will present a review of the literature as it relates to this study.

Definition of Key Terms

American Recovery and Reinvestment Act of 2009 (ARRA). The primary objective for ARRA was to produce jobs. As a secondary measure, ARRA provided over 53.6 billion to aid local school districts. Schools applied for funds through grants and were offered monetary incentives to either adopt Common Core State Standards or develop state standards that were aligned with CCSS (American Recovery Reinvestment Act, 2009).

Annual yearly progress (AYP). An individual State's measure of yearly progress toward achieving state academic standards as designated under NCLB (2001). Adequate Yearly Progress used the minimum level of improvement that states, school districts and schools must achieve each year (No Child Left Behind, 2001).

Common core state standards (CCSS). Common Core State Standards is an initiative between the National Governors Association Center for Best Practices and the Council of Chief State Schools Officers to develop standards that are be overarching and unify the expectations of learning across the United States. The standards are designed to be robust and relevant to the real world, reflecting knowledge and skills that young people need for success in college and careers (National Governors Association Center for Best Practices, 2010).

Core academic subjects. Core academic subjects are English, reading, mathematics, language arts, history government and geography (ESEA Title I, Part A, Section 1119).

Disabilities: Child with a disability means a child evaluated in accordance with Sec. 300.304 through 300.311 as having mental retardation, a hearing impairment (including deafness), a speech or language impairment, a visual impairment (including blindness), a serious emotional disturbance (referred to in this part as "emotional disturbance"), an orthopedic impairment, autism, traumatic brain injury, any other health impairment, a specific learning

disability, deaf-blindness, or multiple disabilities, and who, by reason thereof, needs special education and related services (IDEA, 2004).

Georgia performance standards (GPS). The Georgia performance standards process began in early 2003 and commenced as a full-scale revision of curriculum. The development of new and refined standards was limited to the basic core areas of English, language arts, mathematics, social studies and science (Georgia Department of Education, 2004).

Race to the top (RTTT). Race to the Top funds were geared towards reforming America's public schools and improving student learning. States had to demonstrate advancement in four specific areas: adopting standards for students to succeed in college and the workplace, building data systems that measured student growth, recruiting and developing effective teachers and principals and turning around the lowest achieving schools (United States Department of Education, 2010).

High stakes testing. Any assessment used for accountability that has significant consequences (Lewis, 2000).

Highly qualified teachers. Highly qualified teachers have to possess a bachelor's degree, full state certification and demonstrate competence in the academics subjects that they teach (No Child Left Behind, 2001).

Inclusive educational settings. Settings where diverse groups of learners feel welcomed, teach and learn from each other, and are actively engaged in a supportive environment in order for all students (with and without disabilities) to achieve at higher levels (Skoning, 2007).

IDEIA. Public law 108-446, the Individuals with Disabilities Education Improvement Act is the 2004 reauthorization and revision of the Individuals with Disabilities Education Act (IDEA). Among several significant changes in the law, IDEIA (2004) aligns IDEA (1997) with

the provisions of the No Child Left Behind Act (2001) and regulates requirements for "highly qualified" special education teacher (National Dissemination Center for Students with Disabilities, 2007).

No Child Left Behind Act of 2001 (NCLB). Reauthorization of Elementary and Secondary Education Act (ESEA) of 1965. The Bush Administration's educational commitment that ensures high quality education for all children based on higher accountability for learning and standards-based teaching (United States Department of Education, 2006).

Professional development. A comprehensive, sustained, an intensive approach to improving teachers' effectiveness in raising student achievement (Hirsh, 2009).

Special Education. Specifically designed instruction, at no cost to parents, to meet the unique needs of a child with a disability, including instruction conducted in the classroom, in home, in hospitals and institutions, and other settings (Individuals with Disabilities Education Improvement Act, 2004).

CHAPTER 2

LITERATURE REVIEW

The purpose of the study was to explore the participants' perspectives on knowledge and skills learned from professional development and its perceived impact on their classroom practice linked to Common Core State Standards. The literature review is organized into four parts. The first section provides a history of special education and the legislation that impacts special education teachers and students. The second section discusses the various themes related to teachers as adult learners. These include theories of adult learning, self-directed learning and communities of practice. The third section focuses on teacher change theory with an emphasis on the models of teacher change. The fourth section provides an overview of professional development, program planning and conclude with a summary of Chapter Two.

History of Special Education

Special Education in America has been through a transformational phenomenon and has experienced changes since early stages of the legislation that established it (Gargiulo, 2003). Winzer (1993) suggests that many of the contemporary issues faced by today's special education teachers, (i.e. placement decisions, specialized instruction, behavioral concerns) are not new in their inception, but rather a continuation of issues faced by the early pioneers of Special Education.

During the early 19th century, national compulsory education laws outlined the provisions covering the rights of children to a free public education (Winzer, 1998). However, these laws did not include children with disabilities. Children with disabilities were lawfully excluded from participation in public education (Yell, Rogers, & Rogers, 1998). By the middle of the nineteenth century, several institutions, commonly referred to as asylums or sometimes as

"schools," were established to benefit citizens with disabilities (Heward, 2003). These facilities provided primarily protective care and management rather than treatment and education (Gargiulo & Kilgo, 2000; Turnbull & Turnbull, 2000). By the end of the nineteenth century, residential institutions for persons with disabilities were a well established part of the American social fabric (Shonkoff & Meisels, 1990). Initially established to provide training and some form of education in a protective and lifelong environment, they gradually deteriorated in the early decades of the twentieth century due to "overcrowding and lack of fiscal resources" (p.9). Additionally, the mission of these institutions moved from training to custodial care and isolation. The early optimism that had initially characterized the emerging field of Special Education was replaced by prejudice, unwarranted scientific views, and fears which slowly eroded these institutions into "gloomy warehouses for the forgotten and neglected" (Gargiulo, 2003, p. 18).

After World War II, the stage was set for the rapid expansion of Special Education. Litigation, legislation, and leadership at the federal level, coupled with political activism and parental advocacy, helped fuel the movement of services to children with disabilities (Ballard, Ramirez, & Weintraub, 1982; Gargiulo, 2003). There was an unyielding determination among parents and advocacy groups to see children with disabilities share the benefits of public education as students without disabilities had been granted (Yell, Rogers, & Rogers, 1998). Significant benefits for children with disabilities resulted from these efforts.

Between 1965 and 1975 state legislatures, the federal courts, and the U. S. Congress passed legislation to ensure the strong educational rights for children with disabilities (Martin, Martin, & Terman, 1996). Martin et al. (1996) stated "Federal courts, interpreting the equal protection and due process guarantees of the Fourteenth Amendment to the U. S. Constitution,

ruled that schools could not discriminate on the basis of disability and that parents had due process rights related to their children's schooling" (p.25). Beginning in the mid-1970s and continuing to the present time, children and youth with disabilities secured the right to receive a free and appropriate public education provided in the most generalized setting. An education for these students is no longer a privilege; rather, "it is a right guaranteed by both federal and state laws and reinforced by judicial interpretation" (Gargiulo, 2003, p. 20).

Federal Legislation

Federal laws state the need for special education programs and dictate the necessity for related services in public schools. These laws guide policies of public schools in special education and mandate how public schools should meet special education standards (Wright, Wright, & Heath, 2007). The passage of federal laws has influenced the comprehensive nature of special education programs and has been the guiding force behind the programs implemented by schools (Wright et al., 2007).

The Elementary and Secondary Education Act of 1965 (ESEA) sought to equalize educational opportunities. Although ESEA primarily addressed educational opportunities for the disadvantaged, it did not overlook the needs for educating children with disabilities. The ESEA of 1965, together with the appropriation of funds for training teachers of children with cognitive deficits and programs for students who were disadvantaged, disabled, or gifted became the catalysts for future legislation that supported the rights of individuals with disabilities (Hamilton & Yohalem, 1982; Yell, 2006). The Education of the Handicapped Act (EHA) was passed in 1970 to incorporate previous federal special education laws under one piece of legislation and provided for teacher training programs, research into special education practices and

implementation of pilot programs in order to improve special education practices (Winzer, 1993). However, these acts did not mandate districts to educate students with disabilities.

By 1970, American schools educated only one in five children with disabilities, and many states had laws excluding certain students from public school systems, including children who were deaf, blind, diagnosed with emotional disorders or cognitive deficits (Bushweller, 2005). Forty-eight states had exemptions in the compulsory attendance law for children who were categorized with physical, mental, or emotional disabilities, while those who did attend school were either institutionalized far from home, mislabeled or placed in classes for the educable mentally retarded with minimal regard for individual needs (Hamilton & Yohalem, 1982). In response to the continued isolation of students with disabilities, parents and advocacy groups challenged the system. The most significant pieces of legislation arose from two Supreme Court decisions, *Pennsylvania Association for Retarded Children v. Commonwealth of Pennsylvania (1971)* and *Mills v. D. C. Board of Education (1972).*

Supreme Court Rulings

Pennsylvania Association for Retarded Children v. Commonwealth of Pennsylvania (1971) challenged a Pennsylvania statute that required that all children attending Pennsylvania Public Schools to perform at a certain level. Those who did not perform at this level were deemed "unable to profit from… public school attendance" and were not permitted to either start or continue to attend public schools (Winzer,1993, p. 143). The plaintiffs in this case challenged the constitutionality of this statute on Fourteenth Amendment Grounds claiming that it denied disabled children of equal protection under the law. The case was settled with a consent agreement that schools may not "terminate or in any way deny access to a free public program of education and training to any mentally retarded child" (*Pennsylvania Association for Retarded*

Citizens v. Commonwealth of Pennsylvania p.27). The influential case of *PARC v. Commonwealth of Pennsylvania* further provided access to a free public education to children with mental retardation up to age 21 and established the standard of appropriateness in that each child be offered an education appropriate to his or her learning capacities and established a clear preference for the least restrictive placement for each child (Martin et al., 1996).

In the following year, in *Mills v. D. C. Board of Education*, seven children between the ages of 8 and 16 with a variety of mental and behavioral disabilities brought suit against the District of Columbia public schools, which had refused to enroll some students and expelled others, solely on the basis of their disability (Yell, Rogers, & Rogers, 1998). The school district admitted that an estimated 12,340 children with disabilities within the district's boundaries would not be served during the 1971–72 school year because of budget constraints. The U.S. District Court ruled that school districts were constitutionally prohibited from deciding that they had inadequate resources to serve children with disabilities because the equal protection clause of the Fourteenth Amendment would not allow the burden of insufficient funding to fall more heavily on children with disabilities than on other children (Yell, Rogers & Rogers, 1998).

The ruling in *Mills* was pivotal and far reaching. Children with disabilities had an equal right to public education offered in a form that was meaningful for them, and when the school considered a change in their status (including suspension, expulsion, reassignment, or transfers out of regular public school classes), the children were entitled to full procedural protections, including notice of proposed changes, access to school records, a right to be heard and to be represented by legal counsel at hearings to determine changes in individual programs, and regularly scheduled status reviews (Martin et al., 1996; Yell et al., 1998). The *PARC* and *Mills* cases caused a flurry of litigation. By 1973, more than 30 federal court decisions had upheld the

principles of *PARC* and *Mills* (Yell et al., 1998). These court cases set the framework for the continued legislation for students with disabilities.

In 1973 the Rehabilitation Act (PL 93-112) was adopted and provided for comprehensive services to all individual, regardless of the severity of their disability, and outlawed discrimination against citizens with disabilities (Pierangelo & Giuliana, 2001). However, the landmark act, Education for All Handicapped Act of 1975 (PL 94-142), changed the direction of education for student with disabilities (Kutash & Duchnowski, 1994). EAHA guaranteed access to a free and appropriate public education and any related services necessary to meet the needs of students with disabilities (Alshuler & Kopels, 2003). It included eleven specific disabling conditions, which qualified a student as eligible for special education services (Alshuler & Kopels, 2003).

Individual with Disabilities Education Act

EAHA (1975) was amended in 1990 and renamed the Individual with Disabilities Education Act (IDEA). IDEA(1990) mandated free appropriate public education for all children with disabilities through due process rights, least restrictive environment and individual education plans. Under IDEA, placement into least restrictive environment was to be determined by the school district's special education team and had to represent the educational placement of services that were appropriate for each individual child (Martin, Martin & Terman, 1996; Winzer, 1993). Additionally, IDEA (1990) added transition services for students with disabilities. School districts were not required to observed outcomes and assist students with disabilities in transitioning from high school to postsecondary life (Martin et al, 1996). Most importantly, according to Kutash and Duchnowski (1994), IDEA gave special education a unified national voice that allowed the field to depart from traditional educational approaches.

The act outlined a foundation from which current special education practices would build (Pierangelo & Giuliani, 2001). IDEA has since been reauthorized in 1997 and 2004.

In 1997, IDEA was reauthorized to require students with disabilities be included in all state and district wide assessment. In addition, general education teachers were now required to be a part of the Individual Education Plan (IEP) team and assist in developing the student's IEP (Peterson, 2007). In 2004, IDEA strengthened the requirements for states and local districts to be more accountable for data indicating the outcomes for students with disabilities (Koltz & Nealis, 2005). This shift from the original law, which only guaranteed access to education, focused on student outcomes and intervention. Additionally, districts were required to provide adequate instruction and intervention for students to help address their educational concerns and possibly prevent the need for referral and placement in special education (Koltz & Nealis, 2005; Peterson, 2007).

The implementation and reauthorizations of IDEA impacted the fields of special education and general education as a result of the increased placement of students with a wide range of disabilities into public school classrooms (Carter & Hughes, 2006). The inclusion of millions of students with disabilities forces teachers to take on new responsibilities (Smith, 2004). Teachers were required to make curriculum modification and shift classroom strategies in order to accommodate the needs of students with disabilities (Carter & Hughes, 2006, Smith, 2004).

No Child Left Behind Act

No Child Left Behind (NCLB) was passed in 2002 by a bipartisan majority as the twelve billion dollar reauthorization of the ESEA. NCLB represents the consolidation of the reform movement started with *A Nation at Risk.* NCLB (2001) is a federal reform initiative

designed to improve teacher accountability and student performance in American public schools (U. S. Department of Education, 2005). NCLB mandates aim to improve teacher quality by regulating teacher certification requirements and stipulating what qualifications teachers must have in order to be considered a Highly Qualified Teacher (HQT) (Reese, 2004). The main focus of NCLB is to improve student achievement in reading, math, and science by the end of the 2013-2014 school year (Reese, 2004). NCLB's goal for one hundred percent proficiency is to be achieved through monitoring the academic performance and assessment for all students in grades three through eight, and high school (Reese, 2004; Yell, Katsiyannas, & Shiner, 2006).

The goals of NCLB are to: (a) increase student achievement scores in math, reading , and science; (b) assure more accountability for teaching and learning results; (c) increase flexibility and control that local education agencies have over education; (d) provide more school choices options for parents; and (e) encourage the use of research-based teaching strategies (U. S. Department of Education, 2005). Two major features for both special education and general education are in the areas of student achievement and teacher instructional behaviors.

NCLB and student achievement. The center of the debate with respect to the effects of NCLB is whether the policy has positive impacts on student achievement. Studies have consistently shown that average student test scores have increased since NCLB was implemented (Center on Education Policy (CEP), 2007; Choi, Seltzer, Herman, & Yamashiro, 2007; Gribben, Campbell, Mathew, 2008; Mueller & Schmitt, 2006). Using national data, the Center on Education Policy (CEP) examined the trends in state test scores since NCLB was enacted (CEP, 2007). Their study showed that math and reading scores have increased since the policy was implemented. In addition, among 13 states which have sufficient data to make the comparison before and after NCLB, nine states showed that average annual gains in two subjects' test scores

have been greater in post-NCLB years than in pre-NCLB years. Another study that examined national trends in achievement, Cronin, Kingsbury, McCall & Bowe, (2005) reached a similar conclusion that student test scores in reading and math have improved in the post-NCLB era. Furthermore, the study by Mueller and Schmitt (2006) also found evidence that student achievement has increased under NCLB. Using Kansas data from 2000 - 2005, Mueller & Schmitt (2006) examined effects of AYP requirement on student achievement by calculating effect sizes of the change in proportion of students in different achievement levels before and after NCLB. They found that effect sizes were large when comparing results two years before NCLB with three years after NCLB, suggesting that student achievement gains were higher in post-NCLB than in pre-NCLB years (Mueller & Schmitt, 2006).

Although there is evidence of improvement in average student achievement since NCLB was implemented, the effects of the policy are not identical for different student groups. Generally, there are two types of achievement gaps that researchers are interested in. The first is the achievement gap among different racial groups, usually between black/Hispanic and white/Asian students. Studies indicated that different racial groups experienced different rates of improvement in achievement, resulting in gaps as great as or greater than in the past. Lee (2006) examined national reading and math achievement trends using NAEP data. Lee (2006) found that although the achievement gap between black and white students in math narrowed to some extent immediately after NCLB was enacted, the narrowing did not persist. Furthermore, the gap in reading did not decline under NCLB (Lee, 2006). Another study found that the gap in the percentage of students in the top performance level between black/Hispanic and white students widened over time (Gribben, Campbell, & Mathew, 2008), using states' assessment results.

The second is the achievement gap among students with different levels of ability. The

minimum proficiency requirement of NCLB gives schools strong incentives to target resources to students at the margin of becoming proficient and ignore those at the high- and low-end of the achievement distribution (Krieg, 2008). There is mixed evidence on this issue. Several studies indicated that the improvement of low-achieving students was realized at the expense of high-achieving peers (Figlio & Rouse, 2006; Reback, 2008; Neal & Schanzenbach, 2007; Krieg, 2008).

Using Texas data from 1992-93 to 1997-98 school year, Reback (2008) examined the impacts of the incentives from the school accountability system on the distribution of student achievement among different ability groups of students. Reback (2008) found that low-achieving students experienced larger than expected gains in achievement, but high-achieving students had lower gains if their test scores were irrelevant to school's rating. Moreover, Krieg (2008) found that in Washington high-performing students had less than expected gains in achievement in schools that did not make AYP, suggesting that schools facing the threats of sanctions under NCLB ignored the high-performing students and that more resources were devoted toward those with a high probability of being proficient.

Other studies reached a different conclusion: that the improvement of low-achieving students was accomplished without hurting that of high-achieving counterparts (Chakrabarti, 2006; Mullier, & Schmitt, 2006; Springer, 2008). Chakrabarti (2006) examined the impact of school accountability in Florida public schools. Chakrabarti (2006) found that schools that faced threats of vouchers did put more emphasis on improving the achievement for students below the minimum proficiency cutoffs. However, the improvement was not to the detriment of high-performing students. Similarly, Springer (2008) found that both low- and high-performing students experienced larger gains in test scores in non-AYP schools than their corresponding

peers in AYP schools, suggesting that the improvement of low-achieving students did not hurt high-performing students.

NCLB and teacher instructional behavior. Although the overall test scores have increased since the accountability policy was introduced, some scholars argued that the rise of test scores might not be the result of the improvement of real learning (Jacob, 2005; Klein, Hamilton, McCaffrey, & Stecher, 2000; Koretz, 2008). Rather, it is claimed that the instructional behavior exhibited by teachers and school leaders was the reason for the inflation of test scores (Jacob, 2005). Specifically, two behaviors are considered in the literature. First, the increase of test scores is believed to be the result of teachers spending more time on high-stakes subjects. Studies that examined pre-NCLB school accountability found evidence that teachers indeed spent more time on high-stakes subjects, such as math and reading (Deere & Strayer 2001; Koretz & Barron, 1998; Stecher, 2002). Moreover, among high-stakes subjects, teachers were more likely to focus on the one that was relatively easier to improve, such as writing in the case of Florida, in order to improve their school's rating and avoid sanctions (Chakrabarti, 2006; Goldhaber & Hannaway, 2004). Additionally, research demonstrated that teachers spent more time on high-stakes subjects, i.e. reading/English and math, while reducing instructional time on other low-stakes subjects, such as science, social studies, and the arts, since NCLB was launched (Au, 2007).

Second, it is believed that the inflation of test scores is due to the exclusion of low-achieving students from testing. There is mixed evidence on this argument. Some studies indicated that more students were classified into special education after school accountability systems were introduced (Cullen & Reback, 2002; Figlio & Getzler, 2002; Jacob, 2005; Mintrop, 2003). However, Chakrabarti (2006) showed that there was no evidence to suggest schools acted

inappropriately by classifying more students into special education categories. Since NCLB requires at least 95% of students should participate in state assessments, otherwise schools will be considered as not making AYP, it is expected that schools have little opportunity to exclude low-performing students from taking the tests (Chakrabarti, 2006).

Although NCLB created a nation wide accountability structure, it left decisions about standards and metrics up to each individual state. Thus, implementation from state to state has been highly variable and comparisons of improvement remain difficult to quantify (Fusarelli & Fusarelli, 2003). “Under NCLB, each state is permitted to set its own standards and determine levels of proficiency, which makes nationwide comparisons difficult, given the considerable variability in state standards” (p. 173). Though the results of NCLB have been mixed and research on its effectiveness is inconclusive, much of the federal education policy still draws from the foundations of the ESEA (McGuinn, 2006). As of 2013, NCLB remains the current legislated version of ESEA.

Common Core State Standards and Race to the Top

With numerous schools facing NCLB-related penalties an, estimated 48 percent of schools failed to make adequate yearly progress in 2011 the, Obama administration announced, as a part of its Race to the Top (RTTT) funding initiative, that it would offer states “waivers” under NCLB (Lohman, 2010). RTTT has many of the same goals as NCLB, but provides funding to states through discretionary competitive grants rather than attached to mandates (Lohman, 2010). To receive a waiver, states must adopt college- and career-ready standards; develop a plan to identify and improve the bottom 15 percent of schools; and develop teacher and principal evaluation systems “based on multiple valid measures, including student progress over time” (p.85).

One of the key differences between the NCLB and RTT is the promotion of national standards (Lohman, 2010). NCLB pushed many states to establish their own standards. With the first few years of NCLB, nearly all states had defined academic performance standards for students and were testing students to determine their mastery of those standards (McDermott & Debray-Pelot, 2009). Whereas NCLB allows states to determine their own performance standards and measurements, RTTT, "requires a state that receives a grant to promise to adopt and use common K-12 standards for what students know and are able to do. These standards must be developed in a consortium with several other states and be internationally benchmarked" (Lohman, 2010, p.87)

Common Core State Standards (CCSS) developed in 2010 under the direction of the National Governors Association and the Council of State School Officers, represents the first ever national level curriculum reform in the United States (Bohmer & Maloch, 2011). The mission statement of CCSS:

> The Common Core State Standards provide a consistent, clear understanding of what Students are expected to learn, so that teachers and parents know what they need to do to help them. The standards are designed to be robust and relevant to the real world, reflecting the knowledge and skills that our young people need for success in college and careers. With American students fully prepared for the future, our communities will be best positioned to compete successfully in the global economy (CCSS, 2010, p.15).

Bohmer and Maloch (2011) states "This is not just the latest round of revisions to your state's standards. We are living through a historic, national event where the federal government is, for the first time, imposing a logic of development that shapes the whole of curriculum from kindergarten through high school" (p.39).

Georgia and Common Core State Standards. When the expert development groups that the Council of State School Officers and National Governor's Association pulled together began writing the standards in mathematics and English language arts, they built off of the work of states that had already developed rigorous college- and career-ready standards (CCSS, 2010). Georgia was one of these select states, and when reading the CCSS, it is clear that there are many elements of the Georgia Performance Standards (GPS) throughout. Some of the standards are introduced at different grade levels, but teachers have, essentially, been implementing the CCSS while they've been teaching the GPS (Georgia Department of Education, 2010). The mission statement of the Georgia Department of Education States:

> The Common Core Georgia Performance Standards (CCGPS) for English language arts, mathematics, and literacy in science, history/social studies, and technical subjects will ensure that all Georgia students have an equal access and opportunity to master the skills and knowledge needed for success beyond high school. Effective implementation of the CCGPS requires support on multiple fronts, including strengthening teacher content knowledge, pedagogical skills, and contextualized tasks for students that effectively engage 21st Century learners. The standards create a foundation to work collaboratively across states and districts, pooling resources and expertise, to create curricular tools, professional development, common assessments, and other instructional materials (Georgia Department of Education, 2010, p. 33-34).

Key elements of common core state standards in reading. At the elementary level, the standards call for a 50-50 balance between informational texts and literature (CCSS, 2010; GDOE, 2010). CCSS shifts the emphasis to 55 percent informational by middle school, and 70

percent by high school. Such reading includes content-rich nonfiction in history/social studies, science, and the arts. Informational text is seen as a way for students to build coherent general knowledge, as well as reading and writing skills (Porter, Riley, Towne, Hightower, Lloyd, Sellers & Swanson, 2012).

The standards place a premium on students' use of evidence from texts to present careful analyses and well-defended claims. Rather than asking students questions they can answer solely from their prior knowledge or experience, the standards envision students' answering questions that depend on reading texts with care (GDOE, 2010). The standards also require the cultivation of narrative writing throughout the grades. The reading standards focus on students' ability to read carefully and grasp information, arguments, ideas, and details based on evidence (GDOE, 2010).

Key elements of common core state standards in math. The standards build a "staircase" of increasing text complexity to prepare students for the types of texts they must read to be ready for the demands of college and careers (CCSS, 2010b). Closely related to text complexity, and inextricably connected to reading comprehension, is a focus on academic vocabulary: words that appear in a variety of content areas (such as "ignite" and "commit"). The standards focus deeply on the major work of each grade so that students can gain strong foundations: solid conceptual understanding, a high degree of procedural skill and fluency, and the ability to apply the math they know to solve problems inside and outside the math classroom and learning can foster new understanding and build on previously laid foundations. (CCSS, 2010b). The standards in math in Georgia state:

> The standards for mathematics call for an emphasis on conceptual understanding of key concepts, such as place value and ratios. Teachers must help students to access concepts

> from a number of perspectives (so they see math as more than a set of mnemonics or discrete procedures) and to build speed and accuracy in calculation. To do this, teachers are expected to structure class time and or homework time for students to practice core functions like single-digit multiplication (so that they have access to more complex concepts and procedures) and to provide opportunities for students to apply math in context. Teachers in content areas outside of math, particularly science, will also ensure that students are using math to make meaning of and access content (GDOE, 2010, p. 46).

Opposition to common core state standards.

Given the historically limited educational role of the federal government, those behind the CCSS have taken care to avoid having the effort characterized as "national standards" or a "national curriculum." (Kohn, 2010). Four states (Alaska, Nebraska, Texas, and Virginia) have, as of October of 2012, declined to participate, and Minnesota has agreed to adopt CCSS in only one subject area (CCSS, 2012).

However, that refusal has come at a cost (Klein, 2012). For a state to be eligible for federal Race to the Top or NCLB waivers, it must adopt college and career ready standards (CCSS, 2012). Nevertheless, in many minds, curriculum and standards are a state responsibility, and the CCSS represents federal over-reach (Klein, 2012).

The strongest arguments against adopting the Common Core Standards for K-12 seem to center on two issues: (1) the cost and difficulty of changing the existing curriculum and assessments and (2) the sovereignty of states in issues related to education. A letter from Texas Governor Rick Perry to U.S. Department of Education Secretary Arne Duncan said:

> I will not commit Texas taxpayers to unfunded federal obligations or to the adoption of unproven, cost-prohibitive national curriculum standards and tests. RTTT would amount to as little as $75 per student in one-time funding, yet the cost to Texas taxpayers to implement national standards and assessments could be up to an estimated $3 billion. In the interest of preserving our state sovereignty over matters concerning education and shielding local schools from unwarranted federal intrusion into local district decision-making, Texas will not be submitting an application for RTTT funds (Perry, 2010).

With NCLB, high-stakes consequences were attached to the test scores. As a predictable consequence, Harris, Smith, & Harris (2011) have asserted that the assessments have driven curriculum and instruction much more than the state standards themselves. It is now again predictable that the nature and use of the CCSS assessments will largely determine the impact of CCSS (Harris, Smith, & Harris, 2011). Two national assessment consortia (the Smarter Balanced Assessment Consortium and the Partnership for Assessment of Readiness for College and Careers) are developing computer-based testing for a scheduled implementation in 2014-15. Among the unresolved issues are: 1) the amount and impact of testing time required for the new assessments; 2) whether the results have enough validity and precision to justify high-stakes applications currently being eyed by lawmakers (e.g., evaluation of principals and teachers); 3) the ability of the two consortia to sustain the effort given the current fiscal needs and available resources; 4) whether the assessment systems will be ready on time; and 5) most important, whether the tests will create incentives for teaching a rich, engaging, comprehensive curriculum (Gewertz, 2012).

Those critical of federal overreach (see, for example, McCluskey, 2010, Whitehurst, 2010) have asserted that states' involvement in the CCSS process is less of an issue of states

serving their own needs and more the actions of the federal government leveraging favored reforms through federal aid. Kincaid (2010) characterized the leveraging of federal policy priorities with federal aid, such as RTTT program, as federal "cooperative coercion" (p. 21). " For the first time in U. S. history, federal aid is the single largest source of state and local revenue" (p. 23).

Additionally, as the absence or presence of rigorous or national standards says nothing about equity, educational quality, or the provision of adequate educational services, there is no reason to expect CCSS or any other standards initiative to be an effective educational reform by itself (Whitehurst, 2009).

Self-Directed Learning and Collaboration as Professional Development

The nature of teaching requires educators to acquire new learning while assessing what is and is not working in their classrooms (Wiggins & McTighe, 2006). Applying self-directed learning to professional development allows teachers to explore practice-related questions that they generate and to pursue learning and "mastery of skills that are relevant to their positions" (Steinke, 2012, p. 54). Self-directed professional development can be used to meet the needs of teachers at diverse stages of their careers (Slavit & McDuffie, 2013). Self-directed learning also allows teachers the flexibility they need to complete learning activities when they are able (Steinke, 2012).

However, self-directed learning does not necessarily mean isolated or solitary learning without interacting with others or using external resources (Brockett & Hiemstra, 1991; Brookfield, 1985a; Caffarella, 1993; Candy, 1991; Cavaliere, 1992; Peters & Gray, 2005). Donaghy (2005) conducted interviews with four prominent scholars in the field of self-directed learning. Each scholar acknowledged the importance of collaborative learning in adults' self-

directed learning efforts (Donaghy, 2005). Self-directed learning activities can be conducted independently or collaboratively (Guglielmino, 2008). Activities are self-initiated, but they can involve learning with or from others (e.g., family members, mentors, content experts), learning from material resources, or learning in formal educational settings (e.g., courses, workshops, presentations; Caffarella, 1993, 2002; Cavaliere, 1992; Sparling, 2001).

Furthermore, individual learners rarely evaluate their learning projects entirely alone (Peters, Taylor, & Doi, 2009). The learners may include others in the validation of the learning (Candy, 1991). Often, when given autonomy over one's learning, learners will choose to work collaboratively with others (Candy, 1991). Collaborative learning and support groups can be "a means of capitalizing on synergistic learning efforts" (Brockett & Hiemstra, 1991, p. 177). This next section will provide an overview of self-directed learning and collaboration as it relates to teacher professional development.

Self-Directed Learning

According to Mushayikwa and Lubben (2009), "self-direction has been identified as a potential key to the success of professional development of teachers" (p. 375). Self-directed professional development empowers teachers, providing them with an internal locus of control that ensures that teachers continue to build new understanding of teaching and learning" (p. 381).

Self-Directed Learning (SDL) has been one of the high-interest topics in adult education for many decades. Mezirow (1985) argued that this is due to the significance of the concept as it is so central to what adult education is all about. Baumgartner, Lee, Birden, & Flowers (2003) claimed that the systematic study of self-directed learning in adult education began with the work of Houle (1961), Tough (1971), and Knowles (1975).

Self-directed learning is based on the notion that as a person grows and matures his or her self-concept changes from that of a dependent personality toward that of a self-directed individual. Self-directed learning indicates that the locus of control in the learning process lies mainly with the adult learner, who may initiate learning with or without assistance from others (Lowry, 1989).

Research that has been conducted on self-directed learning of adults has shown its importance in the learning and development of adults in their life. Tough (1978), in his adult's learning project, found that nearly 90 percent of all adults conduct at least one self-directed learning project per year. Typical learners engaged in five learning projects, spending an average of 100 hours on each project (Tough, 1978). Cross (1981) also asserted that an estimated 70 percent of adult learning is self-directed learning.

Knowles (1975) defined SDL "as process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies and evaluating learning outcomes." (p.18).

Merriam and Caffarella (1999) also defined SDL in terms of its goals, process and personal attributes of the learner. They described that the main goals of SDL are:

- Enhancing the ability of adult learners to be self –directed in their own learning
- Fostering transformational learning as central to SDL
- Promoting emancipatory learning and social action as an integral part of SDL

In terms of its process, SDL was defined by Merriam and Caffarella (1999) as a process "in which people take the primary initiative for planning, carrying out, and evaluating their own learning experiences" (p. 293). SDL is also understood as a "personal attribute" through "internal

state of psychological readiness to under take SDL" (p. 307). Guglielmino (1977) and Oddi (1986) developed SDL readiness scales that intend to measure the learners' curiosity, persistence, learning enjoyment, and goal orientations as characteristics to measure readiness to SDL.

Baumgartner et al. (2003) classified models of SDL into three categories: The sequential, interwoven, and instructional models. The sequential models delineate steps in the self-directed learning *process* (Knowles 1975; Tough 1971) whereas the interwoven model (Brockett and Hiemstra 1991) examine learner characteristics such as the learner's personality in addition to the learning context, which "interact to form episodes of self-directed learning" (Merriam and Caffarella 1999, p. 295). Instructional models (Grow 1991, 1994; Hammond and Collins 1991) represent "frameworks that instructors in formal settings…use to integrate self-directed methods of learning into their programs and activities." (Merriam and Caffarella 1999, p. 302)

Spear and Mocker (1984) demonstrated the importance of understanding the learner's environmental circumstances in promoting self-directedness in learning processes. They concluded that the organizing circumstances direct the structure, methods, resources and conditions for learning rather than the individual characteristics of the learner such as motivation, creativity, and persistence (Spear & Mocker, 1984). Spear and Mocker (1984) assert that the environmental factors surrounding the learner as the learners' characteristics may have different impacts on their own contexts.

Self-directedness, as characteristic adaptation, change over time and across circumstances in response to biological maturation, changes in the environment, or deliberate interventions (McCrae & Costa, 2003). Self-directedness is thus described as a learned characteristic that is amenable to the educative process and influenced by environmental circumstances

(MacKeracher, 2004). This changeable feature is intended to help the individual adapt to the requirements and opportunities of the social environment.

In line with studies conducted by Candy (1991), Grow (1991) and Ponton, Derrick and Carr (2005), self-directedness is understood as a domain specific concept. One may have a high or low level of self-directedness in different domains depending on personal and environmental factors. A person may demonstrate a high level of self-directedness in his working life but a low level for self-directedness in social life (Grow, 1991). Even in working life, individuals can behave differently depending on the area of functioning (Candy, 1991).

Ajzen and Fishbein (2005) characterized self-directedness as a dynamic process towards creating constant adaptation to the environment that is expressed in behavior and regulated by cognitive (beliefs), affective (attitudes), volitional (intentions) and earlier behavioral patterns. A characteristic adaptation is thus a dynamic and interactive network of beliefs, attitudes, intentions and behavior that allows one to interact meaningfully with the social environment (McCrae & Costa, 2003).

Adult educators have found that some adults are incapable of engaging in self-directed learning because they lack independence, confidence, or resources (Hanson, 1996; Merriam, Mott , & Lee, 1996). Not all adults prefer the self-directed option, and even the adults who practice self-directed learning also engage in more formal educational experiences such as teacher-directed courses (Brookfield, 1985).

Collaboration

When teachers engage in effective teacher collaboration, the collaboration should lead to improved instructional practices and, eventually, to improved student learning (Hattie, 2010). DuFour and Marzano (2011) believed that in order for collaboration to be effective, it needs to

become part of the routine schedule of the school. Teachers have the majority of their workday situated in their classrooms determining how to and attempting to reach and meet the needs of their students (Musanti & Pence, 2010). DuFour and Marzano (2011) also proposed that collaboration in an already negative environment will not be successful. Instead, it will only reinforce the negativity that already exists, and the collaborative sessions will become venting sessions and increase the negative environment.

Conoley and Conoley (2010) stated that "successful collaboration can result in the construction of a social support system for teachers engaged in the highly stressful work on instructing children" (p. 78), and for it to be successful, the focus needs to be on the strengths that each individual can bring to the collaborative table. Each individual brings and offers social, intellectual, and emotional support to one another to reach the greater goal of the collaborative group (Conoley & Conoley, 2010). Collaborations with colleagues also increases awareness of student achievement, completion rates of teaching professional development, and improved relationships with students (Jackson, Stebleton, & Laanan, 2013). Berry, Daughtrey, & Wieder, 2009 found that teachers working in collaborative groups gained expertise in content and teaching practices. Additionally, teachers gained support from their colleagues not only in teaching practices but also in emotional support. Berry et al.(2009) also asserted there should be structure to the collaborative meetings to keep the session moving forward and not allowing a complaint session to arise. This creates an atmosphere of trust and value amongst the participants.

Effective collaboration

The recipe for successful collaboration requires several key ingredients in order to add value to students and teachers. Educators need skills and training in the art of collaborating with other adults. Collaborative skills include communication (Keefe & Moore, 2004; Kohler-Evans, 2006; and compatibility (Keefe & Moore, 2004; Kohler-Evans, 2006; Mastropieri et al., 2005). Collaborative skills are important for creating a positive classroom environment for the students and the partnering co-teacher (Kohler-Evans, 2006; Scruggs et al., 2007). The roles of both teachers must be clearly defined, both in general and specifically for each lesson, in order to maximize parity between the educators working in collaborative partnerships.(Keefe & Moore, 2004; Kohler-Evans, 2006; Parnell, 2011). By understanding the roles and responsibilities of educators in a collaborative setting, the impact of two teachers in one classroom can be maximized.

Parnell (2011) posits that teachers are limited today with the high stakes testing and curriculum that is designed to raise test scores and not challenging to students. Parnell (2011) looked at how collaboration assisted teachers in engaging students with this type of curriculum. The participants overwhelmingly preferred to work with their peers to develop ways to engage students within the scripted curriculum. Berry, Daughtrey, Weider and The Center for Teaching (2009) conducted surveys and interviews of teachers in low performing schools to determine if collaboration would make a difference in their decisions to stay in the high needs school. The study found suggestions effective collaboration. These suggestions included scheduling adequate time for collaboration, aligning collaboration for horizontal and vertical collaboration, structuring collaboration meetings formally, and creating an atmosphere of mutual trust (Berry et al., 2009).

Administrative support for collaboration

Rasberry, Mahagan, and The Center for Teaching (2008) stated that teachers have limited time to collaborate with other teachers and that decisions regarding the opportunities for collaboration are typically from administrators with little input from teachers. This lack of input can lead to isolationism and lack of trust (Rasberry, Mahagan, & The Center for Teaching, 2008). Administrators also play a role in designing a schedule that maximizes opportunities for the teachers to meet and plan together (Scruggs et al. 2007; Weiss & Lloyd, 2003). Administrators are instrumental in selecting teachers for collaborative assignments. Providing an opportunity for teachers to volunteer for collaborative classes, instead of being assigned to them, is a critical component of effective teaming (Smith, 2012). Furthermore, teacher teams benefit from having a common belief system and common work ethic (Smith, 2012). Practices for creating and building trust include cultivating a supportive atmosphere, modeling open conversations, providing time, mentoring on professional learning communities, and building virtual learning communities (p. 23).

Additional implications to collaboration included the following: collaborative schools are more attractive to work in, collaboration should be organized carefully with time and scheduling, and support to succeed in the classroom. Over 80% of the teachers who participated in these collaborative sessions decided to stay at their perspective schools (Berry et al., 2009). In a comparative case study by Meirink, Imants, Meijer and Verloop (2010) concluded that there was a close connection between collaboration and learning. Findings indicated that school leaders need to allow teachers autonomy in considering the topic and process so it is important to the participants (Meirink et al., 2010).

Levine (2010) states that teachers need tools to help them reflect about teacher learning, and design and implement activities to foster their learning. Levine (2010) asserted that when teachers work with each other, they are more open to try new ideas and strategies. Furthermore, there are different types of communities that teachers can work in, but each allows teachers to work collegially and develop their practice (Levine, 2010).

Martin-Kniep (2008) puts forth three arguments for the creation of collaborative communities. These include the benefit to students because teachers learning will be increased. There is a benefit to teachers in that they will learn from each other and share their experiences and knowledge. The third benefit is to the school itself. The school receives teachers with a positive attitude who are committed to the school. These positive teachers are more apt to sustain the necessary changes that the collaborative community has made (Martin-Kniep, 2008). Troen and Boles (2010) posit that schools can expect a variety of benefits to teachers when they work together including the decline is isolationism, increase in morale, and sharing of their shared strengths.

Teachers as Change Agents

Fullan and Hargreaves (1991) stressed the importance of treating teachers as persons, in other words, beyond the technical role. In this sense, personal development is equally important to professional development. The value of treating teachers as persons was also stressed by Hargreaves and Evans (1997) who stated that in order to make a difference there needs to be a professional culture that takes account both the emotional and intellectual strengths of teachers. This resonates with Day's (1999) proposal of professional development that invests in the whole person. With respect to responding to educational reforms, Fullan (1993) urged teachers to claim back their moral purpose in teaching which included facilitating critical enculturation; providing

access to knowledge; building an effective teacher-student connection; and practicing good stewardship. Fullan (1993) claimed that many teachers enter the profession because "they want to make a difference" (p.11). Fullan (1993) proposed that change process, and four core capacities required for building greater change capacity: personal vision building, inquiry, mastery and collaboration.

Teachers, as change agents, being empowered to make decisions within the context of educational change is a fundamental piece to school reform. Fullan (1993) supported this notion by stating, "Individuals must take the initiative if we are to avoid becoming helpless, overworked, dependent victims of change forces" (p. 123). Similarly, in his review of the teaching profession, Ingvarson (1999) suggested that teachers must be empowered. This power must both be given or delegated to teachers by government and taken up or developed by teachers – arriving at a new and non-coerced consensus on beliefs that exist within all levels of the school organization. Goodson's (1997) proposed of reviving and reinstating of the relationship between research knowledge, theoretical knowledge and teachers' professional knowledge. As professionals, teachers must speak with a united voice (Kelly, 1995). Developments in teacher professionalization should also be supported by developments in the sociological, technical and economic processes of teachers gaining status and privilege (Darling-Hammond, Wise and Klein, 1999).

Teacher Change

Fullan (2006) in writing about approaches to teacher change wrote about seven premises that underpin change theory. The premises are those deemed necessary to design strategies of instruction, which elicit results. These premise are as follows: 1) motivation; 2) a focus on results; 3) learning in context: 4) changing context; 5) reflective action: 6) tri-level management;

7) persistence and flexibility to stay the course. To bring about change the instruction strategy must motivate the teachers that may not be there initially, but can be established over time (Fullan, 2006).

Huberman (1992) notes that pressure is often necessary to encourage change, particularly among those who are less willing to change. Guskey (2006b) states "that both pressure and support are necessary ingredients of success. Untapped competence can surface and flourish in this environment and support coupled with pressure is essential for continuing professional improvement" (p. 338).

According to Elmore (2004) those involved in professional development need to be cognizant that as learning occurs in context, the learning context itself is in constant state of change. Randi and Corno (1997) contend that change without a clear understanding of the innovation and how teachers implement the innovation will be unlikely to support change at the classroom level. For the innovation to be successful, teachers must be able to respond to the unique context in which they teach (Randi & Corno, 1997).

Guskey (2006b) identified the importance of introducing content that can fit in with teachers' existing practices based on teachers' needs, while at the same time allowing for adaptation and change to occur. Duffy (1993) found that although teachers initially asked for prescriptive lessons in his study, over time teachers showed progress from modeling prescribed practices to revising and inventing new strategies. Sparks (1996) found that teachers' attitudes toward change was more heavily influenced by the facilitator of the professional development program.

Furthermore, Fullan (2006) noted the instructional strategy of a PD program needs to include time and space for reflection as " people learn best through doing, reflection, inquiry,

evidence, more doing and so on" (p. 10). It is vital that teachers experience positive feedback on their teaching, when implementing changes in practice, this will reinforce their teaching and encourage sustained change and further change (Guskey, 2006b).

Models of Change

According to Guskey's (2002) model of change (see Figure 1) professional development works through the process of 1) changing teachers' classroom practices, 2) changing the learning outcomes of students and 3) changing the teachers' attitudes and beliefs. This linear model suggests that change in teachers' attitudes and beliefs occur primarily after they gain evidence of improvements in student learning, as a results of improvements in teachers' classroom practices.

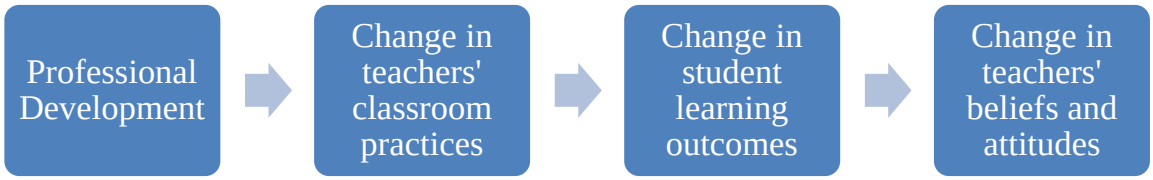


Figure 1. Guskey's model of teacher change (adapted from Guskey, 2002)

Teachers believe that the PD has worked because they have seen it work and this has a positive effect on their attitudes and beliefs, "it is not the professional development per se, but the experience of successful implementation that changes teachers' attitudes and beliefs (p. 38).

Guskey's model is designed to evaluate professional development activities on multiple levels. Each level of evaluation builds off of the previous level by posing more focused questions, addressing a higher order of outcomes. For example, level one addresses participants' reaction to the professional development. The next level addresses the participants' learning from the training in relation to changes in practice. Level three explores the degree of change in learning outcomes and the last level assesses participants' change in attitude and beliefs in relation to new teaching strategies. Guskey's model can evaluate both the short-term and long-

term effects of professional development training, beginning in the training room itself and ending in the participant‘s classroom (Guskey, 2002).

Huberman (1995) states that the change process for teachers is a cyclical one (see Figure 2), changes in beliefs lead to changes in practice that brings changes on student learning that begins further change in practice that result in additional changes in beliefs. Change is a cyclical process indicates that change can occur at any point in the change process and assumes that change is not just influenced by professional development , but also by “ structural, cultural and political aspects of a teacher’s experiential context” (Opfer, Pedder, & Lavicza, 2011, p.446).

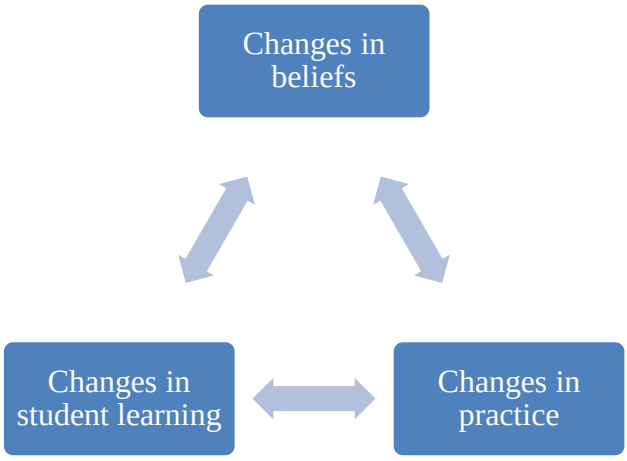


Figure 2 Huberman’s model of teacher change (adapted from Huberman, 1995)

Desimone (2009) proposed a theory of change that articulated the process of change as interactive, nonrecursive relationships between the core features of professional development, teacher knowledge and beliefs, classroom practice and student outcomes. Professional development includes key features that posit that change in attitude occurs prior to a change in teaching practices to foster increased student learning (see Figure 3). According to Desimone (2009), this model can allow testing of both the theory of change and the theory of instruction.

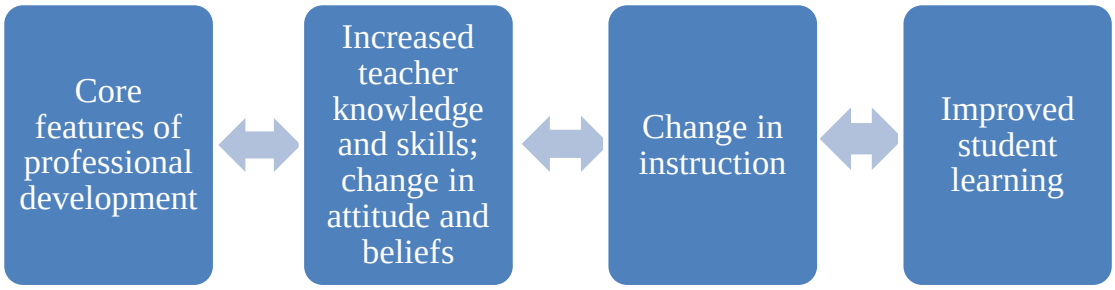


Figure 3 Desimone's model to test theory of teacher change (adapted from Desimone, 2009)

In reviewing the literature on teacher change, it became evident that change cannot occur unless professional development takes place and carried out in a supportive environment. Key features that promote teacher change in PD are the need for collective participation (Darling-Hammond & McLoughlin, 2011; Guskey, 2003), congruent with teacher practices, ensuring active learning and coherence and duration of PD (Wayne, Yoon, Zhu, Cronen, & Garet, 2008). While the models above refer to change in practice, change in beliefs and change in student learning there is little consensus as to the order in which these change occur or if order does in fact matter once the professional development program has been effective in achieving change.

Self Determination Theory: Teacher Autonomy and Motivation

Self-determination theory (SDT) was introduced over twenty years ago by two psychologists, Deci and Ryan (1985). Their theory proposes that all humans have three basic needs: autonomy, competence, and relatedness. People feel autonomous when they are making decisions for themselves without outside pressures. Acting autonomously is also seen as operating with an internal locus of control (Deci & Ryan, 1985). Attainment of these needs is effected by two factors: how determined people are, and whether or not they are being nurtured by the social environment (Deci and Ryan, 2000). When people are determined and their environment is meeting these three needs they are likely to be more intrinsically motivated and less extrinsically motivated (Deci & Ryan, 2000). Possible benefits to people whose needs have

been satisfied can include the optimization of personal well-being and social development (Deci and Ryan, 1985).

The importance of autonomy and motivation in relation to professional development cannot be understated. If teachers are to implement professional learning in their everyday practice, they need to be self-motivated (Beltman, 2009). According to Deci (1995), people's success at changing behavior begins when they identify their own motivation. Additionally, Beltman (2009) explained understanding behavior is best attained through exploring teachers' needs, beliefs, goals, and motivation. If teachers are to implement professional learning in their everyday practice, they need to be self-motivated (Beltman, 2009).

Teachers are the vital link to change. According to Beltman (2009), people who are self-motivated and who approach work and life with the desire to do a good job intrinsically, do so not because of rewards and consequences. Deci's (1995) research substantiates that people's success at changing behavior begins when they identify their own motivation. To make lasting change, it is best for special education teachers to understand their own motivation. According to Deci (1995), "human behavior is purposeful, and motivated behavior is directed toward outcomes" (p. 152). Deci (1995) believed self-determination calls for providing choice without control. "It is the controlling intent of rewards that sabotages their attempts to motivate others, destroying the very motivation they had been intended to promote" (p. 38). Deci (1995) further suggested people are goal oriented and work best when they are involved in the goal setting and monitoring of the achievement without punishment or rewards for true intrinsic motivation to occur.

In the context of self-determination theory (SDT), intrinsic motivation is present when people are motivated for participating in an activity by the activity itself (Deci & Ryan, 2000)

For example, teachers engaging in professional development as a personal decision as opposed to mandated attendance. Extrinsic motivation occurs when people are motivated by something other than the activity. Deci and Ryan (2000) suggests that "Motivation, performance, and development will be maximized within social contexts that provide people the opportunity to satisfy their basic psychological needs for competence, relatedness, and autonomy" (p.328). According to Deci (1995) the best way to motivate people is to support their sense of autonomy by allowing them choice and flexibility to perform tasks that lend to a more effective approach than traditional rewards and punishments.

Professional Development

Most education policy analysts and experts agree that professional development (PD) for teachers will be especially critical to the overall success of Common Core State Standards (CCSS, 2010; Magner, 2011). With a plethora of research dedicated to teacher professional development, this section will focus on the research defining professional development and its purpose, characteristics of effective PD, barriers that may exist and professional development models.

Defining Professional Development

As the practice of professional development has evolved, there have been numerous definitions of the concept offered. For example, Guskey (1986) offered a definition that included a "systematic attempt to bring about change—change in the classroom practices of teachers, change in their beliefs and attitudes, and change in the learning outcomes of students" (p. 5). Bell and Gilbert (1994) viewed teacher development as a purposeful inquiry comprised of three dimensions: (a) professional, (b) personal, and (c) social development. National Staff Development Council (2010) defined professional development as "the process by which, along

and with others, teachers review, renew and extend their commitment as change agents to the moral purposes of teaching; and by which they acquire and develop critically the knowledge, skills and emotional intelligence essential to good professional thinking, planning and practice with children, young people and colleagues through each phase of their teaching lives" (p. 4). Clement and Vandenberghe (2000) argued that professional development is "a continuous process determined by the interplay between the individual and the organization, leading to a combination of craftsmanship and mastery" (p. 87).

Evans (2002) however stated that "even those who are generally considered leading writers in the field do not define precisely what they mean by the term" (p. 124) and this is a necessity so as to provide conceptual clarity for the study of teacher development and shared understanding. Evans (2002) offered the definition of teacher professional development as "the process whereby teachers' professionality and/or professionalism may be considered to be enhanced" (p. 131). Evans (2002) argued that two constituent elements of teacher development are fundamental to an individual teacher's development: (a) attitudinal development and (b) functional development. Attitudinal development is where teacher's attitudes are modified and functional development is the process of improving a teachers' professional performance. Within the voluminous literature on professional development (Huberman, 2001), Kelchtermans (2004) observed that the amalgamation of the variant definitions of professional development has made it a new 'container concept' in the educational research discourse.

Purpose of Professional Development

Within education, the purpose of PD is articulated in a number of ways. For example, Glatthorn (1995) indicates that professional development for teachers provides the opportunity for professional growth as a result of gaining increased experiences and examining his or her

teaching systematically. Additionally, The National School Board Foundation (1999) identified investing in teacher education as the primary means to raise student achievement.
Widen and Ian (1987) outlined two somewhat different purposes: (a) training teachers in skills and (b) continuous personal and professional growth of teachers. Widen and Ian (1987) argued that these purposes are not necessarily mutually exclusive, but often inform the design of the professional development program. Guskey (2009) summarized that most teachers engage in development so they can gain "specific, concrete, and practical ideas that directly relate to the day-to-day operation of their classroom" (p. 6).

In terms of the functions professional development fulfills, Day and Sachs (2004) included (a) extension, (b) growth and (c) renewal. However, Blandford (2000) outlined four major functions of professional development including to: (a) enhance individual job performance, (b) rectify ineffective practice, (c) establish groundwork for the implementation of policy, and (d) facilitate change. Craft (2000) added the following functions including promotion, to clarify school policy, and to promote job satisfaction. In addition, Little (2001) found four broad functions of teacher professional development in case studies of schools, including (a) inspiration and goal-setting, (b) knowledge and skill development, (c) inquiry, and (d) the development of collaboration and community.

Effective Professional Development

Effective teacher professional development can lead to a transformation in teacher practice (Stewart, 2014). However tradition professional development activities, described as "something external to the ongoing work of teaching , or something that one does or is provided in the form of activities and events" (Little, 1999, p. 246), are no longer appropriate for transformational change in teacher practices (Ingvarson, Meiers, & Beavis 2005). Traditional

approaches, such as workshops and one day events, have value in that they can support compliance and credentialing (Mundry, 2005; Guskey, 2009), but lack the support as teachers attempt to implement new approaches in their classrooms (Ingvarson, et. al., 2005). Flores (2005) asserts that teacher professional development has moved away from short term training sessions, where information is disseminated by "experts," to a more constructivist model. This constructivist model is thought to be more effective as it is based upon the recognition that learning takes place over time and that active learning requires opportunities to link previous knowledge with new concepts (King & Newman, 2004). Researchers have composed checklists and guidelines for what constitutes "effective" professional development (Guskey, 2009; Balan, Manko, & Phillips, 2011). Zepeda (2010) asserted that "For effective professional development, teachers need the opportunity and time to work with one another; they will learn more from sustained discussion on classroom practices, coaching opportunities, and the formal and informal mentoring they can provide to one another" (p. 23).

Characteristics of professional development can be useful in choosing a particular professional development approach and assist in justification of a design and evaluation of a specific PD program. (Lieberman & Pointer Mace, 2008). Hawley and Valli (1999) summarized research about the conditions that foster professional learning that relate to improved student learning outcomes. The nine principles recommend that professional development should:

> " a) be connected to a comprehensive change process; b) provide opportunities to gain understanding of the theory underlying skills being learned; c) incorporate evaluation of multiple sources of information on outcomes for students; d) be continuous and involve follow up and support for further learning; e) be organized around collaborative problem solving; f) be primarily school based and built into the day to day work of teaching; g)

> involve teachers in the identification of what they need to learn and the development of those learning experiences; h) be based on the analysis of the differences between actual student performance and the goals and standards for student learning; and i) have a content focus on what students are to learning and ways in which different problems students may have in learning the material may be addressed."(p. 161-162).

The need for effective, quality teachers is evident throughout reform initiatives. Researchers and policy makers are aware of the need for teachers to keep current with skills, strategies, and classroom practices to help increase student achievement (Hill, 2009). Professional development opportunities must incorporate research based strategies can assist teachers with learning new strategies and refining classroom practices that increase student achievement (Hill, 2009).

Fogarty and Pete (2009) identified seven protocols or characteristics for effective professional development about which there was some overlapping consensus in the literature. The review summarized principles of effective PD with which there was agreement between academics and practitioners. These principles asserted that PD was continuous and job embedded, focused on evaluation of students outcomes, enlisted collaborative teams, hands on and interactive, practical and provided for differing modalities to assist in acquiring newly learned skills.(Fogarty & Pete, 2009). While these lists of principles and characteristics of effective PD are useful in framing the intent and content of PD activities, they provide only a starting point in efforts to improve the quality of PD programs and activities (Fogarty and Pete, 2009).

Evaluation of Professional Development

There is a need to ensure that professional development is evidence based and is matching the particular needs of the teacher and the activities are relevant in that they ensure a

positive effect at the class level (Blank, de las Alas & Smith, 2009). Guskey (2005, 2009) developed a framework for evaluating PD activities based on the principles of various research. Composed of levels, this framework provided questions, suggested method of collecting data to respond to the questions, identified what was being assessed, and suggested how the information could be used. A comprehensive evaluation of PD activities could be based on data analysis in relation to these questions. The *Five Levels of Professional Development Evaluation* (Guskey, 2005, 2009) are; a) participants' reactions; b) participants' learning; c) organization support and change; d) participants' use of new knowledge and skills; and e) student learning outcomes.

Guskey's (2005,2009) five levels have been used (Anderson, Sullivan, & White, 2005; Hanley, Maringe, & Ratcliffe, 2008;) to evaluate PD programs that were transformational in natures and had a common thread of relating to student outcomes. While improved outcomes are aspirational goals of PD, valid measurement of such improvements appears to be problematic (Guskey & Sparks, 2002; Jenkins & Yoshimura, 2010). Yoon, Duncan, Lee, Scarloss, & Shapley (2007) identified nine studies out of 1300 reviewed that were able to demonstrate empirical data linking PD with improved student achievement. Although the studies varied in multiple ways, content areas, experimental design, target schools, there were commonalities among the nine studies. The studies were focused on elementary school teachers that had participated directly in summer workshops or trainings that provided direct training from the researchers as opposed to train the trainer models (Yoon et al., 2007). The time spent on PD activities was ongoing and provided feedback as need for teachers and the duration and intensity of the activities that spent more than 14 hours on PD showed a statistically positive and significant effect on student achievement (Yoon et al., 2007).

Although there are occasional anomalies in the characteristics and principles constructed by researchers pertaining to factors that contribute to effective professional development, there is consensus on baseline requirements. The characteristics of effective PD are ongoing, based at school, specifically linked to student outcome, reflective for participants and provide the opportunity for ongoing learning by participants (Fogarty & Pete, 2009; Guskey, 2005; Guskey, 2009; Stewart, 2014).

Barriers to Professional Development

Much has documented concerning the barriers to teacher professional development. For example, Fullan and Stiegelbauer (1991) reviewed the related research and summarized that professional development efforts fail because: (a) of an extensive use of one-shot workshops; (b) topics selected by nonparticipants; (c) lack of follow-up; (d) lack of thorough evaluation; (e) factors within the schools not being addressed; and (f) an absence of a conceptual basis for program planning and implementation. Guskey (1986) theorized that "the majority of programs fail because they do not take into account two critical factors: what motivates teachers to engage in staff development, and the process by which change in teachers typically takes place" (p. 6).

Cervero and Wilson (2006) confirm that political and economic agendas have a great influence on PD. When developing educational programs, those involved "exercise their power in accordance with their own agenda and specific interests…" (p. 88). For example, The National Education Goals Panel (1994) reported that its goal was to have every American adult literate and possess skills and knowledge to compete globally. Askov (2000) stated that this goal was supposed to be achieved by the year 2000, but instead has become political rhetoric. According to Sparks and Peterson (2000) this emphasis directed the nature and purpose of literacy and basic skills education, which also created a "crisis in accountability." Educators were described as

being “torn among meeting the goals and objectives prescribed by funding agents, school boards or other governing agencies that may be in direct conflict with the needs of learners” (p.263). Furthermore, the crisis becomes particularly pronounced when involved parties come from different value systems (Sparks & Peterson, 2000).

Fenwick (2001) further argues that goals within organizations tend to direct learning strategies in PD and detract from the original goals of improving practice. This is certainly the case noted within K-12 literature. Marshall, Pritchard, and Gunderson (2001) assert “that the overriding concern with increasing standard test scores among students has led to an increase in creating professional development towards this aim with little attention given to the teacher as learner” (p. 63). Furthermore, professional development is presented as a “one size fits all” due to its economic advantage to school systems (p. 65). Additionally, for schools to break out of a singular professional development model, teachers need three essentials: flexibility, freedom, and trust (Paterson, 2002). Given the flexibility to work productively, unencumbered by rigid external guidelines and mandates, teachers will work towards the improving instructional practice and skills (p. 221). In contrast, Sparks and Hirsh (2000) assert ineffective professional education as a major component attributing to the lack of teacher input in education reform.

Professional Development Planning

The challenge of determining the best method of organizing and delivering the educational experience to the adult learner is at the center of the adult educational phenomenon (Clardy, 2005). In a climate of educational change, knowledge of how teachers learn and grow as competent and productive adults is critical for professional developers charged with the task of planning teacher professional development experiences (Terehoff, 2002). According to Terehoff (2002), an individual must become critically aware of his or her circumstances in order to invoke

successful professional development experiences are dependent upon the professional developers‘ ability to create learning environments based on the principles of adult learning. Terehoff (2002) suggests that when teacher learning experiences are based on the principles of adult learning, teachers are more likely to be interested and engaged in the learning process. Furthermore, Terehoff (2002) argues that the extent to which teachers are able to assimilate and accommodate new materials and teaching strategies into their daily work depends upon the decisions professional developers make in planning and implementing a teacher professional development program.

Cervo and Wilson (2006) assert that political and economic agendas have a great influence on professional development. When developing educational programs, those involved “ exercise their power in accordance with their own agenda and specific interests…” (p. 88). Fenwick (2001) further argues that goals within organizations tend to direct learning strategies in professional development and detract from the original goals of improving practice. Marshall, Pritchard and Gunderson (2001) state “ that the overriding concern with increasing standard test scores among students has led to an increase in creating professional development towards this aim with little attention given to the teacher as learner” (p. 63). Paterson (2002) argues for schools to break out of the singular professional development model and provide teachers with the “flexibility to work productively, unencumbered by rigid external guidelines and mandates” (p. 221).

Guskey and Huberman (1995) suggest that general professional practice are described in “ broad and nebulous terms” and that adaptations must be made in order to align with the unique character of the particular settings. “There will never be on model that is the one right answer for

professional development. Our research must focus on finding the optimal mix that will work best in a particular setting" (p. 3).

Prescriptive, sequential, operational program planning models for adult education abound (Caffarella, 2002; Cervero, 1988; Houle, 1996; Nowlen, 1988; Sork & Caffarella, 1989; Tyler, 1949). However, professional development in the United States still engages teachers in one or two day workshops or conferences, according to research by Darling-Hammond (2009).

Effective Program Planning

Because, a strategically planned delivery system can "provide adult educators with the critical concepts and processes needed to develop effective and meaningful programs with and for adult learners" (Boone, Jones, & Safrit, 2002, p. xvi), it is critical to consider the element of program design as it relates to the research question regarding factors that may influence the acquisition of teacher knowledge and strategies. The meta-analysis done by Boone and his colleagues identified the following characteristics of effective program planning models:

(i) Effective program planning models are holistic systems that are composed of interrelated and integrated parts that form a whole (Boone et al., 2002). Within these systems, three major interrelated processes exist: (a) planning, (b) design and implementation, and (c) evaluation and accountability (Boone et al., 2002).

(ii) Effective program planning deals with change: In order for an adult education program planning model to be considered effective, it must address change in some form or another (Tyler, 1949; Lippit et al., 1958; Knowles, 1967; Freire,1970; Boyle, 1981; Cervero & Wilson, 1994).

(iii) Effective program planning models identify learner, community, and/or program needs (Tyler, 1949; Lippitt et al., 1958; Beal et al., 1966; Knowles, 1967;

Freire,1970; Boyle, 1981; Cervero & Wilson, 1994; Houle, 1996; Sork, 2000; Boone et al., 2002).

(iv) Effective program planning models focus on how to select and organize the learning experience/learning situation and learner activities (Tyler, 1949; Lippitt et al., 1958; Knowles, 1967; Boyle, 1981; Cervero & Wilson, 1994; Houle, 1996; Sork, 2000; Caffarella, 2002).

(v) Effective program planning models set program goals, outcomes, and/or objectives (Lippitt et al., 1958; Beal et al., 1966; Knowles, 1967; Cervero & Wilson, 1994; Caffarella, 1994; Houle, 1996; Sork, 2000).

(vi) Effective program planning models identify resources such as personnel, fiscal, and instructional resources (and others) (Lippitt et al., 1958; Beal et al., 1966; Boone et al., 2002; Caffarella, 1994; Houle, 1996).

(vii) Effective program planning models identify, consider, and plan administrative and organizational structure to support the program (Lippitt et al., 1958; Beal et al., 1966; Knowles, 1967; Boyle, 1981; Cervero & Wilson, 1994; Caffarella, 1994; Houle, 1996; Sork, 2000; Boone, 2002).

Participating in effective professional development designed around how students learn is valuable to educators and is a key element of the connection between professional development and student achievement (DiCerbo & Duran, 2006; Yoon,Duncan, Lee, Scarloss, & Shapley 2007). In addition, the opportunity to engage in active/inquiry learning activities is critical (Boyle, Lamprianou, & Boyle, 2005). By including elements of active and inquiry learning strategies in professional development, instructors are offered the opportunity to use critical thinking skills such as exploration, reflection, practice, and problem-solving (Snow-Renner &

Laurer, 2005). These are the same skills that teachers strive to impart on students. Research suggests that when teachers are actively involved in activities focused on increasing their understanding and application of knowledge, the more likely they are to apply what they learn to the classroom (Cohen & Hill, 2001; Garet, Porter, Desimone, Birman, & Yoon, 2001; Boyle, et al.2005; Snow-Renner & Laurer, 2005).

Summary

If teachers are the critical element determining the success Common Core State Standards and teacher professional development and support are the ways to influence teachers' practice, then we need to know more specifically what kinds of support are needed, and what kind of professional development is most useful to change teacher practices. The review of the literature provided a brief history of special education and the legislation that was influential in providing services to students with disabilities. Although Federal legislation, such as No Child Left Behind (2001), have mandated students with disabilities be assessed on the same curriculum within the least restrictive setting, students with disabilities continue to perform below their grade level peers. This is a concern as a majority of states are now moving towards a more rigorous set of standards in Common Core State Standards.

Understanding how teachers learn is productive and necessary in many endeavors; professional development, and career-long training and recertification opportunities. Understanding teacher learning will allow researchers to think about teaching more productively (Putnam & Borko, 2000; Magner, 2011). Teacher learning is both a social and situated experience. All knowledge is situated, but for teachers it is most meaningfully situated in their classrooms; in discussions with other teachers, and in environments where they learn subject matter.

Professional development is a necessary catalyst for meeting Common Core Curriculum standards. Professional development should be aligned not only with content standards, but also with teacher learning theory (Ball & Cohen, 1999; Hardy, 2009; Jones 2009). It should emphasize how teachers cultivate knowledge, analyze and critique their own professional work, and participate in communities of discourse on practice (Ball & Cohen, 1999; Jeanpierre, Oberhauser, & Freeman, 2005). Specifically, it should offer a wide array of experiences that allow teachers to build on prior knowledge, reflect on their own behaviors, evaluate what motivates them to learn, become aware of the processes of professional practices, and experience learning as a socially shared undertaking (Hawley & Valli, 1999; Jones, 2009).

Effective professional development has been defined as that which emphasizes student learning needs as well as the individual needs of the teacher, is intensive and sustained, focuses on concrete tasks, but orients them in theoretical understandings, integrates subject matter and standards, and connects to the school environment (Balan, Manko, & Phillips, 2011; Hardy, 2009; Hawley & Valli, 1999). Asking teachers to change can be difficult, both because change is challenging, and because it takes time to implement, and even more time to see results. Professional development is one method for encouraging and supporting change. Change is most effective when it is supported by the teacher's school environment, is congruent with the teacher's beliefs, and benefits student learning (Fullan, 1991, 2001; Stewart, 2014).

In Chapter Three, I present the research design and methods for this study. This includes the research design, sampling procedures, description of the site, data gathering and analysis procedures, and assumptions related to trustworthiness, reliability, and bias.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

This chapter discusses the methods of inquiry, data collection, and analysis for this study. Theories of adult learning and teacher change were used as the analytical framework. Purposeful sampling was used to select participants and the criteria and process for selecting the participants are discussed. The data collection process and primary data sources, including interviews and observations are discussed in detail. Data analysis is described, including the thematic coding mechanism chosen for the interview data. Finally, the design of the research is compared to established criteria relating to trustworthiness, reliability and validity.

The purpose of the study was to explore the participants' perspectives on knowledge and skills learned from professional development and its perceived impact on their classroom practice linked to Common Core State Standards. Since CCSS expects that teachers will develop higher levels of reasoning and critical skills necessary to implement standards, it would be both practical and illustrative to study special education teachers as they prepare to transition from Georgia Performance Standards to Common Core State Standards. Research questions that informed this study were:

1. What are the special education teachers' perspectives on the professional development activities designed to assist them in implementing Common Core State Standards in their classrooms?
2. How do the special education teachers' perspectives on the relevance of professional development impact how they implement common core state standards in their classroom?

Qualitative Research Design

This study utilized a qualitative research design with a case study approach. Creswell (2003) recommends that researchers choose a research design that connects the method with the intended outcome of the study. The goal of this style of research is to convey an understanding of the perspectives of the participants. The purpose of this study was to explore the impact that special education teachers' perspectives on and knowledge and skills learned from professional development has on their classroom practice linked to Common Core State Standards.

Case studies are designed to give the intended audience a rich, holistic look into the world of the participant (Merriam, 1998, 2009). The findings of the research are reported as a "vividly descriptive narrative of the setting and the situation" (Merriam, 1998, p. 238). The case study approach presents the reader with an insider's access to the setting and the opportunity to learn about the situation from different perspectives (Merriam, 1998, 2009).

Creswell (2003) describes a case study as an in-depth exploration of "a program, an event, an activity, a process, of one or more individuals" (p. 15) bounded by time or by activity. This research study investigated a specific group of special education teachers in their natural context and report the findings through the perspectives of these teachers involved in the study (Gall, Gall, & Borg, 2003). The study offered insight into their perspectives of their participation in professional activities and how their participation transforms their teaching practice. This information can be used to help inform special education teacher training. Special education teachers from a variety of service delivery modalities were solicited to participate in the study to describe their support needs.

Specific characteristics of the case study approach are exemplified throughout the design of this research study. As a "bounded system" (Merriam, 1998, p. 27), this group

of special education teachers share the responsibility for teaching students classified with disabilities within a direct service model or co-taught classroom. The uniqueness of the student population coupled with the rural setting frame the context of the setting for this group of special education teachers. Gall, Gall, & Borg (2003) point out that the time frame for a case study should be identified. The study was conducted over the course of the two nine week terms.

Case Study

There are many well-known case study researchers. For the purpose of this dissertation research, I relied primarily on definitions offered by modern case study methodologists Merriam (2009), Stake (2010), and Yin (2009). The qualitative case study research method focuses on a "bounded system" (Creswell, 2013; Merriam, 2009). Boundaries are of time and place. That is, the case should be defined within particular time frames and be in a particular place (Creswell, 2013). For this reason, the case study method requires the study of the "environment" that constitutes the "bounded system" and thus, the researcher has limited or in some cases no control over the case of study (Merriam, 2009; Yin, 2009). For the purpose of this research, the context of the study took place within the researcher's home school district. The case is bounded by utilizing multiple elementary school settings with special education teachers from kindergarten through fifth grade.

In terms of the contributions of case studies, Flyvbjerg (2006) believed that a greater number of good case studies would strengthen social science. However, he warned researchers to be mindful of the five greatest misunderstandings of case study research: (1) theoretical knowledge is more valuable than practical knowledge; (2) one cannot generalize from a single case; therefore, the single-case study cannot contribute to scientific development; (3) the case study is most useful for generating hypotheses, whereas other methods are more suitable for

hypotheses testing and theory building; (4) the case study contains a bias toward verification; and (5) it is often difficult to summarize specific case studies. The case study method was specially chosen for this study for two primary reasons. First, this method facilitates a more personalized relationship with the data, thereby opening the door for a deeper understanding of the experience. Second, this method allows the researcher to probe for meaning and reveal the structural elements of the relationships and networks that define and describe social capital. As a result, the findings presented have the potential to thoughtfully reflect the meaning of the participant's experience as opposed to simply reporting the results (Moustakas, 1994).

Participants

In order to achieve a thick, rich description for the case (Merriam, 2002), it was important to include various special education teachers from within the school district. Elementary school sites were chosen as they were the focus of the professional development activities. Researchers have recommended that data continued to be collected until information gleaned reaches redundancy (Lincoln & Guba, 1985; Merriam, 2009). For this study, there were 22 special education teachers within the selected county who taught students kindergarten through 5th grade. After the research sites were approved by the local school district and IRB approval was obtained by the university, the researcher asked each principal permission to distribute demographic questionnaires (see Appendix A) to special education teachers who had been active participants in professional development activities over the past two years. Each principal provided the in-school coordinator (ISC) with the demographic questionnaires. Forms were provided with a self –addressed stamped envelope to be mailed directly back to the researcher.

Eleven forms were returned and the researcher invited seven teachers to participate based on criteria from the demographic questionnaires. Additional information about participant selection is detailed in the next three sections.

Demographic Questionnaire

A demographic questionnaire (see Appendix A) was used in order to gather information about each participant's personal and teaching backgrounds. Questions regarding personal background were included as well as their age and gender. Additional questions focused on the participants' teaching background included, major, certifications held, when and how they were certified in Special Education, what grades they were teaching, how many years they have taught in elementary special education classroom, and whether they were currently teaching at least one direct core subject area or in a co-teaching classroom.

The demographic questionnaire also included questions about participants' current classrooms. These questions included how many students were in the classroom, how many teacher aides were in the classroom, and the average teacher to child ratio.

Table 1 summarizes information used as selection criteria.

Table 1: Participant Demographic Information

Participants (pseudonyms)	**Years Taught**	**Current Grade(s)**	**Subject Areas**
Kendra	10	K,3	Math, English, Reading
Sheryl	23	K,1	Math, English Reading
Pam	8	1,2	Math, Reading
Julie	16	2,4	Math, Reading, Writing
Alex	6	5	Math, Reading, English
Katie	24	K,1,3	Math, Reading, Writing
Tara	11	4,5	Math, Reading, English

Source: Demographic Questionnaire Appendix A

Sampling Procedure

According to Merriam (2009), purposeful sampling begins with determining the selection criteria for the people to be studied. The sampling procedure for this study was purposeful.

Maxwell (2005) defines this as "a selection strategy in which particular settings, persons or activities are selected deliberately in order to provide information that can't be gotten as well from other choices" (p. 88). Selection of special education teachers interviewed was purposeful, in that they were special education teachers that taught in a co-taught classroom or had at least one segment of direct instruction in a core subject area. The participants were selected from the five elementary schools within the selected school district. Special education teachers were selected based on their participation in professional development activities that presented Common Core Curriculum Standards for kindergarten through 5th grade standards. Middle and high school special education teachers were excluded from this study as they were not required participants in the professional development activities.

In order to have a representative sample of special education teachers from kindergarten through 5th grade, teachers were selected for the study based on the following criteria: a) Teachers were currently working with elementary school age children within either a direct service model or in a co-taught classroom where Common Core Standards are being taught; b) Teachers had a minimum of five years of experience teaching to ensure they have taught under the Georgia Performance Standards and Common Core Curricula. c) Teachers were participants in professional development activities that were designed to deliver Common Core State Standards; d) Teachers had a degree and certification in special education.

The local school system employs two curriculum directors: one for elementary schools and one for middle and high school. Each curriculum director is responsible for the creation, dissemination and implementation of professional development activities in the district. Decisions about the professional activities are primarily at the sole discretion of the curriculum director. Professional development for CCSS consisted of attending redelivery conferences

presented by a local curriculum director, participating in data teams with general education teachers, and viewing webinars presented by Georgia Department of Education.

Based on all criteria specified above, seven teachers were invited to participate. Four teachers did not meet selection criteria as they has less than five years of experience or were not currently certified in the field of special education. Eleven other potential participants did not return demographic questionnaires to the researcher. A study of seven teachers was justified because as Creswell (2013) suggested, studies focused on a description of the experiences of participants often have data from five to twenty-five individuals who have experienced the phenomenon.

Study Sites

As a means of convenience and utilization of the researcher's knowledge of the educational system in the selected county, the research study involved the selection of three elementary schools within a rural school district in Northern Georgia that had engaged in professional development related to Common Core Curriculum over the past two years. These three schools serve approximately 1400 students in pre-kindergarten through fifth grades. School site one serves 431 students and is ranked in last place within the school district. It is ranked 55% higher than other elementary schools in Georgia.

The student population is 71.5% Caucasian, 14.2% Hispanic, 9.5 % African American, 4.2% two or more races and .6% Asian. Approximately 67% of the students receive free or reduced lunch. School site two serves 516 students and is ranked 3rd within the school district and 79% higher than other elementary schools in Georgia. The student population is 56.6% Caucasian, 22.9% Hispanic, 13.8 % African American, 3.4% two or more races and .3% Asian. Approximately 76% of the students receive free or reduced lunch. School site three serves 467

students and is ranked 4th within the district and 76% higher than other elementary schools in Georgia. The student population is 90% Caucasian, 4.6% Hispanic, 1.9 % African American, 2.9% two or more races and .6% Asian. Approximately 67% of the students receive free or reduced lunch.

Data Collection

Green, Camilli, & Elmore (2006), echoing Yin (2009), stated that a carefully conducted case study benefits from having multiple sources of evidence, which ensure that the study is as robust as possible. The concept of methods refers in general to the appropriate use of techniques of data collection and analysis (Prasad, 2006). In a case study, it is important to converge sources of data, also known as triangulation, as a means to ensure comprehensive results that reflect the participants' understandings as accurately as possible (Stake, 2010; Yin, 2009).

Triangulation seeks the validation of a single finding through the convergence of multiple data sources, while the search for multiple meanings implies a single finding is not possible (Stake, 2010). This dissertation acknowledges the importance of triangulation to produce credible findings. As cited in Lincoln and Guba (1985), Denzin discussed four major types of triangulation:

- Source triangulation: assess whether a finding or observation occurs in the same way, or has the same meaning, under different circumstances (Stake, 2010);
- Methods triangulation: the most recognized type of triangulation, which involves gathering information from different types of data collection (e.g., observation, interviews, documents) to determine what is found with one method (e.g., observation) can be validated against another method (e.g., interview) (Lincoln & Guba, 1985);

- Investigator triangulation: involves the corroboration of one investigator's finding with the findings of another investigator (Lincoln & Guba, 1985); and
- Theory triangulation: involves confirming a finding by corroborating it across different theories (Lincoln & Guba, 1985).

The major type of triangulation this case study utilized was methods triangulation. This type of triangulation helped corroborate findings across the different types of data collection and sources. This dissertation did not triangulate every single finding. Rather, triangulation was reserved findings related to the research questions, as suggested by Stake (2010). This study relied on two major types of data collection—observations and interviews. The purposes and processes of each of these data collection sources are discussed next.

Additional sources of data allow case study researchers to create a story—one that honors participants' meaning-making processes. Seidman (1991) supported this same view, stating, "I interview because I am interested in other people's stories. Telling stories is essentially a meaning-making process. When people tell stories, they select details of their experience from their stream of consciousness" (Seidman, 1991). Based on the scope of this research, which focused on perspectives of professional development activities and the impact of these perspective on teaching practices, I selected interviewing as the as the primary data collection method, along with observations of participants in their classrooms.

As a rule, interviews must be conducted carefully to ensure a reliable case study (Merriam, 2009). Purposeful sampling, including the consideration of an individual versus a group focus, was considered, as well as sample size and appropriate participants to choose for the interviews. The interview is often viewed as a conversation between the interviewer and interviewee, in which the interviewer asks questions and the interviewee responds accordingly

(Esterberg, 2002). When conducting interviews, relationships and rapport must be established, and coupled with trust: “The purpose of interviewing is to find out what is in and on someone else’s mind. We interview people to find out from them those things we can’t observe” (Patton, 1980, p. 196). Active listening and nonjudgmental behavior are two of the common practices that should be prioritized when interviewing for case study research. There are six types of questions (Patton, 1987; Merriam, 2009) to be employed during the interview process for case study research: (1) experience/behavior, (2) opinion/belief, (3) feeling, (4) knowledge, (5) sensory, and (6) background/demographic.

Esterberg (2002) described a pattern for general and specific questions, called, “open-ended” questions, and cautioned against dichotomous or leading questions, which could lead to a closed style of questioning. For this study the interviews were conversational. Opie (2004) indicated that establishing rapport can encourage the participants to respond and talk more freely. As the researcher, I utilized an interview protocol (see Appendix B) that shared information about myself with the participants to establish the trust and rapport necessary for this conversation, review the purpose of the study and reminded participants of their ability to withdraw without penalty from the study. Conducting the interviews in this way allowed me to put respondents at ease, and allowed for an optimal interviewing environment.

Interviews

Interviewing special education teachers allows for identifying and soliciting knowledge from those who Patton (2002) calls, “key informants.” Key informants are people who are particularly knowledgeable about the inquiry setting and articulate about their knowledge, and whose insights can be helpful in assisting an observer in understanding events that have happened and reasons why those events happened. This study’s participants were interviewed

between October 2014 and March 2015. All interviews were conducted face to face and took between 45-90 minutes. Member checks and secondary interviews averaged between 30 and 45 minutes. With participant approval, I audio recorded the interviews to ensure accurate transcription (Merriam; 2009). I took handwritten notes during each interview, which enabled me to track key points to return to later in the interview or to highlight ideas of particular interest or importance.

In order to follow university procedures for the Institutional Review Board (IRB), the participants were given a few minutes to read information about the interviews and determine whether they were willing to continue as a participant in the research study. Consent forms (see Appendix D) were redistributed and reread while the researcher explained that there were benefits, and no likely risks, to participants. Demographic questionnaires were used to document those who chose to be engaged in continued professional development during the 2013-2014 and 2014-2015 academic years.

As a first step in the interview process, I reminded participants of the purpose of the study, research procedures, expected benefits, their right to withdraw from the study at any time, and protection of confidentiality. I asked participants if they had any questions about the research study or research procedures. I provided information about myself to establish rapport and gain their trust (Patton, 1980: Opie, 2004).

I used the semi-structured interview approach (Merriam, 2002) and a uniform set of open-ended questions to obtain participants' perspectives of professional development activities. Open-ended questions were used throughout the interviews to encourage participants to respond freely and openly to queries (Bogdan & Biklen, 2003; Esterberg, 2002; Kvale, 1996). Probing and/or follow-up questions were used, when necessary, to encourage participants to elaborate on

or clarify a response (Denzin & Lincoln, 2000). All interviews were individual. Five participants were interviewed once and had a follow up meeting for member checks and secondary questions. Two additional participants were only interviewed once. The transcription process for each participant began immediately after the interview and took approximately one week per participant.

Observations

Gillham (2000) notes that observation involves watching what people do, listening to what they say and sometimes asking for clarification. Observational evidence is often extremely helpful and provides additional information about the topic being studied (Yin, 2009). The research for this study afforded access to the special education teachers' classrooms at all three school sites. It offered the opportunity to perceive reality through the eyes of the participants in the case study. It is this opportunity that Yin (2009) believed is invaluable in producing a precise depiction of the case study phenomenon. The researcher observed each participant on one occasion between 60 and 90 minutes. The date and time for observations were pre-arranged with the school site principal and special education teacher. General education teachers were asked permission if the observations took place during co-taught segments.

During the observations, the use of an observation protocol was utilized (see Appendix E). The observation protocol documented time, date and activities that occurred during the session. Additionally, the researcher collected field notes. The researcher used the observation sessions to corroborate, compliment or refute evidence from the interviews regarding the information learned from and implemented during professional development activities. Keeping direct observation notes, logs, and a calendar separate from other data sources allowed the

researcher to review and analyze this information separately. These observation notes also provided support for the themes that emerge from the interview data.

Procedures

The data collected for this study followed a uniform process to ensure that all data was systematically collected and analyzed according to the following steps:

1. Participants were be invited to the study by the researcher, and were informed of the risks involved.
2. In-depth (semi-structured) interviews were held with participants in their respective schools. Semi-structured interviews have predetermined topics, but allow for researchers to explore relevant topics as they reveal themselves during the course on the interview (Merriam, 2009).
3. Responses to interview questions (see Appendix C) were audio-recorded with participant permission and transcribed within a week of the interview.
4. Follow up was initiated with each participant for member checks to verify content and themes from transcripts. Follow up questions were asked to clarify information or ask for additional information. Five of the seven participants were involved in the member checks and secondary interviews.
5. The researcher coded the data for emergent themes. The audit trail was utilized to ensure verifiable research steps throughout the process.

Additional details about data analysis are provided in the next section.

Data Analysis

Qualitative research studies involve a continuous interplay between data collection and data analysis (Strauss & Corbin, 1994). For this reason, I began analyzing data following the first interview to begin identifying patterns, and to facilitate subsequent data collection (Strauss & Corbin, 1998). Qualitative analysis is a form of intellectual craftsmanship. There is no single way to accomplish qualitative research, since data analysis is a process of making meaning. It is a creative process, not a mechanical one (Denzin & Lincoln, 2000). Similarly, a qualitative study capitalizes on ordinary ways of making sense (Stake, 2005). Stake reminds qualitative researchers that, "there is no particular moment when data analysis begins. Analysis," he explains, "essentially means taking something apart" (p. 71), which in this case, not only means understanding the ways special education make sense of the Common Core Curricula, but also identifying and defining the behaviors that emerged from participating in professional development activities.

Methodologically, Esterberg (2002) suggests, "getting intimate with data" (p. 157), and describes the main objective of immersing oneself in interview transcripts to "load up your memory" with the collected data. This dissertation research followed the data analysis and coding procedures suggested by Creswell (2009) and Esterberg (2002). Specifically, Esterberg (2002) suggested that open coding is a process where "you work intensively with your data, line by line, identifying themes and categories that seem of interest" (p. 158). Additionally, Creswell (2009) mandated the traditional approach in the social sciences that allows the codes to emerge during the data analysis. This research study will follow Creswell's (2009) six steps in the data analysis process and, although these steps are described in linear

order, Creswell described “an interactive practice” to analysis. That is, there is a recursive element to following these steps—the process is not simply a static, linear order of analysis.

Step 1: “Organize and prepare the data for analysis” (p. 185). During this step, I reviewed audio tapes from interviews and transferred into word document transcripts.

Step 2: “Read through the data” (p. 185). This step also aligns with Esterberg’s directive to “get to know your data”. Each transcript was read multiple times to reflect on the overall meaning to gain a general sense of the information and ideas that the participants convey.

Step 3: “Begin detailed analysis with the coding process” (p. 186). I utilized an interview coding protocol (see Appendix F) and followed Creswell’s procedure of organizing the material into segments by taking the text data and segmenting sentences or large phrases into categories. I label those categories with terms based on the actual language from the participants. This was the first step in open coding. I listened to the digital recordings and followed along with the written scripts with the intent of looking for significant words or phrases. During this process, the words and phrases that emerged as patterns or themes were listed in a computer document. An individual document that contained key phrases and words for each individual interview, and participant observation was recorded.

Step 4: “Use the coding process to generate a description of the setting or people as well as categories for these for analysis.” (p. 189). A second level of coding, axial, was initiated to focus on the significant words and phrases that were reoccurring in all of the individual interviews, and participant observations. The researcher reread all of the data to determine the themes that were emerging. Exploration of the data was deemed sufficient when repetition and redundancy occurred during initial and subsequent

interviews, indicating saturation had occurred, meaning no new information was being gained from the interviews (Creswell, 2013; Munhall & Chenail, 2008). The original transcripts that were created for each individual interview were then combined under categories and themes that had surfaced. This was accomplished through a comparative analysis investigating the similarities and differences that were found in the data. The researcher then began to look for possible relationships among the categories.

Step 5: "Advance how the description of the themes will be represented in the qualitative narrative" (p. 189). As I entered the third phase of the coding process, selective coding, data were reviewed for identification of dominant and subordinate themes. This next phase required charting the themes based on how the researcher determined they should fit together. The researcher used various methods to look at the data when determining themes. Abstraction was used to identify patterns where the use of various terms or phrases, although not precisely the same, resulted in the same experience for the participants (Creswell, 2013). Additionally repetition of data was used to determine dominant and subordinate themes. Repetition is one of the easiest ways to identify themes (Lincoln and Guba, 1985). Some of the most obvious themes in a collection of data are those "topics that occur and reoccur" or are "recurring regularities" (Lincoln and Guba 1985, p.53). Additionally, the researcher included themes and subthemes that did not constitute a majority of responses from participants. These themes were based on responses deemed as outliers. An outlier is a response that one or a few of the respondents in the research study stated (Sproull, 2004). Outliers can be an indication of a significant theme the researcher often has a hard time noticing but helps the researcher become aware that the opposite response of the majority of the responses can

be significant (Yin, 2009). All of the individual documents from all of the individual interviews and participant observations were merged into one document and the phases from the participants were placed under the corresponding categories and themes. The data was then separated by the appropriate category and placed with the corresponding research question.

Step 6: "Interpret the meaning of the data" (p. 189). Creswell recognizes that a researcher's own background plays just as important a part of the meaning making process as a researcher's fidelity to a theoretical lens. During my own interpretation process, my experience as a special education teacher helped inform my understanding of the participants' stories. As well, to convey the participants' perceptions of their experiences accurately, I focused specifically on what they said, the conclusions they drew, and their intentions for future practice. The themes that emerged from this study come directly from my awareness of the healthy tension between my own biases and the participants' own meaning-making processes.

Trustworthiness, Dependability and Transferability

For the purpose of this qualitative study reliability and validity will be referred to as trustworthiness, dependability and transferability. Patton (2002) states that validity and reliability are two factors that any qualitative researcher should be concerned about while designing a study, analyzing results and judging the quality of the study. Healy and Perry (2000) assert that the quality of a study in each paradigm should be judged by its own paradigm's terms. Lincoln & Guba, (1985) state the terms Reliability and Validity are essential criterion for quality in quantitative paradigms, in qualitative paradigms the terms Credibility, Neutrality or Confirmability, Consistency or Dependability and Applicability or Transferability are to be the

essential criteria for quality. To be more specific with the term of reliability in qualitative research, Lincoln and Guba (1985, p. 300) use “dependability”, in qualitative research that closely corresponds to the notion of “reliability” in quantitative research. Seale (1999) endorse the concept of dependability with the concept of consistency or reliability in qualitative research. To ensure reliability in qualitative research, examination of trustworthiness is crucial. Seale (1999), while establishing good quality studies through reliability and validity in qualitative research, states that the “trustworthiness of a research report lies at the heart of issues conventionally discussed as validity and reliability” (p. 266). When judging qualitative work, Strauss and Corbin (1998) suggest that the "usual canons of ‘good science’…require redefinition in order to fit the realities of qualitative research" (p. 250).

Trustworthiness is an important consideration in qualitative research because the researcher takes an active role in the collection and interpretation of others’ meaning making. Stake (1995) cautioned qualitative researchers against narrow thinking, and instead suggested that researchers learn to understand their research as their participants do, rather than impose their own assumptions. In qualitative research, these protocols come under the name of, “triangulation” (p.109). To increase the trustworthiness of the study’s findings, I employed strategies recommended by qualitative researchers. To decrease threats to credibility (Lincoln & Guba, 1985), I performed member checks with five out of the seven participants. Each participant was sent a copy of the transcript. After each participant indicated that the transcript had been read. I asked to meet with the participant again to discuss the accuracy of my interpretation of the interview and to ask additional probing questions for clarification.

To increase dependability (Lincoln & Guba, 1985) of study findings, I utilized an audit trail (Merriam, 2002); that is, a detailed explanation of the data collection and analysis methods

and how decisions were made throughout the study. Finally, to enable other researchers to make decisions about transferability (Lincoln & Guba, 1985) of results, I used rich, thick description (Merriam, 2002).

All researchers attempt to design and implement ethical and trustworthy studies. Indeed, qualitative researchers believe that if a study is credible, it has to be good in the ethical sense and be trustworthy. A sound case study is significant and complete, utilizes alternative perspectives and sufficient evidence and is reported in an engaging manner (Yin, 2009). There are additional strategies that I followed to ensure ethical and trustworthiness (Merriam, 2002). Merriam (2002) describes reflexivity, rich thick data, and maximum variation as strategies that support the trustworthiness of case study.

Merriam (2002) describes reflexivity as engaging critical self-reflection by the researcher regarding assumptions, biases, and the relationship to the study, which may affect investigation. I worked to remove my own bias by constant reflection on the interview and observation data. When developing themes, I reread transcripts and listened to audio tapes to ensure that I represented the participants' thoughts and comments accurately. Member checks were used to confirm my themes. Additionally, I interviewed participants for a second time to seek clarification (Merriam, 2002).

Researcher Positionality

One important distinction between qualitative and quantitative research is the role the researcher plays in the process. It is clear that the primary instrument for data collection and analysis in case study research is the researcher herself. As a researcher progresses through the research process, the researcher must acknowledge he or she is a human instrument and the primary research tool. As such, it is imperative for researchers to consider their own biases,

limitations, and views—throughout data collection, analysis, interpretation, and the reporting phases of the process. Qualitative research assumes that the researcher's biases and values impact the outcome of any study (Merriam, 2009). However, Peshkin (1998) submitted that, "one's subjectivities could be seen as virtuous, for bias is the basis from which researchers make a distinctive contribution, one that results from the unique configuration of their personal qualities, and joined to the data they have collected" (p. 18). To enable any audience of qualitative studies to evaluate the validity of conclusions extrapolated from data, researchers should, as part of the study, neutralize or bracket their biases by stating them explicitly to the full extent possible (Altheide & Johnson, 1994). For this study, in the interest of full disclosure and of guarding against unethical or unintentional influences on my interpretation of how special education teachers perceive professional development activities and transform their teaching practices, the following discussion outlines my personal experiences germane to this study.

I have currently spent more than twenty three working in K-12 education, including five years as a middle school special education teacher and 18 years as a special education teacher at the elementary level, which have given me keen insight into the professional development of special education teachers. Currently, working as a special education teacher in a collaborative setting with general education teachers has given me an even broader scope in understanding the importance of professional development for the purposes of learning and implementing standards based curriculum. From this position, I view the challenges that general and special education teachers face as they attempt to, once again, delve into a change in curriculum and face new evaluation systems for both students and teachers.

Limitations and Delimitations

There are limitations and delimitations to this study. The scope of this study is limited to research at only one school district and, therefore, results may not applicable to other contexts. Additionally, a larger sample including special education teachers at middle and high school teachers may give additional insight into the overall experiences of special education teachers participating in professional development.

An additional limitation to the study may be the data collection process. Since information was obtained during the interview, it will largely be dependent on the interviewee and what he or she was willing to share, since the respondent pool and the participants were limited to only special education teachers, the nature of their information will be limited to his or her own perspective and lived experiences. Patton (2002) stated that perceptual data are in the eye of the beholder.

There are delimitations—that is, how the study is narrow in scope (Creswell, 2013). Conducting case study research in only one school district is viewed as a delimitation. Although a complete district perspective could be gained by collecting data from the special education teachers in each individual school within a singular district, it is important to remember that one Southern rural school district may vary greatly from another Southern rural school district, whether of the same size, larger, or smaller. For this reason, speculation that this study's results are similar to another school district should be discouraged. Another delimitation is the fact that the study focuses solely seven special education teachers who agreed to participate in the study. Data sources, which include semi-structured face-to-face interviews, and then relevant observations, add to the narrow scope of the study.

Summary

Chapter 3 outlined the theoretical grounding, the methodology for this study, and the ways in which these decisions anchored the research design and process of analysis. The rationale for qualitative research and methods was described. The chapter concluded with a discussion of the strategies that were used to enhance the trustworthiness of the findings.

CHAPTER 4

RESEARCH FINDINGS

The present research study was conducted to understand how special education teachers' perspectives on knowledge and skills learned from professional development has on their classroom practice linked to Common Core State Standards (CCSS). Many of the participants were engaged in varying professional development activities. These PD activities ranged from collaborative learning to that of participation in formal teacher PD programs organized by the local school system. This chapter opens with a brief description of the professional development activities and follows with the themes revealed in the analysis of the participants' descriptions and experiences as they relate to the research questions.

Professional Development Activities

Participants in the study utilized three methods of professional development during the implementation of Common Core State Standards: face- to- face training, webinars and collaborative learning opportunities. Face-to-face training was the most utilized training method employed by the participating school district. All of the respondents indicated that face-to-face training was mandatory. The local system provided one math and one English language arts session for teachers in kindergarten through second grade and one math and one English language arts session for teachers in grades third through fifth. Each of the four sessions were a half day in length. Participants were required to attend a minimum of one training session.

Teachers that taught across grade levels were asked to choose the sessions they felt were most relevant. Five of the participants attended at least two of the training sessions for math and English/language arts for their current grade levels. Common purposes of face-to-face training included sharing information about CCSS and explaining curriculum changes from GPS to

CCSS. Additionally, the local school system used face-to-face training to explain assessment changes from GPS to CCSS. Participants felt that there was a lack of information in instructional strategies and differentiated training based on special educator needs.

At the state level, the Georgia Department of Education developed multiple webinars as a "convenient and cost-effective approach" to providing information on CCSS. Participants were required to utilize their planning and personal time to view webinars related to their content areas and grade levels. In contrast to choosing the most relevant webinars to their practice, more than half of the respondents reported that they were required to watch all of the webinars for K-5. Webinars caused more controversy than any other training method. According to three participants, the number of webinars school administrators expected participants to view caused frustration and burn-out. Sheryl stated she was, "webinared out." In addition to the webinars provided by the state, participants had access to resources through the Georgia Department of Education website (GADOE) and Regional services centers (RESA).

As a follow up to the locally provided PD sessions on Common Core State Standards (CCSS), a survey (see Appendix G) was administered by the local curriculum director. The purpose of the survey was to gather data on the types of supports, resources and services utilized to assist teachers with the transition to CCSS. As a part of the survey, teachers were asked to mark resources used and rate how helpful they were in presenting CCSS standards and delineating the sequence of standards from each grade level.

Table 2 summarizes the professional learning resources available to participants, the resources utilized and a rating of their quality.

Table 2: Summary of professional development activities and ratings

Participants	**Georgia DOE**	**Rating**	**RESA**	**Rating**	**Webinars**	**Rating**	**Local PD**	**Rating**
Kendra	Y	3	N	n/a	Y	2	Y	2
Sheryl	Y	2	Y	3	Y	2	Y	2
Pam	Y	2	N	n/a	Y	3	Y	2
Julie	Y	3	N	n/a	Y	2	Y	2
Alex	Y	2	N	n/a	Y	3	Y	2
Katie	Y	3	N	n/a	Y	3	Y	3
Tara	Y	3	N	n/a	Y	3	Y	2

Source: Common Core Survey
Ratings: 1=very helpful, 2=helpful, 3= not helpful
Accessed: Y/N

Research Question 1: **What are the special education teachers' perspectives on the professional development activities designed to assist them in implementing Common Core State Standards in their classrooms?**

The first research question provided insight into an understanding of the needs and preferences for special education teachers related to professional development. To explore the research question, the transcripts of the semi-structured interviews were explored using the coding process discussed earlier in Chapter Three. The responses are organized in the context of the two identified themes and subthemes represented in Figure 4.

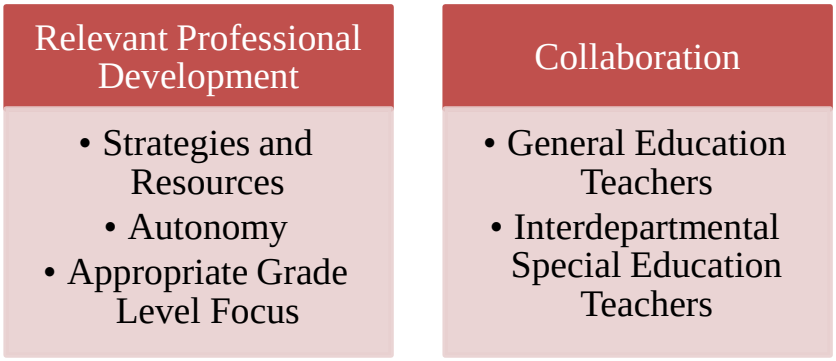


Figure 4: Key findings for research question one.

Relevant Professional Development

All seven of the participants described the need for professional development to match their own learning goals and be relevant to the needs of their students. Alex indicated "I look forward to training if I feel like I'm going to learn something that is going to help my classroom." Learning of new skills and strategies was verbalized by all of the participants as the number one reason they seek out professional development opportunities. This motivation to continue to learn to improve teaching practice was discussed by Sheryl when she described her expectations for learning the new curriculum. "We were all in the same place, and we were looking for something useful to improve our own teaching." Sheryl went on to further illustrate

her own learning motivations by describing her own fears about teaching. “I fear getting in a rut. That’s one of the reasons I look forward to learning new things. Falling into the same old teaching habits is easy to do.”

Alex and Sheryl indicated positive attitudes toward professional development. Throughout the interviews, both positive and negative participant attitudes were noted. Autonomy, the use of strategies and resources and appropriate grade level focus during PD emerged as a sub-categories of relevant PD.

Strategies and Resources

Six of the seven participants indicated that the CCSS professional development provided by the local school district was beneficial as an overview of the curriculum. However, further probing questions indicated that participants did not find the PD relevant to their individual instructional practices. The participants expected to glean new instructional strategies to implement CCSS and gain additional resources. Tara asserted that while the meeting on CCSS had lots of good information, “There was really nothing more than giving us information. I did not get anything useful to take back to my classroom.” Alex claimed professional development experiences should be based on more than a “dissemination of information or deficits in test scores.” Alex indicated a need for additional resources and aligned frameworks for new standards.

When probed further about the activities in the course, Katie spoke to the lack of activities present in the sessions: “We had some power point slides to watch and Mrs. S. went over how the curriculum was moving to different grades levels, but very little group discussion or hands on activities.” Tara reflected back on the introduction of Georgia Performance Standards and their implementation:

> When GPS was introduced I attended multiple meetings where we worked together and created pacing guides, tied frameworks together with standards and created our own assessments. None of that has taken place with common core. Based on my previous experiences with GPS, this was less helpful.

Two other participants mentioned that the frameworks created by the Georgia Department of Education (GADOE) were useful resources when implementing GPS, but the lack of similar instructional activities was not present with CCSS. Kendra indicated "no specific activities have been identified or benchmarked for the current curricula and no path has been drawn between the planned activities and the achievement of any targets."

Three of the participants specifically mentioned the need for differentiation strategies under the CCSS curriculum. Julie expressed that her goal was to "learn new differentiation strategies to help lessen the achievement gap with my students and those in the regular classroom, and to show growth through the year." As the special education teacher she is viewed as the "expert on differentiation" and is relied on heavily by her peers. Katie echoed this sentiment:

> My co-teachers look to me to help differentiate the curriculum for the students with and without disabilities. In kindergarten, we have to have all letter sounds and names taught by December. Kindergarten teachers are looking to me to figure out how to get the kids that struggle to learn letters and sounds in this time frame. I feel a great deal of pressure to provide strategies that will work. I am not sure that we have all the resources we need right now. Common Core didn't change the curriculum, they just increased the pace. I mean, you know, how is this helpful?

As the discussion of strategies and resources reoccurred during the interviews, probing questions were asked to specifically identify the types of strategies or resources these special education teachers hoped to gain from their professional development experiences. Participants that taught in grades three and four indicated a need for strategies that were relevant to the new assessments. Julie explained,

> "We have spent years and considerable money to purchase programs to help our students with test taking strategies for reading and math and now we have to prepare them to think differently than they have in the last five years. I worry I do not have the appropriate resources to help with this transition."

Tara displayed similar frustration related to math resources:

> During my math session it was made clear that the students are going to be expected to have a written explanation of their answers. Several of us were kind of amused at the thought of getting students to write about their thinking, but then I thought to myself I'm not sure how to teach this using the intervention programs we have now.

Alex teaches specifically in 5th grade. She indicated that students that are served in resource settings for reading are required to be taught from a list of approved researched based programs. She commented,

> I haven't been as vocal as some other teachers about common core, but I have some concerns that we are being left to figure out too much on our own. If my students are going to take computer based assessments then I want some resources and strategies to help prepare them. I have to be able to know what success is going to look like for my students and so far that is vague.

Participants that were responsible for grades kindergarten through second were not as concerned with assessments, but voiced concern over lack of resources that explained the new sequencing of standards. Sheryl commented, “I wish the county had provided a pacing guide during these sessions as they had for GPS. That would have been very helpful.” Katie stated that, “For professional development to be meaningful, I need to learn the skills I need to know and what I need to do to help struggling students.” Additionally, Katie indicated that during the webinars and PD sessions there was an emphasis on increased rigor in testing but did not elaborate on specifically how that was going to be addressed instructionally. She commented:

> I have lots of questions that nobody has been able to give solid answers for. So, what are the strategies we will use to increase the rigor of our instruction? How will the strategies be used in the classroom for our students with disabilities? How will we connect strategies to expected outcomes? I do believe it’s important to stay current and be open to new ideas, but I think it would have been more meaningful if the sessions had been more tailored to how we are going to help the students with disabilities meet these more rigorous academic demands.

Resource rich professional development was a priority for participants. They asserted, that to fully implement the new CCSS curriculum in the classroom, they needed additional resources and new strategies. Participants reported they preferred professional development to include strategies and resources that tied together frameworks, addressed differentiation and new assessments and sequencing of new standards. Additional, they articulated the need for resources that they were able to readily utilize in their classrooms. Unfortunately, participants cited insufficient resources, strategies and the lack of appropriate grade level focus during professional

development. The following section will discuss the data related to appropriate grade level sessions during professional development.

Grade-level Focus During Professional Development

Within the context of discussing relevant professional development, three teachers commented on how the sessions were organized. Participants wanted to attend sessions that were age appropriate for their current grade. Attending sessions that were for grade spans of kindergarten through fifth grade were not found to be very effective for several teachers. Kendra, a kindergarten and third grade special education teacher, spoke of her experience with a session that was not grade appropriate.

> I went to the 3-5 math training and found that it was really not appropriate for my grade level. The presenter stated that you could adapt some of the fifth grade math examples to lower grade levels. Well I could, but it would take a lot of adapting. For staff development to be good for me I have to be able to take things back to my classroom fairly easily. I don't mind adapting some things, but I can't spend my entire day recreating resources. Like I said it was a good information, but more appropriate for the older grades.

Participants stated that when they attended professional development sessions that were designed for multi grade spans, they were often limited by what they brought back to the classroom. Sheryl had a similar comment when referring to her experience with the kindergarten through 2nd grade ELA session that was not grade appropriate. She stated, "Most of the materials and examples were for 2nd grade students. It was not possible to adjust for lower grade levels."

Some of the participants also had suggestions for how to improve the focus for the professional development sessions. For example, Pam made suggestions concerning the content

of professional development sessions. “What I would really appreciate more than anything would be for them to find something for all grade levels and specifically address our special education students. Not to put us all in one big group and say this is what we are going to do.” Pam asserted that the examples provided were focused on one or two grade levels rather than providing examples for all the grade levels present. Additionally, she felt that there was a significant lack of focus on students with special needs.

Overall, the participants indicated that when they attended professional development sessions, they wanted to ensure that the session was meaningful. Sessions that were multi-grade level often led to a situation in which the teachers had to adjust the information to their grade level. While it may be easier for the presenters, the participants indicated that this was not a useful or realistic expectation, particularly when they did not have a great deal of autonomy in terms of choosing the professional development attended. Data from this study related to autonomy is presented in the next section.

Autonomy

The teachers across school sites had different perspectives of how much autonomy and decision making authority they perceived they had over their professional development. Katie and Pam indicated that they had some autonomy to choose their professional development while Julie, Sheryl, and Tara indicated a complete lack of autonomy. Throughout the interview process one topic that appeared in several conversations when discussing professional development in connection with student achievement was the fact that many schools base their professional development needs from achievement data on standardized tests. According to the participants, professional development frequently focused on weak areas within the school’s curriculum based on achievement data. While useful as a point of input, participants indicated they needed a

certain amount of autonomy for the professional development to be relevant. Participants felt that being given choice in their learning enabled them to determine for themselves what they needed to know and how they wanted to learn. As Pam stated, “I feel like I know what I need and what I do not need.”

When discussing the county’s model for professional development over the past several years and the types of choice that are given to teachers who participate, Julie summarized her experience by saying,

> About five years or six ago we had a math initiative because our scores took a drop county wide. Since that initiative, I have taken all of the required math training courses, but only one workshop related to actually working with special education students. I think we need professional development and other workshops not just geared in one area. You need to have at least equal emphasis on the strategies that work with our students as well as subject areas.

The emphasis on subject matter was mentioned by five of the seven participants as limited in usefulness. Pam, Katie, Tara, and Alex indicated a need to attend more professional development in the areas of behavior, Autism and strategies for students with learning disabilities. During the interviews, phrases such as “challenging behaviors,” “ social skills training,” “ reading strategies for Dyslexia,” and “ supporting autistic students through technology” were specific needs articulated by participants. Pam asserted that depletion of funding is a major issue.

> I wanted to attend a conference on Autism in Atlanta, but when I sent in my request I was told that there was no more money for professional development and I needed to make

> my request sooner. The problem is that I had no way of making the request any sooner based on the scheduling of the conference.

Additionally, Katie stated that she wanted to attend a Lindamood Bell training session, but the cost was prohibitive. Instead she was told to observe another teacher using the program. She stated, "I do not mind observing another teacher, but with a system this complex, I wanted to be directly trained."

In addition to funding issues, two of the participants indicated that there was little emphasis or importance placed on learning for special education teachers. Tara stated that her job was "more like that of a regular classroom teacher" and resulted in professional development that was generated "with only them in mind." Sheryl commented about the perception of county wide leadership:

> There is such a push for our students to be academically sound that I think they forget that these are special education students who need specialized support and strategies to achieve. They also tend forget that we are the special education teachers working directly with these students and we need that specialized training and support too.

The effective implementation of high-quality PD and utilization of effective teaching activities and strategies can provide the pathway to meeting the highly rigorous cognitive levels of the Common Core (Datnow, 2012). Participants indicated a need for locally provided PD sessions to incorporate activities and strategies that were applicable to their current grade levels and readily able to be utilized in the classroom. Research supports the idea that teachers expect that professional development should be practical and applicable to meet their needs (Guskey, 2009). Participants reported a clear disconnect between what was presented during the PD sessions and their expectations. This lack of shared expectations and what participants of PD

perceive to be valuable can facilitate negative attitudes towards professional development and foster a belief that PD will not promote student achievement (Gubi & Prescott, 2010; Pierce & Ball, 2009). The next section will reveal the data related to the efforts by participants to create their own learning opportunities through collaboration with their colleagues.

Collaboration

The need for these participants to find learning opportunities that were relevant to their context and purpose often served as their motivation for seeking out opportunities to learn with other professionals at their schools. In contrast to perspectives of the county wide professional development on CCSS, participants said that they received the most benefit from working together with general education teachers and other special education teachers at their respective schools. The informal integration of sharing work and conducting professional dialogue was a welcomed strategy that helped participants implement common core curricula in their practice. Kendra expressed quite clearly the impact that collaboration had when she stated, “Collaboration helped me to grow as a professional” and “Collaboration with peers has great potential for affecting instruction and learning.” Katie’s comment, “The best resource we have in this district is each other” paints a picture in which special education teachers have developed a strong sense of community through the implementation of the CCSS.

Participants discussed an essential need to collaborate with their colleagues on pedagogical and other teacher-related issues as a means of effective professional development individually and interdepartmentally within the schools where they teach. The following sections will discuss the data related to collaboration with general education teachers and with interdepartmental special education teachers within participants’ schools.

General Education Teachers

Six out of seven participants indicated varying degrees of involvement with the lessons, planning and assessment data. Participants were able to work with other teachers to share or learn new strategies. Participants within the study often referred to this type of collaborative engagement as important because all teachers were being active participants in their learning. Julie commented on the collaborative activities as one of her most favorable professional development formats. She stated:

> I worked with three general education teachers to help align and develop activities for English/language arts for our lower elementary students. They gave me activities that I could use with my small groups. We were able to share and trade materials that went along with objectives.

Pam noted that being able to practice the activities that her children would be participating in was a strength when working with general education teachers. “We were doing the activities that we were going to teach our children. Then we were able to bring them to the classroom.” Julie recalled a collaborative professional development training that she found interesting and helpful in promoting learning.

> I have a hard time sitting through professional development where I am lectured to for extended periods of time. When RESA provided the year long math training, now that was fun. We had some time for lecture, but we were always actively playing games and reflecting on student learning with other teachers.

Kendra commented on how common planning time has allowed her to work more closely with the co-teachers in her grade level:

> Working with my kindergarten teachers during planning time on new objectives is very helpful. I feel like I can turn around the next day and use these ideas in the classroom. We throw around ideas that are easily implemented. With the new objectives in kindergarten we actually practiced giving the new assessments to each other. So at first you feel silly, but you remember it if you actually do it you understand what is expected from students.

Alex spoke about why working with general education teachers was so effective for her. She stated that the being able to participate in the activities allowed her to know what to expect in the classroom: "The knowledge I gained from the common planning time I have with my teachers gives me a better understanding of how to teach my students. Plus I get to borrow materials and resources." Tara indicated that working and planning activities with the general education teacher made learning unfamiliar curriculum less intimidating.

> I have only taught at lower grades levels. I am much more confident with the curriculum in grades k-2. When I was moved to fourth and fifth grades this year, I did not feel confident about my ability to teach math at this level. I was in charge of pulling small groups of students that had not mastered concepts. I think my co-teacher knew I was hesitant and took the time to make sure I was comfortable with the curriculum. We meet once a week to cover content and discuss groups and instruction. If I do not understand something or how she wants it taught, I feel very at ease asking her to explain.

Alex spoke to collaboration providing improvement in the areas of flexibility and responsiveness and also differentiating instructional strategies to "meet learning styles needs of all students, not just students with special education needs." She believed that through collaborating with the general education teachers, she was able to increase the use of

differentiated instruction, “to improve the performance of at risk students and students with special needs.”

Sheryl reported that teachers are now talking together about best results and how these results were achieved through instruction and assessment. “Teachers are now more willingly share their instructional ideas. After all of this sharing occurs, we work hard to incorporate these practices into our own classrooms.”

When probed about an example of new instructional ideas, Sheryl provided her math class as an example. “We looked through the new curriculum and determined we could use a computer program to assist us in assessing and practice on more abstract skills at the beginning of each new math data cycle. This is something we had not tried before.”

Although collaborating with general education teachers was a positive experience for most participants, it is not without its difficulties. Participants were eager to work closely with their general education peers, but found that there were several barriers to regular collaboration.

Sheryl and Julie indicated that common planning time was not a priority when developing the special education schedule at their schools. Sheryl commented,

> Each year in the spring we work on our student projections and schedules. I have asked year after year that we include planning time for at least one of our grade levels and each year it’s an issue. We have been told that special education drives the schedule, but that is in theory only. I have taught several years with no common planning time for any of my grade levels.

Julie supported the difficulty in planning without shared planning time by stating, “ Without common planning time, it can feel a bit like walking around in the dark, you have no idea where you are headed.”

In addition to common planning time, several teachers indicated that not all general education teachers were suited for collaborative teaching. Tara stated,

> I have worked with multiple teachers over the past few years and I always have those I would prefer to work with. Some teachers are open to sharing their classroom and others are not. You know how that is, some prefer to have complete control while others look to you as another valuable resource in the classroom.

Alex, Sheryl and Pam were generally positive when discussing collaboration with co-teachers, but indicated that certain attributes made it easier to work with select teachers within their buildings. Pam indicated that teachers who were, "open to suggestions and shared ideas" created better collaborative partners. Alex indicated a "willingness to share responsibilities and being viewed as an equal partner" was important to her collaborative relationships. Lastly, Pam sought out teachers that demonstrated a "willingness to differentiate for all students and included special education teachers in the planning process." Six of the seven participants reported collaboration resulted in more effective instructional practices.

Working with other Interdepartmental Special Education Teachers

Pam and Sheryl described the nature of working relationships of the special education team, and the ways that they depend on other special education teachers within their schools. Pam described her work as effective when each person on the team was willing to cooperate and participate, filled by a sense of give and take and fairness in decisions made by the team. Pam stated, "I think one reason it works for us is that we are so different. I like how we share and we give to the conversation about what we are doing. It's okay if someone doesn't agree. We are all very different, but we come together very well."

Katie, Pam and Sheryl reported that the collaboration with other special education teachers was a logical step for them because of the established, working relationship. For example, Sheryl stated, “It’s not like we are adding anything to our workload because the relationship was already there. It wasn‘t, like, how are we going to do this, or what is it going to look like because the relationship was already there.” She further indicated that each person was an essential part of the team, and each played a valued role.

Throughout the observation review and the interviews, participants referenced two types of goals. These were goals for the school special education team and goals for students. Katie asserted, “With the new curriculum, we needed clear goals for ourselves as well as for the kids. So there was sharing between us to know what we needed to focus on and then have time to discuss.”

Three participants reported clarity about what was to be accomplished. Julie commented:

> You have to know where you want the students to be. You have to have goals to see if what you are doing is effective. If you didn‘t know what you were doing ahead of time, what you were going to focus on for teaching, you might waste half the time floundering. Some direction is important. We have set goals for our special education students as a whole group. We want to see x percentage of growth in math for this grade or x percentage of increased reading scores for this grade. We talk about what was most important, and what we as a team need to do.

Julie, Katie, and Sheryl reported that setting clear short-term goals that are based on specific data, saved time and planning. Instead of one teacher working independently, a team undertaking planning tasks resulted in strategies the team could implement separately in the each of their classrooms. Sheryl indicated, “We share a lot every day about our students. We really

like it when we share information about what had worked for a student." Co-teachers also appreciated planning around long-term units. "We spent a lot of time talking about that. What worked for us was we could play off each other and what we had already done and talk about where we are going next."

The comments of three participants demonstrated the importance of student results in the collaborative process. What students learned was a strong motivating factor for sustained collaboration. Julie, Katie and Sheryl cited collaboration with general education teachers as a meaningful resource for implementing new standards, sharing the responsibility for all students, mentoring in subject areas and a shared focus for CCSS. Although all of the participants indicated that working together was a positive experience, they did not share the same level of collaboration. Sheryl and Tara were not given specific direction regarding the data teams to work with, and indicated a lack of direction when collaborating with others. Katie and Julie worked more closely with the special education team within the school and shared more common planning time with general educators. However, Katie and Julie indicated a lack of follow up from the locally provided professional development. All participants were assigned a data team by their school principals, but four out of seven participants indicated that these data teams did not always meet at a mutually convenient time.

The lack of common meeting time reduced the participation by participants. Kendra, Pam and Alex were strategically placed by the school administrator into data teams and effort was made to include planning time with general educators. Kendra, Pam, and Alex shared the most time with special education teachers and general education teachers.

Summary for Research Question One

The perspectives of relevant professional development and collaboration were discussed and reviewed in research question one. It was the perspectives of participants in this study that changes in classroom instruction did not occur through participation in the professional development provided by the local level or the state provided resources, but resulted due to teacher motivation to seek out their own professional development through collaboration with general and special education teachers within their own school sites. The participants gave a variety of examples where improvement of instruction has occurred as a result of increased collaboration with specific themes of planning, communication, instructional strategies and data driven instruction. The evidence of this growth was indicated through qualitative semi-structured interviews and observations of participants during planning and within the classroom.

Research Question Two: How do the special education teachers' perspectives on the relevance of professional development impact how they implement common core state standards in their classroom?

All participants indicated that the motivation for engaging in professional development was to prepare their students for the increased rigor of the new standards. Participants frequently discussed the new Common Core State Standards (CCSS) and how their practice would need to change in response to the rigor and format. However, findings from research question one indicated that participants did not find the professional development provided by the state and local school system met their professional development needs. Participants articulated the need for PD to be relevant to their needs by providing autonomy in PD choices, providing strategies and resources when attending PD sessions and providing appropriate grade level focus PD sessions. Additional findings from question one indicated participants sought to collaborate with

general education teachers and other special education teachers as a means of addressing their learning needs. Collaboration with other general education teachers was cited by participants as the most helpful professional development activity to assist in improving their teaching practices and ultimately increase the rigor needed to meet the new testing standards. As participants engaged in the collaborative process, themes and sub-themes emerged to address how participants were using the collaborative process to meet their professional development needs for implementing CCSS. The two themes that emerged were a) teacher motivation and b) changes in instructional practices participants utilized with subthemes of: planning, communication, instructional strategies and data driven instruction. Each is described in more detail in the following sub-sections. Figure 5 summarizes the themes and sub-themes.

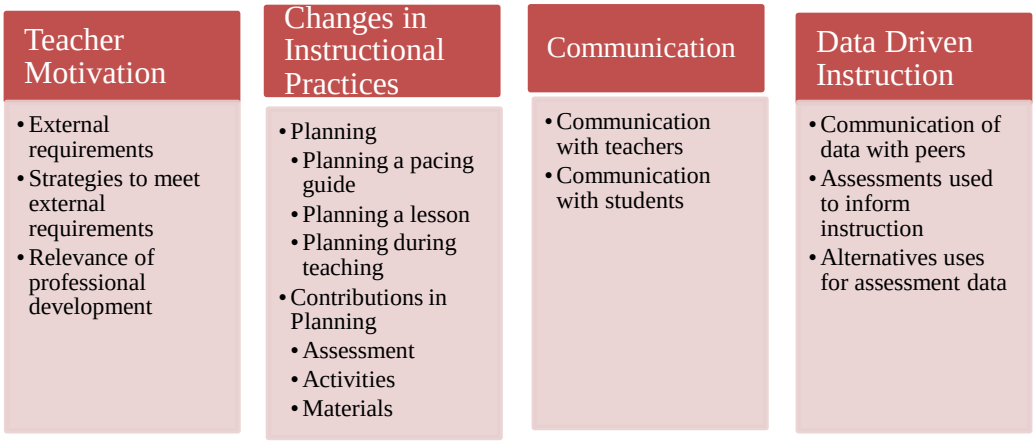


Figure 5: Findings for research question two.

Teacher Motivation

If teachers attend a professional activity that perceive is a waste of their time, or does not pertain to their classroom or teaching, little motivation for implementation can be expected (Guskey, 2003; Fullan, 1993). The seven participants mentioned that they liked attending professional development activities, but were more motivated when sessions or activities were more closely aligned to meet their needs.

External Requirements

Four of the seven participants also expressed that they were motivated to develop connections with other colleagues as a result of concerns regarding the new rigor of the standards and testing requirements. Sheryl and Julie expressed a lack of motivation to fully engage in viewing the online webinars and attending to the PD sessions because of the lack of relevant information during the course. As Sheryl stated:

> You go to these staff development things, and it's like, "OK, we're going to talk about Common Core which is something that I expect will help assist me in some meaningful way, and so we're talking for 30 minutes when I realize we are just getting more information and nothing really useful. At this point I have a hard time listening and being motivated to attend.

All of the participants in this study mentioned that they positively viewed professional development and saw it as a vital part of their learning and elaborated on opportunities they found to be very useful. Tara mentioned how useful information sessions on CCSS can be, especially to new teachers. She explained:

> The local CCSS training addressed important changes in standards for students in lower grade levels and I just know that younger teachers, who had very little exposure to these standards compared to the Georgia Performance Standards benefitted from being there, but those of us that were relatively familiar with both sets of standards were looking for something more which we could immediately use in our classrooms.

Pam reinforced this idea when she asserted, " I respect our administrators, but I have to admit I am never really excited to attend when we are required to participate in mandated county

wide PD sessions. It always seems we are hit with how poorly we are performing and this next new thing is going to help."

Julie also spoke to her struggle to "take seriously" the webinars provided by the Georgia Department of Education and local CCSS professional development. She indicated a poor quality due to the lack of "immersing teachers:"

> They repeatedly show one high school teacher as an example for several of the new standards. For me this isn't motivating at all because I need hands-on training. …you don't just go to a computer and watch someone give a lecture or perform a task. You actually need to sit down as a student and do. You actually need to participate in a class where you are a student immersed in the content. You live it and learn it.

Julie also indicated that this level of immersion would help build special education teachers' understanding for how CCSS should look and feel within their own classrooms, thus supporting their sense of competence and motivation to continue learning.

Strategies for Meeting the External Requirements

Although two of the participants indicated a lack of motivation for learning and participating in CCSS professional development, participants also frequently described their motivation for learning strategies and implementation as contingent on the rigors of the standards and their pending assessments. The participants in this study generally indicated they had more confidence in professional development situations where there was scaffolding based on standards previously taught. Alex stated, " I feel confident if I have previously taught the standards and get to use my old lesson plans because I can find information and familiar

activities, but if it's a new concept or something and I haven't taught, then it's a bit harder to feel confident and prepared."

Participants also reported higher motivation for learning concepts and strategies in weighted areas of assessments (math and reading) as opposed to non-weighted areas(science and social studies). Participants felt that they had more pressure to learn about concepts relating to math and reading assessments due to the way these scores were going to be reflected in their school's performance and their evaluations as teachers. Julie observed,

> Everyone is very concerned about the new assessments and how we are going to prepare our students. Teachers and administration are looking for ways to bolster support for low performing students. We are trying out new programs, practice assessments and grouping arrangements for students. Teachers are really looking for way to help our students.

Two participants reported that their schools were offering professional learning by utilizing government funding through their local RESA districts; however, funding was still limited and available only for core content areas.

Relevance of Professional Development

Although four of the seven participants reported a high level of motivation for learning new strategies and concepts for math and reading to address the rigor of new assessments, others indicated that they were not comfortable with some of the changes taking place within their schools. Tara commented: "We are slowly replacing science and social studies with more supplemental math and reading time in the general education classroom. We have combined both of those subjects into a 45 minute block per day and rotating instruction." This replacement of other subject areas was a common theme among participants. When probed about changes in scheduling of content subjects, all seven participants reported a decrease in time for social

studies and science for more supplemental time in math and reading. Additionally, two out of seven participants feared that the impending tests would require them to teach in ways contrary to their own ideas of good practice. Alex asserted,

> I am very motivated to see my students perform well on these tests, but I would just be lying if I said my motivation was selfless. I worry about my job and the constant talk about how my pay and job performance is going to be based on these test scores. I feel like I am forced into ignoring some of the needs of my students in favor of teaching to the test.

Two participants indicated that they were losing class time with their students in lower grade levels to assist with administering tests and to help remediate students that were not students with special needs. Both participants reported a loss of class time totaling three weeks. During the three weeks, they were used to give mock pre-tests, run hourly math boot camps and participate in grading written portions of mock end of course tests. A participant (participant asked that her pseudonym not be used in this section) commented:

> I went to my administrator to discuss the class time I was losing because I was constantly being pulled to assess students. I even presented the actual time out of my class. He wasn't concerned at all and merely shrugged it off. When I, in a round about way, indicated that this really violated the rights of students with IEPs, he said the school as a whole benefitted from addressing lower test deficits in low performing students more than worrying about class time for kindergarten students. At that point it felt pointless to respond.

Although not reported in interviews by other participants, both participants that reported loss of instructional time at lower grade levels were from two separate school sites and not under the supervision of the same administrator.

Comments in interviews also suggest that for Tara, Julie, and Sheryl, the schools are highly stressed environments where a premium is placed on improving student test performance. Five participants indicated that motivation to learn new teaching strategies was prompted by pressure to raise test scores of low performing student with disabilities. Tara commented,

> We have several sub groups in our school and our student population with disabilities is the largest. I have heard over and over since the No child Left Behind Act that our sub groups are always in danger of hurting the performance of our school. So yeah I worry that is going to be no different. I am constantly worried that our students will not be recognized for anything other than a test score. So I am always trying to look for a balance of strategies that helps with testing taking and teaches content as well.

Julie echoed the same sentiment when referring to providing resource segments for intervention strategies.

> I am always on the lookout for a new program or strategy that can help one of my students. I see myself as building a tool kit for instruction so that no matter what students I teach I have a tool to teach them with….but with the increased focus on test taking I am having to reassess how much time and which resources to use. It is stressful to try and constantly negotiate between what I think the student needs and what my administration wants me to focus on.

Participants also reported they were more likely to teach to tested content and to spend instructional time on test preparation. Katie and Julie were tailoring instruction to math and

reading segments only with at least half of their instructional time being utilized to teach test taking skills. These participants perceived that the focus of teaching to the test would have negative effects on students, but were more motivated to see a rise in test scores as they reported in greater percentages that their students experienced significantly lower scores than their general education peers. As Sheryl commented,

> I teach in the lower grade levels where standardized tests are not given, but we feel the stress of these tests in a different way. We are giving the mock tests even in first grade. Administrators want kids to at least be familiar with how these test will look, but they don't realize how absolutely stressful it is to our students and the teachers when we all have to reflect on their performance. It doesn't matter if the state looks at them, our leaders at the district level do and it gets to be overwhelming.

The result of the interviews reveal that participants are motivated to support their students, but feel pressure and stress to negotiate between what they feel is academically relevant to their students and the consideration of high stakes testing within the school environment. The next section will discuss the changes in instructional practices articulated by participants.

Changes in Instructional Practices

Sherer and Spillane (2011) indicated that planned change involved a conscious decision by one or more members of a group to adapt some existing way of working or to introduce a new way of working. Sherer and Spillane (2011) asserted that understanding change in schools necessitated attention to the interactions taking place, the beliefs of those individuals interacting that change was possible, and the willingness of individuals to choose to change. Through interviews and observations, participants indicated increasing or attendance to instructional

strategies that would assist in planning for implementation of CCSS or assessments associated with CCSS.

Planning

Planning has been divided into two sections. In the first section, a description of the collaboration and communication observed through the planning process is provided and is divided into three observed events: planning a pacing guide, planning a unit and planning during teaching. The second section will describe the contributions made by participants through the planning process.

Planning a pacing guide for common core.

Participants indicated a need for a pacing map to guide their implementation of the common core. As a result of feedback provided by all teachers during the initial professional development meetings, the county offered elementary schools the opportunity to form committees to create new pacing guides for the standards. Each school volunteered to take on specific areas of content. For example, school site one agreed to develop the math pacing guide for grades kindergarten through second. School site two developed the pacing guide for English and language arts for grades kindergarten through fifth and school site three completed the pacing guide for math for grades third through fifth. Not all participants in this study contributed to the creation of the pacing guides. One representative from each school participated on each committee. When asked about how special education teachers were chosen, Pam indicated, “Our principal did not see the need for every special education teacher to be present. Having all our teachers tied up in meetings would have been difficult in terms of substitutes.” Sheryl stated: “I volunteered because I was involved with our GPS guide. It just made sense.”

Because they had previously been involved with the creation of pacing guides for Georgia Performance Standards, Pam and Sheryl were familiar with planning and did not spend significant time on discussing the steps for creating the pacing guides. Along with the general education teachers present, they refreshed themselves and glanced over the standards that were the same for each grade level and created a list of standards that were shifting. They took advantage of the previous GPS pacing guides that contained lesson plans and notes developed in accordance with the curriculum laid out by the school district.

The main focus for first meeting was to revamp the pacing guide by either adding or shifting standards. Sheryl indicated to the group, "We are going to focus on very specific standards for each grade level so that we can spend time on what needs to shift or be added." Pam spent time engaged in conversation with her group about students and their specific needs related to the new standards. Pam added, "We spent our time talking about the kids who will need our help, what kind of help will they need, and how will we do that?" (Observation, 10/27/14).

Planning a lesson.

In addition to changing the pacing guide, participants reviewed unit teaching plans with their general education teachers. In doing so, they reaffirmed their teaching pedagogies, planned activities, and identified their roles. Kendra and Alex sat down with their general education teachers before the start of a math and reading unit, went over the curriculum map in the pacing guide, and identified concepts that might be hard for students to comprehend. Review of the pacing guide created the opportunity to formulate alternative explanations or examples to make the concept comprehendible (Observation, 10/22/14). At the start of their school year, Kendra indicated that she and the general education teacher used data gathered from the previous school

year to help identify students' strengths and weaknesses. Kendra stated, "We have always looked at previous data from students, but this is the first time we have used that data for something other than placement."

During the observation, Kendra and Mrs. E were discussing the unit on elapsed time and the issues that students had previously encountered when only using the counting forward method to solve problems. Kendra indicated that she thought it would be helpful to introduce the use of a timeline and T square so that students would have multiple ways to solve time problems. Kendra demonstrated the T square method from an example from the unit frame work. Through the last 30 minutes of the observation, Kendra and Mrs. E arranged small groups, outlined the introduction of each method and assigned parts of the teaching lesson between them. Through the planning process, it was evident that Kendra and the general education teacher were equally invested in the development of the unit. Each teacher gave suggestions and discussed pre and post assessments, differentiation strategies, and small group activities.

At the beginning of the year Alex indicated that the general education teacher she would be working with in reading emailed her the unit teaching plans at the beginning of each unit and inquired whether she thought they should change anything or switch things around. Having taught in this grade level for only two years, Alex responded by suggesting either a few sequential changes or the addition of an activity. She stated "Since we have the new common core, I was glad Mrs. C gave me the opportunity to sort through it. In the past we just go with the flow and seldom take the opportunity to negotiate the curriculum"

During an observation of their common planning time (10/22/2014), Alex met with the general education teacher to plan for a unit on comparing and contrasting two or more characters, settings, or events in a story. Although the general education teacher took the lead in planning for

the introduction of the material, both teachers discussed the timeline for reading the story, the types of graphic organizers that would best suit the lesson, vocabulary and a writing model for the post assessment. Alex discussed several options for her students with disabilities. She requested the use of a computer for one for the written assessment and an extended timeline for another student for the vocabulary assignment.

Additionally, Alex commented:

> Our communication is pretty good. We have the pacing guide for the entire unit, we know exactly what we are doing on each day, and we know who is doing what. It is not set in stone. One morning in our class Mrs. C was going to introduce the story for the lesson and I was doing a follow up activity the next day, but then something came up and we switched. It worked out fine that way. We are very clear on who is doing what and we are very flexible; both of us are fine with things changing.

As a team Alex and the general education teacher had good communication and an explicitly laid-out teaching plan, but were also flexible to accommodate changes in the teaching plan as needed (Observation, 10/22/2014)

Planning during teaching.

During an observation (10/27/2014), one participant made spontaneous changes while teaching a concept. For example, Julie's lesson plans for teaching multiplication through use of an area model indicated six different types of examples followed up with a worksheet of multiple independent problems. During the observation the general education teacher and Julie worked through several examples. After the examples, Julie did a quick check (i.e., thumbs up from students) to assess if the students understood the examples. After the students responded, the general education teacher and Julie decided not to use three more examples but instead gave the

students some time to work individually on the first few problems independently (Observation, 10/27/14). Julie explained, “If we had continued as planned in our lesson we would have wasted time.” As the students worked independently, Julie and the general education teacher monitored work. Although this was planned as a whole group lesson, each teacher found students that were struggling with the multiplication model. Julie volunteered to pull these students to the back table and work through more problems with the students as the general education teacher continued to monitor others. Julie’s group was fluid as some students quickly saw their errors and were ready to work independently while others were added to the group as the general education teacher continued to monitor.

At the end of the class period, Julie and the general education teacher decided to add more practice for the next day rather than moving onto the next model for multiplication. Julie explained, “With the new standards, planning is a continuous process and is something we are improving this year. We have discussed that we must have a plan for immediate activities or teaching, and must constantly look for what went well or did not go well so we can make changes on the spot. It is no longer just teach it and assess later.” (Observation, 10/27/2014).

Contributions in Planning

In addition to curriculum planning, two participants indicated that planning collaboratively has provided the opportunity to contribute in three important areas: assessment, activities, and materials. Although these participants did not indicate that these were newly acquired skills, they did indicate that the more rigorous testing and accountability for all students compelled them to assert themselves more frequently in the collaborative planning process.

Assessment.

Tara's contributions in assessment were twofold. First, she introduced a pre-test assessment that all students take several days before the test. The pre-test assessment contained 10 or 12 questions from different sections of a unit. Results of this activity helped both teachers identify students who needed extra help and who might struggle with the content. This assessment provided feedback to teachers about specific content that should be reviewed either in a small group or in the whole group. Tara said, "I will take a look at what questions most of them get wrong and usually it is pretty clear. If twelve people got question seven wrong, obviously we should review that content." (Observation, 11/4/14). Second, Tara modified tests to make them less confusing for all students, especially for students with disabilities who have either short-term memory issues or reading issues. She changed their vocabulary, increased their font size, and limited the options in multiple-choice questions. Tara commented, "Sometimes we reword questions. For example, *All of the following is true 'except'* questions, which are always hard." Regarding the format of a test, she suggested breaking down one large five point question into five short answer questions worth 1 point each (Observation, 11/4/2014). Tara indicated that providing the modification for the test allowed students to "break down the material into manageable parts" and "provide additional opportunities" for responses.

To assist student learning, teachers must provide monitoring and feedback so students understand how their performance is expected to improve (Reeves, 2011). Tara used assessments to provide crucial information on what was or was not working for student learning. Both she and the general education teacher analyzed and evaluated instruction to understand how to improve student learning

Activities.

Activities that modify the curriculum require the teacher to make adjustments to what is being taught or expected in the general education classroom (Fuchs, Fuchs, & Compton, 2004). Tara and Katie contributed to activities in the co-taught classroom that created opportunities for involvement for students with disabilities and allowed for a variety of student responses.

In the current co-teaching class, Katie contributed by adding, modifying, and removing activities from the curriculum. Drawing from her previous teaching experiences, Katie introduced a scavenger hunt activity for kindergarten. In the activity, the students acted as detectives and hunted for words that had medial short vowel sounds. Katie and the general education teacher wanted their students to understand and discriminate short and long vowel sounds in the medial position. During the observation, Katie indicated that two of her students increase their level of engagement when activities allow for movement.(Observation, 11/4/14).

Another example of contributions made by a participant was Tara's math center activity. For this, students were given an activity sheet that asked them to look for numbers and then use their knowledge to classify them as either prime or composite. Students were excited to leave the classroom and locate the numbers that were placed by Tara throughout the building. This application activity helped them to synthesize and compare the characteristics of different numbers to increase their number sense (Observation, 11/13/14).

Tara's input on distinctive activities resulted in changes in the curriculum. For example, in a reading lab, students read different types of stories on the computer and documented their reading through a pre-determined writing project. Tara felt it was a confusing lab, and she believed it only addressed the standards tangentially and did not focus on either a particular skill

or specific writing processes. She discussed it with the general education teacher and they decided to remove it from their pre-determined reading curriculum (Observation, 11/13/2014).

Katie and Tara contributed to activities that were targeted at increasing the engagement and student responses. Instructional activities that increase the engagement and allow for alternative ways for student responses are a critical part of accessing curriculum for students with disabilities. (Gargiulo, R., & Kilgo J., 2000). Specifically designed activities can change how the content is accessed or the method of student response (Gargiulo, R., & Kilgo J. 2000; Fuchs, Fuchs, & Compton, 2004).

Materials.

Before Katie started co-teaching in math, she stated that she had been in the habit of distributing handouts that included notes or formulas so students could focus more on listening. These were provided to students with IEPs in resource settings. As she began co-teaching, she observed many students were not listening attentively in class. Katie modified the format of the handouts strategically added blanks to the handouts that students could fill in as they listened to lesson. This middle-of-the road approach meant that students were not overwhelmed by having to write complete notes, but they were responsible for filling in the missing information. Katie explained the importance of study guides by saying, “If we know the concept is particularly hard or has lots of diagrams or steps, we give handout notes to everyone in the class so that students focus more on listening and less on writing…” Katie noted positive outcomes of this change as students seemed more focused and involved in the lesson. In addition to modifying handouts, Katie also provided input in modifying assignments in accordance with the needs of the students or as per their IEP requirements. She said, “I modify tests or I modify assignments, whatever is needed for the my students, but I have included several non-identified students as well.”

When the fifth grade teachers at Tara's school committed to a 100 minute block schedule for math, she suggested either eliminating a portion of a homework assignment or reducing the number of problems students were asked to complete at home. This was meant to give all students sufficient time to comprehend a concept. She commented:

> They did not have enough time for it to be meaningful and were rushing through the problems to finish. We saw that it was becoming a negative. Reducing the number of problems meant students had more time to focus and made the exercise more valuable. Having time to reflect on the class lesson and apply new knowledge to the problem helps in learning, and that is the most valuable part to the process. Rushing through content and trying to cover as much as possible does more harm than good.

Participants demonstrated knowledge of content and pedagogy through various forms of planning. They planned activities that used recognized techniques for teaching math concepts, and they also implemented lessons that featured exploratory activities. Participants relied on guidance from both previous experience with curriculum documents and general education teachers in the selection of content and assignments. Participants were involved in selecting both content and pedagogical activities, and they demonstrated enthusiasm for introducing their own lesson ideas and drawing on personal interests to plan activities and choose supplemental materials.

Observed Instructional strategies

This section describes instructional strategies utilized during observations. Participants indicated, during secondary interviews, that these were skills that were utilized more often as a result of the increased rigor of Common Core State Standards (CCSS). I have grouped

contributions gathered through observations into three sub-sections: asking questions, running review sessions, and conducting pre-test assessment.

Asking Questions

Pam asked questions while conducting an activity. She used a wide array of questions that required students to retrieve, apply or synthesize information. Sometimes she asked questions when the general education teacher was teaching: (a) to clarify the content and (b) to break down a concept into parts. For example, Pam drew a Venn diagram to assist in a way to compare and contrast two characters from two different stories. Pam asked, "What are the different parts as we go from outside in?" There was no response. Pam brought out another compare and contrast diagram from a previous story and said, "Sophia and Claire are the same age, but not in the same school. Where would I place this information on the new diagram and what might come next?" Students responded, "place the school on either side and the grade in the middle" (Observation, 11/13/2014).

Pam recognized and responded to students thinking during classroom interactions. When students were in need of clarification, she demonstrated how to organize the concepts and what tools to use to provide a visual aid.

In another example, Sheryl worked with a small group of students on a shape assignment. In this assignment, students were asked to identify characteristics of 2d shapes and place them into the proper categories based on the characteristics. Sheryl asked the following questions to help students complete the assignment: Sheryl: "What about squares? Where do we know about squares?" Students: "They have 4 sides" Sheryl: "Yah, but what else?" Students: "the sides are the same." Sheryl: "Ok, do you mean they look the same, go the same direction..what do you mean by the same?" Students: "the same length, same distance" Sheryl: "The same length, very

good. How about a rectangle? You see the rectangle also has four sides, but how is it different from the square?" A student: "two sides are one size and the other two sides are a different size." Sheryl: "Exactly, and what math vocabulary describes those sides? What do we call lines that never touch, but go in the same direction?" Students: "parallel." Sheryl: "That's right, now let's use these characteristics to place both shapes on our chart." (Observation, 11/13/2014). To make sure students were understanding the content being taught or to help them complete an assignment, Sheryl would ask analytical and/or developing questions. She also encouraged students to ask questions.

Conducting Review Sessions

In several classrooms, participants conducted review sessions in both whole-group and small-group settings. Whole-group review sessions consisted of quizzes, games and simple oral questions and responses. Julie commented,

> The teachers I work with are great, but I have noticed that they, and I include myself too, do a poor job of reviewing material. We test and assess and move on. In both of my fourth and fifth grade classes, I have made this part of our planning focus. I have starting gathering tests, especially in math, and trying to categorize specific skills that a majority of students don't understand. We can then design reviews that are specifically targeting weak areas.

During an observation, Julie and the general education teacher, were reviewing multiplication using the distributive and area model to solve multiple step word problems. Quiz questions appeared on PowerPoint slides and were displayed on the Smart board. Julie or the general education teacher would read a question and allow time for students to work in groups to

come up with an answer. The groups were pre-determined and were numbered from one to seven. Students were given an option to select interesting group names.

The following is an example of the whole-group review session quiz on the topic of word problem multiplication:

> Julie: "Ok, your first question is a 10-point question (reads it from the smart board); "Name and describe each step of the area model when multiplying a two digit number by a four digit number when the four digit number ends in a zero." [Julie and the general education teacher moved around in the room to make sure that each group was working on the question and explained what was expected of them. Question # 1 was displayed all the time in the class when students were working on finding the answer. Julie: "We are not looking at speed, we are looking at the product and let me know when you are done." [Julie and the general education teacher made sure that all the teams were working on the topic and answered their questions, if any.] Julie: "30 seconds." Julie: "Five…four…three…two…one…zero. Pull them up and hold up your boards." Julie: "Step number one is what?" Students: "expand both numbers based on place value." Julie: "expanded form, that is correct, but what about the number ending in zero?" Student: "we can put down zero because we need it as a place holder in the final answer" [The general education teacher was keeping score on the whiteboard] (Observation, 10/27/2014).

Review sessions in small-group teaching consisted of either making note cards or facilitating guided reviews. Often these review sessions followed a quiz in the whole-group teaching a day prior to the test and after the pre-test assessment. For example, in a small-group, Katie conducted a review session for a social studies quiz and reading quiz that included making

notes cards, flash cards for vocabulary and a quick Jeopardy game. She asked questions and added more information to student responses, if required, to frame a summary on the topic. She drew diagrams to go along with the information. (Observation, 11/17/2014).

Julie and Katie utilized activities that promoted student engagement and collaboration. Through the use of games and cooperative student learning, Julie maximized student activity and engagement in the task. Katie used her knowledge of students to create different activities for the students in her small group. Participants demonstrated a genuine, consistent desire to engage their students in both creative and traditional ways.

Conducting Pre-test Assessment

As with review sessions, two participants conducted pre-test assessments in co-taught classes. This was an activity that two teachers indicated did not happen before this year in the co-taught classroom. Kendra commented,

> "I have always taken my students out of the classroom and modified any type of assessment, but with the emphasis on more rigor, both of my general education teachers suggested that we give the students the opportunity to see what they can do. I wasn't necessarily too keen on the idea so they invited me to help create the assessments we would be using. I know I am overprotective so this was helpful.

Katie created an assessment for her third grade students in reading to learn where students were struggling and then geared her review session towards it. Pre-test assessment was a quick activity that contained 10-12 multiple-choice questions. Katie commented, "Mrs. H liked the pre-assessment and how it identified weak areas so she asked me to use it with the whole class." Both teachers were happy with the results of this activity and the difference it made in terms of better test scores. It became a regular tool that focused on both the needs of students

with disabilities and on the class as a whole. Instead of assigning grades, Katie gave colored stars to indicate performance in the pre-test assessment. Star colors varied from one test to another, preventing students from stigmatizing peers. For example, a day before the test, Mrs. H or Katie announced that they were doing a review for tomorrow's test. If they had a green start on their pre-assessment, they would be staying with Mrs. H. If they had a purple star, they would be going with Katie for the small-group review session (Observation, 11/17/2014).

Through the use of pre-assessment Kendra and Katie influenced their instructional and planning decisions as they sought to meet students where they were and to prepare them for the concepts to be taught. Katie and Julie applied the knowledge gained through pre-assessment scores to their planning and teaching as they sought to order lessons and units.

Participants not only provided support and advocated for children with disabilities in this inclusive class; they also took the lead role and taught students with and without disabilities as a class. Participants' contributions included giving examples, providing mnemonics, asking questions, and conducting review sessions and pre-assessment tests. In addition, participants jumped in whenever they sensed that students were confused or needed additional examples.

Communication

Participants indicated that working collaboratively with general education teachers has help them learn to communicate more clearly and accurately with each other and students. During the course of the interviews each of the participants indicated that they have employed various strategies to increase the communication with students and teachers.

Student Communication

According to Tara, there is now better and increased communication between herself and her students regarding standards. She asserted that "I know I haven't made an effort to really

review standards with my students. They are just part of my lesson plans, but with the increased rigor, I have to be able to more clearly communicate expectations to my students so they know the purpose of the lessons and the standards being covered." Additionally, Tara has introduced picture cues and student friendly language to convey the purpose of each lesson. She commented:

> I had standards posted in my room, but I haven't necessarily pointed them out during instruction. They were there for the administrators doing walk throughs. My co-teacher has her posted, but really took time to reword them and add pictures to represent some of the standards. I see that is really does help the students connect with what they are supposed to be learning.

Pam indicated that she frequently uses essential questions to guide her instruction but seldom states the standards for students, "I have standards in my lesson plans, but I have just started to verbalize these with students." Two of the participants shared that standards were evident in either their rooms or located within lesson plans. Pam and Kendra reported through their interviews that talking with their students about standards is something that has become an increased part of their instructional practices.

In addition to communicating standards, three participants referred to how they are being more intentional with asking questions and incorporating meaningful discussion to check for student understanding and to make decisions regarding instructional approaches. Julie explained:

> I have seldom had students communicate their thought process in math. I look at their work and know that they either have the right or wrong answer. This doesn't always give a clear picture of the conceptual understanding of the material. As a part of my resource math class, we are now using "math talk" as a way of introducing the lesson and opening

up the discussion around math. This has really helped identify students that are struggling to understand what is being taught.

Two participants indicated they have been using questioning and discussion techniques to check for student understanding as a part of their practice, but did not always use the information garnered from these discussions to make changes in instructional practices. Sheryl noted: “I use direct instruction models for reading interventions. These do have some built in discussion questions, but I haven’t always reflected on student answers.” She explained: “When asking comprehension questions, if they got an answer wrong I moved onto the next student rather than trying to help the student find the right answer.” When Sheryl was prompted to elaborate on how she now uses discussion and questioning for instructional practices, she indicated that she allows more time during open discussion to allow students additional response time and time for her to “help move students towards the correct answers.”

Sheryl found a creative way to communicate academic expectations more clearly and accurately. She gave examples of utilizing music to help students identify the concepts being taught in the classroom: “In our co-teaching classroom, we have “ I Can” statements on the board. We write little songs that help students remember them.”

Five of the participants indicated increased standards-based discussions with students. According to research, standards can often be confusing because they are either too broad in scope or too specific (McTighe, Seif & Wiggins, 2004). “Students are more likely to make meaning and gain understanding when they link new information to prior knowledge, relate facts to “big ideas,” explore essential questions, and apply their learning in new contexts.” (p. 28). Participants broke down the standards into component parts, referred to standards during instruction and rewrote them in term that students could understand.

Communication with Teachers

Not only have participants increased communication with students, they have engaged in improved communication with their co-teachers. Katie stated: “Their views on the common core, although not always positive were very insightful and appreciated.” Responses toward communication in planning whole group CCSS lessons indicate that while some doubted the decision for them to be involved in direct planning of whole group lessons, they decided in the end that it was a beneficial experience. Katie elaborated:

> I have worked in several models throughout the years. I have always taken the role of providing the modifications, accommodations or resource support for students. This is changing with the new standards. We talk all the time about specific skills, targeted testing and the types of instructional changes we need to make to help students. I don’t simply walk in anymore and just work with my students. I am involved with my teachers from the ground up.

When discussing communication in planning, participants listed a variety of ways they discussed planning. Planning ranged from direct involvement in whole group lessons, planning with multiple teachers to work in centers and devising small group instruction for interventions. The type of planning was dictated by a combination of availability and teacher preferences. Alex, Katie and Tara indicated that communication with general education teachers has led to a feeling of a true partnership that benefits all the student in the classroom. Alex and Tara both described collaborating and increased communication led to working with students as a group rather than by label. Katie commented:

> There has always been a division of your students and my students when co-teaching. Some teachers see the special educations students as my responsibility rather than a

> shared responsibility. For me, I think as we work more closely the conversations are less about my students and more about specific student need regardless of label.

Alex stated similar thoughts about her students:

> I have students that are on grade level and those that aren't. In the regular ed. classroom the same thing exists. I think we are communicating more about students based on their achievement rather than who serves them.

Participants as a group appeared to value participating in common planning time and the involvement in the process of planning and implementing the new standards. Several indicated that sharing common planning time with not only their teacher, but with other teachers in their current grade level has helped with learning and implementing CCSS.

As states transition to the Common Core, it is imperative that the implementation of these new standards include policies and supports that increase the amount of time teachers have for collaboration and professional development and the amount of time students spend in school learning the new standards (Polikoff, 2012; Chingos, 2013). Meeting the demands associated with the Common Core will be a challenge, but high-quality expanded learning time for teachers and students, is one of the most far-reaching implementation strategies and can enable students to successfully meet these higher expectations (Polikoff, 2012; Chingos, 2013).

Alex works only with fifth grade teachers. Common planning time with this grade level has provided an opportunity to work with this these teachers as a part of a team and has increased opportunities to communicate about students individually. Alex indicated that she recognized that teachers are "sticking more closely to the designed curricula." She reported that "communication about common core has led to instruction that is more tightly aligned to the standards for all academic areas."

Along similar lines, Pam cited that professional dialogue sessions have helped her with implementing more rigorous interventions. She commented: “I am more focused on choosing appropriate curriculum and learning activities based upon standards and individual student needs.” Participants, when planning for instruction, now begin by selecting instructional goals that align with the standards and individual needs of the students.

While all participants indicated that communication with co-teachers was an important piece in their learning, not all participants were afforded the opportunities to share common planning time. Three participants indicated frustration in attempting to negotiate available time when working with multiple grade levels.

Six of the seven participants indicated increased communication with students and/or general education teachers. While three participants indicated communication had increased through email, six of the participants indicated face-to-face communication was preferred and was increased when shared common planning time was available. Effective communication is the foundation for increased student achievement (Stewart, 2008). Student academic and future fulfillment revolves around effective school and classroom communication (Stewart, 2008). Data indicated that participants increased communication with students and other teachers. Examples of communication included discussion of standards with students and general education teachers, questioning and open discussions with students to check for understanding of instructional concepts and professional dialogue during shared planning time.

Data Driven Instruction

As participants worked with general education teachers, they became more aware of their students’ overall performance on common core standards. One significant change experienced by the participants was the utilization of data to support instructional changes through CCSS.

Participants monitored student performance as they related to Individualized Education Plans, but did not assess or reflect on an ongoing basis the performance of students in relation to CCSS. Participants began to build the knowledge base on how to use assessment data to change their instructional strategies in order to meet the high standards of accountability. As Sheryl stated, "Decisions for instruction have become more intuitive. We have real data that supports our instruction rather than relying on what we may feel is the best for a student." Pam stated, "We now have to measure student performance in a more concrete way."

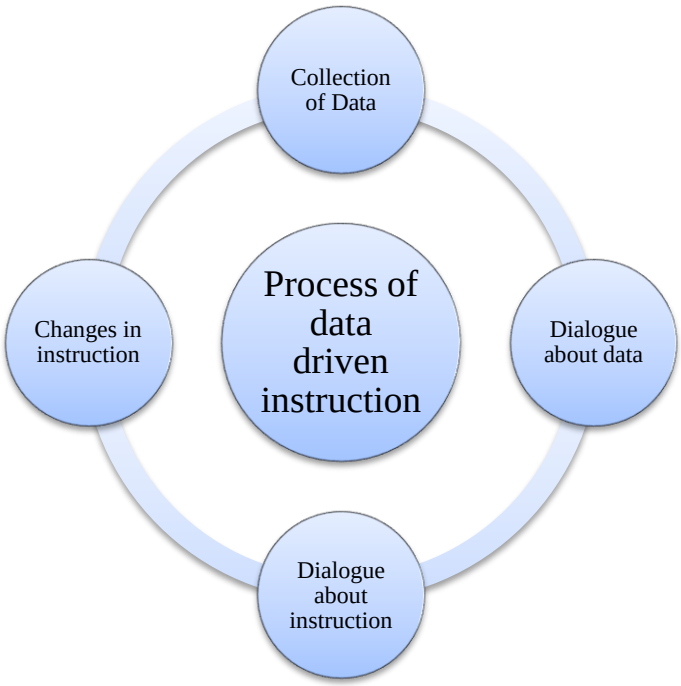
Data analysis of student performance was supported through collaborative relationships with participants and general education teachers. Through interviews, it was noted that all seven teachers participated in monthly and bi-monthly meetings to discuss and analyze data. Participants that taught at multiple grade levels were placed on one data team. Katie indicated that this was not ideal. She stated, "I teach three different grade levels and have little time to connect with three different data teams. I wish I could do this for all the students I teach." Kendra and Julie indicated that attending multiple grade level data teams would require a loss of instructional time, but felt conflicted about not participating in data team for all students. Julie indicated, "I teach second and fourth grade, but since fourth graders are taking the standardized tests and my largest group, I chose to work with the fourth grade team."

Figure 6 demonstrates the process by which participants have begun to use data more effectively to address student needs. Participants provided examples of multiple sources of data collection during the interviews. Several participants asserted that data collection has always been a part of their teaching experience, but not necessarily a part of planning instruction or to identify goals and objectives for students with special needs.

Communication of Data with Peers

A key component articulated by participants was the increased communication with peers regarding data. Participants and general education teachers were engaged in dialogue about assessment scores and engaging in more direct use of scores to address deficits and plan instruction to meet the needs of all students.

Figure 6: Researcher's Model for Data Driven Instruction



Discussions between general and participants revolved around how to collect the data, how to organize the data collected and finally how to analyze the data (Observation Notes, 11/18/2014). Alex expressed, "The analyzing of the data, has been helpful in planning instruction, but has also helped identify IEP goals that promote alignment with common core." A few weeks after one math data cycle with data collection and analysis, Alex stated "I compared my baseline scores with the first post assessment and believe these scores were increased as a direct result of targeting specific issues with three of our students." Additionally she indicated that she "changed her teaching practices to analyze student work data on a more

regular basis" and as a result her teaching strategies have become "more refined." Similarly, as she gained more knowledge about data analysis, she became "more aware of how her interventions were affecting student learning in a positive manner."

Types of Assessments Used to Inform Instruction

Based on interviews and classroom observations, it was evident that participants at all three school sites used many data sources to inform their instruction and chose different forms of data to inform them about student progress. Types of data included formal benchmark assessments, Formative Assessment for Teachers (FAST), guided reading informal tests, Student learning objectives (SLOs), county sight words tests and Accelerated Reading and Accelerated Math computerized assessments. Kendra shared the types of data that she used:

> In Kindergarten we have used GKIDS, FAST, SLOs, math benchmarks, sight words tests and some of the guided reading data to create our center and small group rotations. It has helped target students that need support and I use this information to write short term objectives for reading goals.

Kendra's statement identified multiple forms of data, both formal and informal, that were used to inform classroom planning and instruction. Similarly, Pam also described the many types of data that she used to assess students:

> The SLO assessments that we give in the very beginning and towards the end of the year has replaced the standardized testing in kindergarten through second grades. Teachers do formative assessments in the classroom, but our big assessments would be the Georgia Milestones for third through fifth, which are our version of the common core tests. Then you have the benchmarks. We also have FAST testing where you get specific

> reading information about each student…it's a really nice baseline to compare with other reading assessments that are teacher created ones.

Julie mentioned three different types of data used throughout the school year including FAST testing. The FAST was a district-provided assessment, but teachers had the flexibility to give the assessment whenever they chose.

Similarly, Katie described the types of data available to teachers at her school site that she used to plan instruction:

> I do use data differently to make plans for my interventions. In the past we just grouped students into a resource room if they were below in reading. I'd chose an intervention and implement it. Some students benefitted and others not as much. Some of the data we have now helps me see where students will need more specific instruction. It also points out those skills that most students miss. I can tailor my instruction to target each student rather than the group as a whole.

Alternatives Uses for Assessments

Not only did teachers use many forms of data, they used data in different ways and for different purposes. Sheryl described how she used formal reading data in the following statement:

> We do use guided reading data to move our students in and out of leveled groups. Special education students are able to move with their peers rather than being pulled out for an entire segment all year. If they are reading at a higher level, they get moved to a different group and vice versa. This is a big change in the way we serve students.

In this statement, Sheryl talked about how she used district data, for overall planning purposes and big picture type of decision making. She explained that she analyzed assessment for guided

reading texts to place students in their instructional level, rather than simply assigning them to grade level groups. However, Pam described a more informal use of classroom data. Pam stated:

> In my small groups I have regularly used check ins and check outs to see if students understand what is being taught and demonstrate something they have learned. I felt that this was ok, but not really enough other than giving a test and we give enough of those without adding anymore. So I started making notes on student work to help me identify what student either know or struggle with. I can write lesson plans by looking back over student work with my notes to see just what skills might need extra practice or need to be retaught.

Pam described how she uses daily classroom work to inform her instruction. She described how she collects data by looking at student work, observing work behaviors, and writing down notes about individual student understanding. Pam explained how she has learned that she can constantly collects data in the moment as she observes student work. Sheryl indicated how she used both formal and informal types of data to inform her work in the following statement:

> So for reading, Mrs. W and I use FAST and yellow box scores to determine reading groups. We have groups that need a lot of phonemic awareness support. I'll pull them and work on that skill or a group for comprehension. These groups are changing based on the needs of the students. Sometimes I work only with my special education students and other times I may not have any special ed. students in my group. It's very much a needs based approach in our room.

Sheryl's use of both types of data, provided information that would help determine reading groups based on specific areas of need, such as phonemic awareness. She also indicated how the classroom operates on the basis of students' needs rather than students with labels. She stated:

> We look at the whole class when we look at our data. I am responsible for the students on my caseload, but we work with any student that demonstrates a deficit. Sometimes the students with disabilities are not the ones that always need the extra support.

Julie elaborated on how data collection and data use have become more than information for instruction:

> I have two students that function well below grade level. They show growth, but each time we have to look over assessment reports, it seems like that growth is invisible because they aren't meeting these new standards at the same rate as their peers. I started making charts from each assessment and attaching it to student work so that teachers and the principal can see overall picture not just a number.

Her use of different types of data was not only used to inform her instruction, it was also used to communicate to other teachers and administrators a particular child's strengths and weaknesses. Her idea of data use was to gather information that would allow others to know the whole child. Others in the study also shared their stories of how professional development through collaboration changed their classroom practices. During one of the interviews, Alex commented:

> I learned a lot of techniques that changed my practice. I started to use new assessments in my class. I learned how informal assessments could change instruction so that was something I added. I would use a couple of quick formative evaluations to see where students were at, something like quick writes or exit slips. That's the type of thing that really changed what I did in the classroom.

When asked about her data use, Julie provided a list of data that she used throughout the school year and gave examples of how she used data to inform her work in many different areas. For instance, she used data to support Individualized Education Program (IEP) meetings, parent

conferences and even used data to communicate with a child's physician. In these documents, Julie reports a student's results on assessment tests, but also uses specific classroom examples to add-on to the formal data results. She then offers her interpretations of the information as a whole and her recommendations for support.

Although the participants seemed to have a wealth of data available, both Kendra and Tara had specific instructional needs that were not supported by system wide benchmarks and other county wide assessments. Kendra and Tara commented on "excessive and repetitive testing measures." Kendra asserted," How many different measures do we need to gather information about common core reading performance, right now we have 10 and that just seems to be overkill." Tara commented, "We have so many different forms of data to assess common core and it becomes quite confusing when trying to pinpoint the actual weak areas when one test says one thing and another test says something else." In order to meet their needs, they both created ways to gather data that would help them make more informed instructional decisions about performance on common core standards. Kendra stated:

> And then I myself also have a monthly math assessment or MMA, That's what I call it. It's a math assessment that I've created with other teachers that I use throughout the year just so I can measure progress. I have to sit with each child individually and I am taking notes while they're taking the assessment. I keep it all year. I use a blue pen the first time, and then the second time I use a purple pen. I keep it. I don't ever send it home. I share it with parents during conferences.

Kendra described how the district-provided student learning objective (SLO) assessments did not have questions that addressed some, but not all of the students' abilities in mathematics. In order to get this type of data on math ability for all standards, she created a separate assessment that

she used as a supplement to the district test. Both the student learning objectives and Kendra's addition to the SLO required an up close and personal assessment between teacher and student. Similarly, Tara described the development and use of class assignments to help her gather the data that she needed. Tara described this in the following statement:

> Recently, we wrote a persuasive paper. After reading them I realized that they really needed help with how to figure out what to write that would support their thinking even though we had done a lot of oral work surrounding this. I also realized some students were still struggling with how to write a topic sentence. So I pulled out a graphic organizer that would help us organize our thoughts as we started to deal with persuasive writing. It forced them to think of ideas that would support their reasons as well as help them to write topic sentences since they would know what each paragraph was to focus on. I learned which students really struggled with just being able to access the text they were reading as well as those that did a great job of accessing the text, but struggled with the written aspect of the assignment. It also informed me who was still struggling with writing in general. I cannot gather this information from any of the district tests.

Tara's statement can be broken down into two separate processes. First, Tara examined a writing assignment that her students completed and found that students were struggling. In order to gather more specific data on what individual students needed, she created another classroom assignment to break down students' thinking process that helped her determine exactly where students were struggling, whether it was accessing the text, writing, or understanding the concept of persuasive writing.

Summary

This study examined teacher perspectives of professional development related to implementation of Common Core Standards. Additionally, this study examined changes in participants' instructional practice as a result of professional development.

In this chapter, the data were presented and analyzed in the context of the two research questions. The data analyzed from the three elementary school sites indicates that participants did not find significant benefits from participation in local and state professional development activities. Instructional practices did not change to a great degree as a result of these PD activities, but from collaborative participation with general and other interdepartmental special education teachers.

The activities that teachers engaged in at the state and local level appeared to be more informative rather than instructive and led participants to seek out additional resources. Incidentally, when examined more closely, it appeared that the participants were engaged in self -directed activities that varied among school sites. Thus, the participants were not following a prescribed set of initiatives to implement CCSS, but were trying to find resources to fill the gaps in their learning not addressed through local and state provided professional development.

Chapter Five will provide a summary of the study, discus key findings for each research questions and discuss implications for practice and future research.

CHAPTER 5

DISCUSSION AND IMPLICATIONS

The perspectives of the participants in this study vary widely as to their satisfaction with the professional development (PD) learning experiences and their implementation of knowledge and skills learned through these experiences. The final chapter of the study includes a summary of the study, a review of the findings for each research question, and the implications for practice and future research.

Summary of the Study

The impetus for the study was the perspectives of special education teacher towards professional development focusing on implementation of Common Core Curriculum. The study was a case study of elementary special education teachers who had participated in professional development activities designed to assist in implementation of Common Core State Standards (CCSS). This research used qualitative methods to examine the perspectives of special education teachers. Data collection was conducted over a period of four months and included seven special education teachers from a rural school district. Methodology involved semi-structured interviews and observations based on case study literature from Stake (2005), Merriam (2009), and Yin (2009).

Participating special education teachers met individually for one interview session and one observation session. Six of the seven participants met for debriefing interviews to validate the analysis and ask follow up questions for clarity. Transcripts for each participant were analyzed and compared across other participants. Data analysis indicated specific themes in participants descriptions of professional development activities, types of professional learning

that contributed to growth, collaboration and perspectives of instructional changes in classroom practices. The following questions guided the data collection for this study:

1. What are the special education teachers' perspectives on the professional development activities designed to assist them in implementing Common Core State Standards in their classrooms?
2. How do the special education teachers' perspectives on the relevance of professional development impact how they implement Common Core State Standards in their classroom?

The discussion section, organized by the research questions, will draw connections between the study outcomes and prior research. The next section will discuss implications for practice and follow with recommendations for future research.

Key Findings Question 1: What are the special education teachers' perspectives on the professional development activities designed to assist them in implementing Common Core State Standards in their classrooms?

The first research question examined the perspectives of special education teachers on professional development (PD) activities designed to assist them in implementing CCSS. Investigation based on the first research question uncovered a level of PD at the local level that did not have a shared vision between providers of PD and participants. This shared vision of PD is the foundation for understanding about effective teaching and the role of PD in teacher change. Teacher change literature indicates a strong need for developing shared understandings (Fullan, 2006), having a strongly articulated and communicated vision (Fullan, 2006; Guskey, 2006b), and utilizing inquiry to learn (Day, 1999; Sparks, 1996). According to data gathered from the participants, these key components recommended in the literature were not present during the

county wide PD sessions. While the county in this study had a structure in place to inform teachers about Common Core State Standards (CCSS), the participants in this study held differing expectations and preferences for the content and delivery of CCSS. While there is a process in place for creating professional development, dialogue and inquiry between local curriculum developers and special education teachers does not yet exist. Two themes related to question one emerged: (a) relevant professional development and (b) collaboration with general and special education teachers.

Professional Development Relevant to Special Education Teachers

Participants articulated the need for PD to be relevant to their needs. A majority of the participants rated the local and state provided PD as helpful, but they did not believe it met their learning needs or had a positive change on instructional practices. The participants expressed the need for PD to involve the opportunity to work with other professionals and provide learning based activities/strategies. Participants wanted to spend time learning and applying what was meaningful for their students' success. Boyle, Lamprianou, and Boyle (2005) assert that active learning opportunities are an important part of PD that promotes reflection and problem solving. By incorporating active learning strategies in PD, teachers are afforded the ability to engage with colleagues, increase their own understanding, and increase the likelihood that what they learn will positively impact instructional practices (Snow-Renner & Laurer, 2005; Hochberg & Desimone, 2010; Desimone, 2011).

Through analysis of interviews and observations, it was revealed that participants held differing expectations for the professional development sessions. Participants attempted to integrate learning the new standards with the resources at hand, worked towards making connections across grade level content, sought similarities between the previous Georgia

Performance Standards(GPS) map and CCSS and identified the lack of cohesion between current content standards and the frameworks provided by the Georgia Department of Education. Participants commonly reported that the PD sessions provided information, but their expectations for the professional development centered on learning instructional strategies and content needed to implement CCSS. Aligned expectations of PD help build shared goals required to sustain instructional improvements and reduces confusion and uncertainty about what and how to teach (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009). Additionally, the lack of clear direction and inaccurate expectations of PD confounds any measure of professional development effectiveness (Killion, 2008).

Furthermore, participants commented that the interpretation provided by the district did not appear to clearly translate the purpose of the professional development. Three participants commented that the district appeared to be more focused on simply providing an overview of the standards rather than providing an in depth study framed by instructional strategies and resources. This finding emphasized that the professional development was focused just on CCSS content. However, research indicates that PD focused on not just content, but on the teaching of strategies and learning of content is most likely to be associated with positive change in teacher practice (Blank & de las Alas, 2009). Additionally, high-quality professional learning activities need to be extended to all teachers to ensure they have the technical skills and research-based techniques to be successful in learning and implementing content (Hill, Stumbo, Paliokas, Hansen, & McWalters, 2010).

Autonomy

Autonomy refers to a person's feeling of choice over a decision or action (Deci & Ryan, 2000). When a person has a perception of autonomy, intrinsic motivation is increased as the

element of choice has been demonstrated to be highly connected to intrinsic motivation (Deci,& Ryan, 2000). In this study, many participants expressed feelings of limited autonomy in a variety of ways and to various degrees. If professional developers are going to honor teachers as professionals, then that begins with the simple notion that educators should have a say in what they do (Webb, 2002).

Unsupported autonomy can lead an individual into believing that they have no ownership or say in their decisions or behaviors (Deci & Ryan, 2000). It is especially important for educational leaders to demonstrate support of the perspectives of autonomy for the teachers in their schools (Sykes, 2002). However, not all participants indicated autonomy supports from their administrators. Alex stated that her principal did not "encourage…nor discourage" his teachers from attending professional development. However, by requiring that participants attend other professional development trainings, the principal demonstrated unsupportive autonomy for the participants.

Participants in this study articulated the need for an increased sense of autonomy surrounding their own learning needs. Participants not only wanted professional development in content areas, but also widely expressed the need to attend professional development aimed at providing new strategies and programs for students with disabilities (i.e. dyslexia, behavior disorders, Autism). Day (1999) indicated that "Teachers are centrally involved in decisions concerning the direction and process of their own learning" (p.16). However, four participants indicated they felt restricted to professional development centered on academic deficits resulting from lower test scores. Participants could attend chosen professional development on their on time and at their own expense, but it was also hard to gain financial support for professional development outside of the local school district.

Candy (1991) asserted that ownership of one's learning efforts most clearly exists when such efforts take place outside of organizational contexts. Participants' experiences indicate that ownership of learning can still be experienced within an organizational context as well. Despite diminished control in their professional development, participants in this study demonstrated initiative by engaging in self- directed learning through collaborations with colleagues. For example, participants described how they persisted through challenges stemming from a lack of clarity of requirements and expectations, a lack of understanding of new assessments, a lack of time, or the necessary resources. Additionally, participants in this study shared control over decisions regarding certain elements of their planning. These elements included, the number of resources and learning activities to use, the negotiation of differentiation of activities to allow access to a variety of students, clarification of unfamiliar content, and negotiating time for planning. Research supports that self- directed learners often chose to engage collaboratively when given autonomy over their learning and the use of collaboration can contribute to the competence for self -directed learning (Brookfield, 2009; Candy, 1991; & Tough, 1971).

Collaboration with Colleagues

Collaboration among teachers has been shown to influence the implementation of professional development (Clement & Vandenherghe, 2000). Clement and Vandenherghe (2000) investigated how collaboration and autonomy influences elementary teachers' professional development. Findings from Clement and Vandenherghe consisted of the confirmation that collaboration includes "stories" and sharing of ideas leading to "joint work" (Clement & Vandenherghe, 2000, p. 10). Through interviews, participants shared stories of success and failure of teaching practices as well as using these stories to offer feedback and advice on situations with other teachers within their school sites. Additionally, the offering of help between

general and participants often led to the sharing of ideas that sometimes led to combined effort between the teachers.

Participants in this study indicated the PD provided by the state and local school systems was adequate in providing general information regarding standards, but did not provide a formative plan for implementation of standards. Participants spoke positively of their learning experiences with others. Learning with others enhanced or benefited participants' learning experiences in multiple ways, such as by providing some participants with needed resources, clarification of CCSS content, and variety in their learning efforts. Several participants reported that the structure and accountability provided by learning with others benefited them by helping them ensure commitment, consistency, and progression in their learning efforts. This finding is consistent with research related to participants (Wenger, 1998; Wenger & Lave, 1991), engaging in collaboration for professional development assists in accountability to complete learning activities, having time provided to work on the learning activities, and receiving support. Additionally, other research (Desimone, 2009; Guskey, 2002,2003) indicates that collaboration among educators fosters a sense of professional community and leads to individualized impact for students.

The participants' assessment of the relevance and effectiveness of their development activities were mixed. Two participants indicated positive learning opportunities provided by the local districts while five participants were less convinced of the impact of certain forms of PD on their professional growth and development. Participants drive to learn and grow was derived from a self-generated need to know more about content related CCSS. Negative learning experiences from locally provided PD influenced participants to self-direct their learning with colleagues. Consistent with findings from research (Brockett & Hiemstra,1991; Steinke, 2012),

participants' descriptions of their PD learning experiences illustrated the way collaboration increased their abilities to identify and access learning resources. In addition to contributing to the body of knowledge in the field of teacher learning and self-directed and collaborative learning, the study's results have implications for PD practitioners and policy makers as they develop ways to effectively support teacher growth through PD.

Key Findings Question 2: How do the special education teachers' perspectives on the relevance of professional development impact how they implement Common Core State Standards in their classrooms?

The second research question examined how the perspectives of special education teachers impacted the implementation of CCSS. Participants were clear in describing the factors such as availability of resources and lack of relevant professional development as a catalyst for seeking out other sources for learning. Participants discussed the importance of jointly developing lessons, utilizing student data, examining student work and learning from each other. Participants explained how they met in small groups to discuss standards, pooled resources for instruction, adapted units of study, developed pacing guides and increased the use of technology in their instruction. Through interviews and observations two themes emerged: a) teacher motivation to change and b) instructional strategies for implementation of CCSS.

Teacher Motivation

Joyce and Showers (2002), maintain that professional development activities help teachers learn and apply new skills and knowledge. Although authors such as Cohen and Hill (2001), contended that many models of professional development are largely ineffective because of their nature that limits ongoing, embedded professional development, Guskey (2000) maintained that newer views on professional development have led to a wider range of options

and opportunities, which enhance professional knowledge and skills. All seven participants, recognized the important role professional development plays in changing teaching practices. However, teachers can and do prevent the implementation of new training based on their own attitudes and motivation concerning professional development (Bresden, 2002). For example, a teacher may not be motivated to listen to and understand the new teaching practices presented during professional development training. This was evidenced by several of the participants during the county wide training sessions. Participants were uncommitted to the training because they felt it did not meet their expectations or instructional needs. Teachers' perspectives of whether or not to implement professional development in their classrooms may be related to teacher abilities and motivation to implement the changes (Bandura, 1997; Guskey, 2000, 2009).

Although, responses from the interviews indicated a lack of motivation to engage in the state and locally provided professional development activities, participants overwhelming were motivated to seek out support for their learning through collaboration. All participants agreed that motivation is a component to change educational practices, but answers were general in nature. The participants did not elaborate on motivation's role in enhancing teacher efficacy, implementation of curricular change, or involvement in formal professional development.

In initial interviews participants' motivation to change had a direct bearing on meeting students' needs. Participants viewed motivation as the common thread that connects and weaves teacher learning and student learning together. However, when reviewing the responses from several of the participants, the data indicate that many perceived great levels of stress as a result of high stakes tests, and that this stress is related to their motivation to seek out learning opportunities with colleagues. Participants spoke frequently about concerns for their students' ability to pass assessments, the reflection of their job performance based on these assessments

and the how the results from sub-groups of special education students reflected on overall school performance.

According to the findings in this study, participants were more motivated to make changes in instructional practices as a result of tested content areas reportedly treated as more important than non-tested content areas. Participants reported a loss of instructional time and a narrowing of curriculum to support tested content areas. Results from this study support the research on high stakes testing. The consequences of tested content areas being treated as more important than the rest of the curriculum lead to further narrowing of the curriculum, as subject areas that are not tested are frequently less taught, or not at all (Berliner, 2009). Other effects noted, included less creativity for students, reduction in higher-order cognitive skills for students, and loss of professional identity for teachers (Berliner, 2009).

Instructional Changes in Practice

Specific examples of instructional changes were perceived by participants to have taken place as an outcome of collaboration with other professionals and through the sharing of ideas. Data results indicate that the participants partially or wholly accredited change to the collaboration that had taken place in their school. However, not all collaborative opportunities were designed by administrators and participants. Participants were arbitrarily assigned to data groups according to their schedules and sought out additional time with other general and special education teachers on their own. Based on the interview data, there was no specific plan in place to provide for collaborative interaction other than for participants that shared common planning time. Several participants felt conflicted about planning with only one of their co-teachers while others participants were not provided the same opportunities. Participants, in discussing the importance of working with peers, talked about the importance of collaboration, the need to have

a shared vision and the need to improve teaching practices. Although many participants did not identify these discussions as formal participation in Communities of Practice (COP) groups, they were aware of the goals and targets that have been established at each school to enhance student learning.

The study findings suggested that the time and quality of professional collaboration was structured for data teams aimed at specific feedback of set math objectives. Dialogue was in the form of feedback from assessments. Participants indicated that the data teams were limited when discussing student performance on assessments or strategies. The focus was on the numbers and how to increase the number of students to passing the math post assessment. However, research indicates that the dialogue through COPs should encompass effective listening as a critical factor and catalysis for success when attempting to implement instructional changes in practice (Wenger, 1998; Smith, 2007). Setting a protocol for giving a voice to those involved in the professional collaboration through COPs come closer to sharing ideas and beliefs among teachers and administrators (Wenger & Lave, 1991; Smith, 2007). Such strategies could further contribute to supporting teachers as learners and further support changes in teacher practice.

There was an array of resources from which participants chose to impact their instructional practice. The number of instructional strategies described by individual participants as influencing their practice ranged from only 1 to 5 with none of these viewed as new strategies. It was more common for the participants to indicate an activity was being utilized more often or that strategies were designed for the whole class in terms of quantity, duration, or time allotments than to provide differentiated activities designed to teach new standards for students with special needs. There was little evidence the participants routinely used new instructional strategies derived from professional development. Additionally, when discussing instructional

strategies, none of the participants referred to the how new strategies or standards would be stated in their student's Individualized Education Plan (IEP).

Although the participants from this study interpreted their perspectives to have an impact on their instructional strategies, the researcher considered the number of instructional strategies described per participant to be relatively low and these strategies that should have been a part of the special education teachers' repertoire considering the length of time employed as special education teachers. As indicated by Marzano (2007), "Effective teaching is a dynamic mixture of expertise in a vast array of instructional strategies combined with a profound understanding of the individual students in class and their needs at particular points in time" (p.5).

Moreover, the types of strategies mentioned by most of the participants indicate a strong reliance on simply modifying previously known strategies and expectations in terms of quantity and duration. Indications of true impact of learned strategies through professional development and collaboration were noticeably absent from the data of these participants.

Fullan (2006) proposed that no matter how much teachers know about effective instruction, the challenge is to increase teachers' comfort level so that multiple instructional strategies become everyday occurrences in classrooms. The participants in this study interpreted their instructional planning and strategies as meeting the needs of their students, but the researcher found a number of areas of concern and recommendations for future development in order to address changes in instructional practices to address the rigors of CCSS. This absence new instructional strategies and reliance on utilizing instructional strategies previously learned indicate that the participants may have a limited repertoire of differentiating strategies and may need additional training and professional development to fully implement Common Core State Standards (CCSS). Preparation and support is needed to remediate the discrepancy between what

is known about effective teaching strategies and what is done to assist teachers to achieve their full potential for implementing these strategies. (Fullan, 2006; Horn & Little, 2010).

Implications for Practice

A plethora of research has been conducted on professional development, including those that found that professional development trainings are often negative and ineffective (Guskey, 2009; Guskey & Yoon, 2009; Sawchuck & Keller, 2010) as well as studies that have found professional development to be positive and effective (Wei, Darling-Hammond, & Adamson, 2010). Although there is still much debate on what qualities are necessary for effective professional development, similarities of research include (1) providing sufficient time and resources (2) enhancing teachers' content knowledge and pedagogical knowledge and (3) promoting collaborative interactions, (Guskey, 2009). This study also provided evidence that these are important elements to include in training.

There were several challenges with the professional development the participants in this study experienced. In addition to a lack of confidence and value in the CCSS training provided, new teaching strategies were not presented in the implementation process. Changing teaching strategies is difficult, and implementation may not be immediate (Shidler, 2009). Providing examples of strategies during professional development may help with the process.

Participants in this study sought support through collaboration with colleagues. They indicated the increasing use of previously taught strategies and using strategies learned from colleagues. However, the strategies were not necessarily presented in sequential and manageable steps, and participants were not monitored by colleagues or administrators in order to see "how" these changes were implemented. Implementing new strategies can be especially difficult when the new practices conflict with their current beliefs and instructional strategies

(Fullan;1993,2006). Furthermore, teacher practices are dependent upon their instructional tools and by not providing effective tools, teacher effectiveness is diminished (Hill, 2009). Several studies suggest the need for professional development to be long-term, embedded in teaching practice in the classroom, and rooted adult learning theory (Guskey, 2009; Hill, 2009; Jaquith, Mindich, Wei, & Darling-Hammond, 2010; Shilder, 2009).

Although professional development is familiar to special education teachers, several participants responded to news of upcoming and previous county wide professional development activities with feelings of annoyance. Why do teachers experience negative feelings toward professional development? One reason is that teachers often feel that they are not given a voice in attending teacher training (Bredeson, 2002; Guskey, 1986). This voice is part of a special education teacher's perspective of autonomy to decide whether or not he/she attends a professional development training. Providing teachers with a choice in attending professional development reflects an understanding of the importance of providing autonomy to support special education teachers' intrinsic motivation concerning professional development. If teachers are forced to attend a training, they may attend the training with a resentful attitude and not be willing to listen to new ideas (Fullan 2006, Goodson, 1997).

The findings from this study confirm that the majority of the participants understand the importance of professional development and how it benefits them and their students. Although some participants espoused the importance of professional development, they were less prone to follow through and take part in professional learning activities. In this study, participants revealed reasons for not fully engaging in local and state wide professional development activities. These reasons included lack of relevance, presentation, lack of resources and past negative experience(s) with professional development. Among two of the participants in this

study, a negative experience seemed to justify a lack of participation in further professional development. Additionally, several of the participants were uncomfortable with the perceived shift in teaching methodology, and indicated that they had not received the proper training or resources.

As a first recommendation, this research indicates a need for curriculum directors and administrators to demonstrate instructional leadership by setting a culture within their schools that support continual professional learning and in taking steps that are explicit in supporting individual special education teachers. Administrators could potentially use professional collaboration, through deliberate and organized Communities of Practice, as means of providing direction and influencing others towards improvement. Additionally, a protocol for establishing shared norms of continuous improvement could lead to opportunities for dissemination of desired practice such as professionals given opportunities to observe and contribute to the instructional practice of their peers.

In studying about the nature of professional collaboration, it was perceived by the research respondents that such conversations could be structured on dialogue, going beyond purely feedback. A second recommendation is to emphasize the value of research-based inquiries about professional collaboration and the perspectives of participants about the shared ideas and agreements that change teachers' instructional practice. Giving special education teachers a voice and increased autonomy would prove beneficial in increasing motivation to engage in professional development and implement new instructional strategies.

A third recommendation addresses the need for instruction leaders to support special education teachers with adaptation of CCSS based on the grade level and severity of students. Special education teachers are often charged with teaching multiple subject areas across multiple

grade levels. Within each grade level students present with varying degrees of disabilities and achievement. Special education teachers need support to adapt the curriculum to address the needs of students across grade levels and along the spectrum of performance of students with disabilities. The final recommendation would be for developers of professional development to acknowledge and address the range of responses of participants to the questions about which professional development sessions are more beneficial and relevant. The range of response from participants may serve to remind those responsible for developing PD that individuals needs may not be met though one type of session or content focus. There must be a variety of opportunities for learning with different formats and content.

Implications for Future Research

The recommendations for research that follow are not finite in the consideration of the current limited study. It is hoped that future studies can build upon these first steps of research results to probe deeper and more extensively into how special education teachers forge alliances for sharing ideas and ultimately reach goals for improving their instructional practice through professional development and collaboration.

The research focused on questions posed to investigate special education teachers perspectives of professional development activities designed to implement Common Core State Standards. Additionally, research conducted sought to understand how these perspectives impacted changes in special education teachers' instructional practices. The research results are limited and led to further questions due to the small number of participants in one district. The researcher accepts that more inquiry questions should be asked and that further research will be needed. There remains much to be learned about the perspectives of special education teachers

that could bring researchers closer to understanding the catalysts for change and improvements in instructional practices.

Implementation of new teaching practices often requires an effort (Guskey, 2009; Sawchuck & Keller, 2010). If teachers do not see a need for change in their own practices, how can they be expected to have a motivation to implement changes? In addition to motivation, teachers must also feel a level of autonomy to reach a state of intrinsic motivation to modify behavior (Deci & Ryan, 1985; 2000). Future studies, specifically focused on the autonomy and motivation for special education teachers could lead to a better understanding of how to provide the needed autonomy and support professional development that increase motivation. Research supports the notion that the more motivated teachers are to participate and engage in PD, the more likely they will be to profit from the experience (Avalos, 2011; Alexander, 2008; Watt & Richardson, 2008). Furthermore, teacher motivation in PD is directly linked with classroom enactment of PD approaches, content and skills, and it is indirectly related to increasing the likelihood of desirable student outcomes (Avalos, 2011; Quick, Holtzman, & Chaney, 2009). Future research inquiries focused on autonomy and motivation may impact the types professional development in schools and how administrators and special education teachers contribute to school improvement.

A secondary focus of research stemming from this study is the presence of stress related to the motivation to promote success by students with disabilities on high stakes testing. A study conducted with the purpose of examining the relations between high-stakes testing and motivation would provide insight on how test related stress does or does not foster motivated teaching in the classroom. Additionally, it would be prudent to assess if test-related stress special education teachers perceive may become more salient as the testing window approaches. This

study could begin exploring the patterns of stress and/or perceived stress in special education teachers and how school level administrators can further support special education teachers through effective professional development to provide supports and strategies to address high stake testing.

In this study participants reported that their collaboration impacted teaching practices to assist students in attaining the curriculum. Research indicates that effective professional development links training and implementation of progress monitoring tools that support sustained changes in instructional practices for teachers (Easton, 2008; Guskey & Yoon, 2009). However, the direct impact of collaborative professional development and instructional changes was not clear. A final research recommendation would focus on how instructional leaders, through classroom observations and dialogue with the special education teachers following professional development, can help see the gap between teachers' espoused theory and their theory in action. As instructional leaders, principals play a pivotal role in helping teachers enhance student learning (Flint, Zisook, & Fisher, 2011). An instructional leader's efforts to support ongoing professional development will be ineffective unless leaders attend to the efficacy beliefs of their teachers (Wayne, Yoon, Zhu, Cronen, & Garet, 2008). A principal's involvement in professional dialogue and collaboration would allow him/her to become aware of how professional development through collaboration impacts true instructional practices.

Summary

The purpose of this study was to better understand the perspectives and expectations of special education teachers towards professional development. It purported to view how their perspectives impacted understandings of facilitating student learning, and how perspectives contributed to change of practice. Although the research was limited in concluding how teachers

perceive their roles and professional development in implementing change in their practice, it stimulated implications for further investigations regarding special education teachers motivation to impact instructional changes, stress related to high stakes testing, and preferences for what they believe to be effective and relevant professional development.

The research indicated that there could be further strategies implemented for sharing purpose such as school vision, goals, objectives, with agreement and unity of purpose when developing professional development activities for special education teachers. The research findings suggest that this study has only touched the surface in relation to the focus and special education teachers' perspectives of the shared ideas and agreements that change teachers' instructional practice through professional development.

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APPENDIX A

DEMOGRAPHIC QUESTIONNAIRE

1. Name_____
2. Age_____
3. Gender: Female_____ Male_____
4. Current school placement_____
5. Area of certification_____
6. Degree_____
7. In what year did you receive special education certification_____
8. How many years have you taught in the area of special education?_____
9. Do you currently have additional areas of certification?_____
10. Current grade level(s) taught_____
11. Core subject areas taught_____
12. Are core subjects areas taught as: _____direct service model ____co-teaching
13. How many students are in each classroom where Common Core Standards are taught and you serve as a special education teacher/ classroom where you serve students through a direct service model for Common Core Standards? Please list each Core classroom separately subject area.

    _____

    _____

    _____
14. What is the student to teacher/paraprofessional ratio?_____
15. How many years of experience as a special education teacher? _____

APPENDIX B

INTERVIEW PROTOCOL

Special Education Interview

Date and Time:_____Location Code_____

Name(participant number)_____

Introduction to participant

My name is Catherine Bracewell and I am working on an approved research study at the University of Georgia. The area of research I am exploring are the perspectives of special education teachers professional development activities designed to transition from Georgia Performance Standards to Common Core State Standards. This study will involve five elementary school sites in Madison County.

Thank you for your willingness to participate in this research project. Before we begin the interview I would like to reassure you that this interview is confidential and all information contained in this study will be available only to me. Excerpts of this interview may be made part of the final research report, but under no circumstances will your name or identifying characteristics be included in this report. If at any time you do not wish to continue with the interview or withdraw from the study, you may do so and any information will be destroyed and not used in this study.

Recording/audio recording

With your permission I would like to record this interview. If at any time you wish for me to turn off the audio recorder, please ask me to stop and the recorder will be turned off. May I start the recorder?_____ If yes, begin interview. If participant chooses not to have interview recorder, then hand written data will be taken.

APPENDIX C

INTERVIEW QUESTIONS

1. Will you describe for me your classroom and the subjects you teach?
2. Tell me about what you know about Common Core Standards.
3. Will you describe for me how you were made aware of the new Common Core Standards?
4. What professional development activities did you participate in?
5. Can you describe one or more of these activities?
6. What were your expectations of the professional development activities?
7. Can you describe your learning as a part of these professional development activities?
8. How will your classroom instructional practice be affected by the implementation of the new Common State Standards?
9. Can you provide examples of how your professional development either supports/does not support your current job placement?
10. If you could describe or develop a professional development activity that would benefits you the most, what would it look like?

APPENDIX D

Professional Development Case Study

Informed Consent Letter

Please read, sign and return this letter with your completed demographic questionnaire to Catherine Bracewell

Dear Teachers,

The purpose of this letter is to elicit your participation in a study I am conducting. As a doctoral student at the University of Georgia, I am currently working on my dissertation entitled ―Special Education Teachers' Perspectives of Professional Development Activities (IRB project#_____). The advisor for this dissertation project is Dr. Bob Hill, professor in the Lifelong Education, Administration and Policy Department at the University of Georgia.

Background: In the current era of federally mandated school reform public, schools have been impelled to adopt new curriculum models to address legal requirements for school improvement and to compete for student funds. Effective professional development of school staff members has proved to be one of the most important factors in successfully implementing school improvement initiatives. Special education teachers as adult learners have specific needs. Research indicates that professional development activities targeted to meet the needs of adult learners result in more effective transfer of new strategies into the classroom.

Interviews and observations will be conducted to help me understand how professional development at your school addresses your needs as an adult learner. The interviews will consist of semi structured questions designed to elicit your beliefs and opinions about the professional development activities you have participated in. Each interview will be arranged at your convenience and take no more than 90 minutes.

.

Participation is Voluntary: Your participation is entirely voluntary. You are under no obligation to complete the interviews or participate in the observations. You can decline to answer any questions or withdraw your participation in this study at any time without negative consequences. If there are certain questions you do not wish to answer, that is acceptable. If you choose to withdraw from the project, all data pertaining to you will be destroyed. Refusal to participate or discontinued participation at any time will not result in penalty or loss of benefits to which you are otherwise entitled.

Potential Benefits and Foreseeable Risks: Findings of this project will be integrated into reports, presentations, and publications that can advance the scholarship around professional development. Findings may also be used in articles, presentations, and other publications to inform a national and international audience. Potential risks associated with participation in this study are loss of privacy should confidentiality of responses be compromised. The researcher has taken steps listed below to protect participants' identity in order to protect individuals from embarrassment that may be caused by associating identities of respondents with their responses.

Confidentiality: All information associated with project participants will be kept in a locked office accessible only to the researcher. In accordance with the Federal regulations, the research materials will be kept for a period of seven years after the completion of the research project. No comments will be attributed to you by name in any reports or publications related to this study. You may be identified by category (e.g., teacher), but a pseudonym will be used in place of your name in all reports. Neither the school nor the school district will be identified in any reports or publications related to this study.

Informed Consent: Your input is very valuable, and your participation will be greatly appreciated. **By signing this informed consent form and returning it to me, you are consenting to allow your responses to be used in this study.**

Thank you for your consideration of my request for your participation in this study. If you have questions, feel free to contact me (706-201-0785 or cbracewell@madison.k12.ga.us)

Sincerely,

Catherine Bracewell

105 Courtney Place

Winterville, GA 30683

____ I give my permission for the responses I have made during the interview and observations to be used as data for the study being conducted by Catherine Bracewell as a requirement for completion of her degree as doctor of education at the University of Georgia.

APPENDIX E

OBSERVATION PROTOCOL

OBSERVATION FIELD NOTES Activity observed:

Researcher Name:

Catherine Bracewell

Observation #:	Observation Date:	Beginning Time:
Participant ID#:	Protocol Completion Date:	Ending Time:

Points for the observation: focus on teacher communication, teacher planning, formative/summative assessment, and instructional strategies**:**

- In what ways is the teacher communicating with students or teachers?
- In what ways is the teacher collecting and or utilizing formative/summative data?
- In what ways has the teacher planned for instruction?
- What instructional strategies are a part the teacher's lesson?

Description of environment:
Observations:
1
2
3
4
5
6
7
8
9
10
(Continue numbering until end of observation)
Reflections/Insights: [Brackets will indicate reflections noted during the observation. Reflections made during the observation will be noted alongside the observation field notes.]

APPENDIX F

INTERVIEW CODING PROTOCOL

INTERVIEW CODING PROTOCOL FORM	School site:	
Researcher Name: Catherine Bracewell	Grade level:	
Interview #:	Interview Date:	Beginning Time:
Participant ID#:	Protocol Completion Date:	Ending Time:

Transcript

APPENDIX G

COMMON CORE FEEDBACK TOOL- FOR EDUCATORS

These CCSS implementation survey questions and the associated guidance were the result of collaboration between Achieve, the U.S. Education Delivery Institute (EDI) and Education First. This tool was designed for voluntary use by state education agencies as they create feedback loops to monitor CCSS implementation efforts.

Thank you for taking the time to complete this survey. The [XXXXXXX] is administering this survey to better understand how educators can best be supported during the transition to the Common Core State Standards. Please submit your responses by [XXX]. If you have any questions about this survey contact [XXXXXX]

Your feedback is greatly appreciated!

State Overview: Common Core State Standards

Background Information

Please identify your role/title (check all that apply):

- ☐ Teacher
- ☐ Other: _____

[If yes to "teacher"] Please select the grades or areas in which you teach. (Check all that apply)

- ☐ K- Grade 1
- ☐ Grades 2-3
- ☐ Grades 4-5

[If yes to "teacher"] In which content areas do you teach? (check all that apply)

- ☐ All areas/general education
- ☐ English Language Arts/Literacy
- ☐ Math
- ☐ Science
- ☐ Social Studies
- ☐ Special Education
- ☐ English Language Learners (ELL)
- ☐ Other: _____

[Objective 1: Assess respondents' awareness and support of the Common Core]

1. How much do you know about Georgia's transition to the Common Core State Standards?

   - ☐ I have comprehensive knowledge about the transition to the Common Core.
   - ☐ I have some knowledge about the transition to the Common Core.
   - ☐ I have little knowledge about the transition to the Common Core.
   - ☐ I have no knowledge about the transition to the Common Core.

2. Have you read the Common Core State Standards that relate to your grade and subject area? Y/N/

For number 3, choose the answer that most closely reflects your opinion.

3. I believe that the Common Core State Standards will lead to improved student learning for the majority of students I serve.

   - ☐ Strongly Agree
   - ☐ Agree
   - ☐ Disagree
   - ☐ Strongly Disagree
   - ☐ I don't know

4. [For those who answer "agree" or "strongly agree"] Please identify the reasons you believe that the Common Core State Standards will benefit the majority of the students you serve. (check all that apply)

    - ☐ They will help educators better prepare students for college.
    - ☐ They will help educators focus on what's most important.
    - ☐ They will help educators better prepare students to compete in the workforce.
    - ☐ They will ensure that a high school diploma has meaning.
    - ☐ They will provide educators a manageable amount of curriculum to teach in a school year.
    - ☐ They will give students the opportunity to master key competencies, rather than just being superficially exposed to them.
    - ☐ They will help my school system ensure that our standards are vertically-aligned from kindergarten through grade 12.
    - ☐ They will provide students a clearer understanding of what they must know in order to succeed.
    - ☐ Other: _____

5. [For those who answer "disagree" or "strongly disagree" to #3] Please identify the reasons you believe that the Common Core State Standards will not benefit the majority of students you serve. (check all that apply)

    - ☐ Our current state standards are better than the Common Core.
    - ☐ The Common Core are too rigorous for many students I teach.
    - ☐ The Common Core excludes important concepts that students should learn.
    - ☐ The Common Core embraces a "one size fits all" approach that will not help many students I teach.
    - ☐ The standards do not provide educators the flexibility needed to help students who are not on grade level.
    - ☐ Other: _____

6. How would you describe the difference between the state's current academic standards and the Common Core State Standards?

    - ☐ The Common Core are more demanding and raise expectations for student learning.
    - ☐ The Common Core are pretty much the same.
    - ☐ The Common Core are less demanding and lower expectations for student learning.

- ☐ I don't know.

7. Do you feel prepared to teach the Common Core State Standards?

   - ☐ Yes, I feel completely prepared.
   - ☐ I feel somewhat prepared.
   - ☐ No, I do not feel prepared at all.
   - ☐ I do not know if I'm prepared.

8. [If "no" or "I don't know"] What would help you feel prepared to teach the Common Core State Standards? (check all that apply)

   - ☐ Access to curricular resources aligned to the Common Core
   - ☐ Access to assessments aligned to the Common Core
   - ☐ More information about how the standards change what is expected of my instructional practice
   - ☐ More information about how the standards change what is expected of students
   - ☐ Other: _____

[Objective 2: Gauge respondents' understanding of the Common Core]

1. Over the next 2 years, Georgia will be transitioning from its current academic standards to the Common Core State Standards:

   How much do you know about the standards and content you will be asked to teach next year?

   - ☐ I have comprehensive knowledge.
   - ☐ I have some knowledge.
   - ☐ I have little knowledge.
   - ☐ I have no knowledge.

2. [For general/ELA/science/social studies educators] The Common Core State Standards for English Language Arts/Literacy apply to teachers in other core subjects and their work to support students' literacy development. As you reflect on your teaching of literacy in your subject area, please answer the question below.

   To what extent do you believe the following practices are important to improving student learning? [INTERNAL NOTE: Only 2, 4 and 5 are aligned to the Common Core. Data from this question can be used to gauge educator understanding of CCSS-aligned

practices and to strengthen professional development.]

	Very important	Important	Somewhat important	Not important	I don't know
Providing students ongoing opportunities to write creatively drawing from personal experiences					
Structuring opportunities for students to have conversations and develop arguments based on the texts they've read					
Utilizing pre-reading strategies to help all students fully understand a text through discussions and/or overviews of context, vocabulary, and the author's craft prior to reading					
Creating learning experiences that build knowledge using informational texts, not just literature					
Providing instruction in academic vocabulary to support students' understanding of complex text					

3. [For general/ELA/science/social studies educators] Which of the following describes an activity that would meet the Common Core State Standard below? (check one)

   Standard: Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

   - ☐ Students summarize a chapter of a novel and apply what they've read to their own lives
   - ☐ Students write a story about the American Revolution as if they lived through the time period
   - ☐ After reading a novel, students develop an argument in favor of a character's point of view based on facts and events from the book
   - ☐ Students interview a local elected official after reading about voting rights in America

4. [For general/ELA/science/social studies educators] Which of the following are the central shifts required from the Common Core State Standards in English Language

Arts/Literacy? (check all that apply) [INTERNAL NOTE: Only 1, 2 and 5 are aligned to the Common Core.]

- ☐ Build students' knowledge through content-rich non-fiction
- ☐ Provide students reading and writing experiences grounded in evidence from text, both literary and informational
- ☐ Strengthen students' understanding of narrative text by making meaningful connections to their personal experiences
- ☐ Provide students different levels of text based on their reading abilities.
- ☐ Provide regular opportunities for students to practice with complex grade-level text and its academic language

5. [For general/math/science educators] The Common Core State Standards for math can also apply to other subject area teachers, related to their work to develop students' mathematical understanding and practice. As you reflect on your teaching in your subject area, please answer the questions below.

   To what extent do you believe the following practices are important to improving student learning? [INTERNAL NOTE: Only 1, 3 and 4 are aligned to the Common Core.]

	Very important	Important	Somewhat important	Not important	I don't know
Structuring class time for students to develop procedural skill and fluency in core operations (such as multiplication tables) so they can understand more complex topics					
Exposing students to a wide range of math topics within each grade level in preparation for their future learning					
Connecting student learning within and across grades so learning builds on foundations built in previous years					
Providing opportunities for students to apply math concepts to "real world" situations					
Maximizing student learning by teaching effective mnemonics and recall strategies as alternatives to conceptual understanding					

6. [For general/math/science educators] What are the similarities and differences that you notice between these two math standards? (open answer)

   [*State standard: Include here the most closely related state standard on positive and negative numbers and their opposites.*]

   Common Core State Standard: Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.

7. [For general/math/science educators] Which of the following are the central shifts required from the Common Core State Standards in math? (check all that apply) [INTERNAL NOTE: Only 1, 2 and 4 are aligned to the Common Core]

   - ☐ Focus deeply on the concepts emphasized in the standards to help students build strong foundations for learning
   - ☐ Create coherent progressions within the standards from grade to grade so student knowledge and skills build onto previous learning
   - ☐ Introduce multiplication and division earlier in students' learning as foundations for math concepts taught in later years
   - ☐ Develop students' conceptual understanding, procedural fluency, and their ability to apply math in context
   - ☐ Teach each math topic as an independent, new concept that is distinct from topics taught earlier or later

[Objective 3: Assess the reach of and satisfaction with Common Core resources that have been provided]

1. Have you accessed any of the following resources from the [state department of education] about Common Core implementation? For those that you have accessed, please rate their quality.

Resources	Accessed?	How helpful? (1= very helpful; 4= not helpful)
Department Webinars	Y/N	1 2 3 4
Website	Y/N	1 2 3 4
Department Professional Development	Y/N	1 2 3 4
Regional Service Centers	Y/N	1 2 3 4
[Add others]	Y/N	1 2 3 4

2. [If yes on website question above] When you accessed the Department's website, what information were you looking for? (check all that apply)

- ☐ Link to the specific standards
- ☐ Instructional materials aligned to the standards
- ☐ Reminders about implementation timeline
- ☐ Links to supplemental materials (e.g., curriculum guides, exemplars from other states)
- ☐ Fact sheets, talking points, or powerpoints to pass on to staff, parents, the public about Common Core
- ☐ Powerpoints of specific Common Core webinars to review or adapt for redelivery
- ☐ Other: _____

3. [If yes to website question] What else would you have liked to see on the website? (open answer)

4. Please identify which, if any, of the following activities/resources have been made available to you. (check all that apply)

    - ☐ Collaborative planning time dedicated to understanding and deconstructing the Common Core State Standards
    - ☐ Collaborative planning time dedicated to aligning curriculum to the Common Core
    - ☐ Content-focused trainings on the Common Core
    - ☐ Lesson plans aligned to the Common Core
    - ☐ Job-embedded training or coaching focused on Common Core implementation
    - ☐ Resources on research/best practice in Common Core implementation
    - ☐ Professional learning community focused on Common Core implementation
    - ☐ Other: _____
    - ☐ None of the above

5. Have you participated in professional development/training on the Common Core State Standards? Y/N

6. [If yes] How would you describe those professional development/training opportunities? (check all that apply)

    - ☐ One-day training opportunity
    - ☐ Multi-day training opportunity
    - ☐ Online webinar or video
    - ☐ Job-embedded training or coaching within my school
    - ☐ Professional learning community (PLC)
    - ☐ Other: _____

7. [If yes to #4] Who provided the training? (check all that apply)

    - ☐ A staff member from my school or district
    - ☐ A professional development provider brought in by my school district
    - ☐ The Department of Education

- ☐ An independent professional development provider
- ☐ Other: _____
- ☐ I don't know

8. [If yes to #4] Choose the answer that most closely reflects your opinion.

   In general, the Common Core training I have received has been of high quality. I have learned a great deal of information that has helped me improve my practice.

   - ☐ Strongly agree
   - ☐ Agree
   - ☐ Disagree
   - ☐ Strongly disagree
   - ☐ I don't know

[Objective 4: Identify effective communication and outreach mechanisms]

1. Is there a staff member in your school or district who has been identified as a resource on the Common Core State Standards for teachers? Y/N/I don't know

2. [If yes] What position does this individual hold? (open answer)

3. How accessible is this individual when you have questions about Common Core implementation? (1= very accessible to 4= not accessible)

4. Of the following sources that provide information on the Common Core State Standards, which do you trust? (check all that apply)

   - ☐ Online or print news media
   - ☐ School district newsletter, website, or emails
   - ☐ Fellow teachers
   - ☐ Professional associations
   - ☐ Other: _____
   - ☐ State department website
   - ☐ School principal
   - ☐ District administrator
   - ☐ National website

5. What communication channels from the [state department] would be most useful in helping you implement the Common Core State Standards?

   - ☐ Webinars
   - ☐ Monthly email updates
   - ☐ Annual conferences
   - ☐ Social media (e.g., Twitter, Facebook)
   - ☐ Other: _____
   - ☐ Professional learning communities
   - ☐ Website
   - ☐ Recorded message updates
   - ☐ Recorded video messages/webcasts
   - ☐ Professional development day

6. Does your school have a plan for Common Core implementation? Y/N/ I don't know

7. Does your district have a plan for Common Core implementation? Y/N/ I don't know

[Objective 5: Identify challenges to implementation and potential solutions]

1. What do you believe will be the top two challenges to implementing the Common Core State Standards in your school or district? (check up to two)

   - ☐ Students' prior knowledge
   - ☐ Need more information about the standards
   - ☐ Need more formative assessments aligned to the Common Core
   - ☐ Need more quality professional development
   - ☐ Need more time to collaborate with my colleagues
   - ☐ Need more funding
   - ☐ Need more aligned textbooks and materials
   - ☐ Need more parental involvement
   - ☐ Need a state assessment aligned to the Common Core
   - ☐ Need more time to help all students really learn the standards
   - ☐ Other: _____

2. What tools, resources, or information would be most helpful in addressing the challenge(s)? (open answer)

[Objective 6: Assess changes in classroom practice that result from Common Core implementation]

1. Have you incorporated the Common Core State Standards into your teaching expectations and practice?

   - ☐ Yes, I've fully incorporated the Common Core into my teaching expectations and practice.
   - ☐ I've incorporated the Common Core in some areas of my teaching, in other areas I have not.
   - ☐ No, I have not incorporated the Common Core into my teaching expectations or practice.
   - ☐ I don't know.

2. [For those that responded positively to #1] What changes are you making to your teaching practice as a result of the Common Core State Standards? (check all that apply)

[INTERNAL NOTE: While all of these practices are strong, 2, 3 and 5 are most closely related to Common Core implementation]

- ☐ Incorporating new curricular materials and instructional strategies in my teaching
- ☐ Asking students more questions and encouraging them to develop answers independently
- ☐ Structuring opportunities for students to develop and solve their own problems
- ☐ Increasing my use of national resources on teaching
- ☐ Diversifying the ways I assess student learning and provide feedback
- ☐ Increasing my collaboration with colleagues within my school and in other schools
- ☐ Other: _____

3. Why are you making these changes? (open answer)

For numbers 4-6, choose the answer that most closely reflects your opinion.

4. My understanding of the effective practices to teach of the Common Core State Standards will help me differentiate instruction to meet the unique needs of my students.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly Disagree
- ☐ I don't know

5. The Common Core State Standards will require that I change the way I incorporate instructional technology into classroom learning.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly Disagree
- ☐ I don't know

6. The Common Core State Standards will help me know what content to teach my students and in what sequence to teach it in order for them to fully master key competencies.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly Disagree
- ☐ I don't know

7. Is there anything else you want us to know about how [the state's] transition to the Common Core State Standards is affecting you, your school, or your students? (open answer)

Respondent background information—Optional

Name of District: (optional, choose from drop down)

Name of School: (optional, choose from drop down)

For more information about the Common Core State Standards, access the following links:

[Include the state department of education's website and any resources that may be helpful. See the guidance document for suggestions.]