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# Elementary Coteachers' Understanding about Differentiated Instructional Practices for Students with Disabilities

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COLLEGE OF EDUCATION

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Abstract

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Doctoral Study Submitted in Partial Fulfillment

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Abstract

Despite a rural Georgia school district's effort to increase the academic performance of all students, the achievement gap persists between general education and special education students. The purpose of the study was to explore what factors hindered coteachers from consistently applying differentiated instruction in elementary inclusion classrooms. The conceptual framework for the study emanated from Vygotsky's social development theory as it related to teachers learning from each other through professional collaboration. The research questions explored coteachers' perceptions about differentiated instruction for students with disabilities. Using a case study methodology and purposeful sampling of 6 general education and 6 special education teachers, who met the criteria and agreed to participate, qualitative data were gathered through surveys, semistructured teacher interviews, and lesson plan documentation. Open-ended surveys, transcribed interviews, and lesson plans were coded and analyzed through open and axial coding to generate themes. The major themes identified included teacher perceptions of differentiated instruction, implementing differentiated instructional practices, and supports needed for successful differentiated instructional practices. The findings indicated a need for a systematic approach to professional development on differentiated instructional strategies to improve educational growth for students with disabilities. The recommended professional development may contribute to positive social change by increasing coteachers' impact on the learning environment for special needs students. This increased impact may lead to higher graduation rates and more self-sufficiency among students.

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Dedication

I would first like to honor and thank my Heavenly Father for being the head of my life. It is my belief that I can do all things through Christ, who strengthens me. I give praise to God for His grace and mercy and for allowing me to achieve the highest educational accomplishment of my professional career. I would like to dedicate this work in loving memory of my parents, Sammie and Lula Smith, who inspired me to pursue all of my dreams. I would like to thank my wonderful husband, Cassius, and my adorable children, Jarria and Carlon, for their love, patience, and support. A sincere appreciation is expressed to my brothers, Sammie and Ronald, my sisters-in-laws, Janet and Doreen, my nephews, Rico, Andre, Jarius, and Demetrius (D. J.). I am deeply grateful to my nieces, Tamika and Faith, for keeping me informed about family occasions that I was not able to attend.

I am extending a heart-felt thank you to my loved ones and friends who persistently encouraged me through the doctoral study process and had faith that I would successfully achieve my degree. I would also like to thank my administrators whose leadership helped guide me to become the educator that I am. Last, but certainly not least, this dissertation is dedicated to my wonderful colleagues and the early childhood educators who work diligently to ensure all students start their lives with a high-quality education.

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Section 1: Introduction to the Study

**Introduction**

One of the greatest challenges for American public schools educating 21st century

learners is ensuring that all students, including students with disabilities, are successful.

In 1965, President Lyndon B. Johnson signed the Elementary and Secondary Education

Act (ESEA) into law (ESEA, 1965). ESEA culminated in PL 94-142, the Education for

All Handicapped Children Act (EAHCA) which emphasized that schools be accountable

by providing children equal access to education and quality instruction ((EAHCA, 1975).

Up until the mid-1970s, students with disabilities were included in public schools only to

receive instruction in isolated classrooms with their own specialized, trained special

education teacher (Osgood, 2008). General education teachers did not have a significant

role in interacting with the special education teacher or educating students with

disabilities. However, passing of the Individuals with Disabilities Education Act (IDEA)

of 1975 changed how students with disabilities were educated in their learning

environment (EAHCA, 1975). By the 1990s, the inclusion of students with disabilities

receiving their instruction in general education classrooms became common in public

schools (McLeskey, Landers, Williamson, & Hoppey, 2012). Since the reauthorization of

the IDEA in 1997, there has been a movement toward delivering special education

services to students with disabilities in the general education setting at the same intensive

academic expectations as their nondisabled peers (Timberlake, 2014). Designed to protect

the rights of students with disabilities, the law ensured these students receive a free and appropriate public education (FAPE; IDEA, 2004).

In 2002, President George Bush signed into law the No Child Left Behind Act of 2001 (NCLB) that required states to meet high-stakes standards and mandated accountability in public education (NCLB; 2002). NCLB paired with IDEA and brought into focus the gap in the achievement of students with disabilities and their nondisabled peers. In its most recent amendment, IDEA (2004) required that public schools in the United States provide instruction to students with disabilities in the least restrictive environment (LRE). LRE is an educational setting derived from the Education for All Handicapped Children Act of 1975 that advocated students with disabilities receive appropriate support as close as possible to general education expectations while not in the general education setting (DeMonte, 2010). The NCLB initiative charged states and school districts with accountability for improving the academic performance level of all students, including students with disabilities (NCLB, 2002). Hence, NCLB and the reauthorization of the IDEA in 2004 stressed the significance of including students with disabilities in the general education classroom (McCray & Hatton, 2011).

Coteaching is one approach that schools across the United States can use to meet a variety of instructional needs for educating students with disabilities in an inclusive classroom environment while addressing federal mandates. Conderman (2011) explained that coteaching involves "two or more educators working collaboratively to deliver instruction to a heterogeneous group of students in a shared instructional space" (p. 24).

Brownell and Walther-Thomas (2002) conducted an interview session with Dr. Marilyn Friend, a leading expert in coteaching collaboration. In the interview, Friend (as cited in Brownell and Walther-Thomas, 2002) suggested that administrators should support the professional growth of coteachers saying, "It's about working together to create favorable outcomes for all students" (p. 226). Not only must coteachers meet the needs of students with disabilities in the cotaught classroom, they must also implement differentiated instruction.

In order for teachers to ensure students with disabilities have access to the most favorable environment for learning, students are often assigned to an inclusion classroom where coteaching occurs as specified in each student's individualized education plan (IEP). The IEP outlines a student's cognitive ability and the specific accommodations and modifications that are needed to enhance the learning opportunity for each student (Petersen, 2016). Furthermore, the IEP guides the integration of the general education and special education curriculum (Petersen, 2016). I have observed that general education and special education teachers share different opinions regarding how to provide effective and innovative approaches to meet students with disabilities individualized needs. Differentiated instruction can offer teachers various ways to meet the individual needs of all learners (Tomlinson & Imbeau, 2010). Lynch and Warner (2008) agreed that differentiated instruction focuses on the differing needs of learners.

Implementing differentiated instruction helps coteachers to maximize instruction that benefits students academically. However, an absence of research exists regarding

general education and special education coteachers' preparedness for consistently using differentiated instructional strategies. Specifically, teachers may struggle with understanding its content, process, product, and the learning environment to fit the learning styles of each student. The idea of constructivism supports the differentiated classroom with coteachers creating an environment that promotes students to construct their knowledge (Boghossian, 2012). The way coteachers approach the implementation of a differentiated curriculum within the inclusion environment has the potential to improve students' learning outcomes. Dixon, Yssel, McConnell, and Hardin (2014) stated, "Differentiating instruction offers different avenues towards understanding content, process, and products regarding what is appropriate given a students' learning profile" (p. 111). In the following section, I define the problem, provide a rationale for the study, discuss the significance of the study, and review the existing literature on the topic.

## Definition of the Problem

Two teachers, a special education teacher and a general education teacher, teaching and sharing responsibilities are becoming more and more common in an inclusion classroom. Numerous researchers embrace differentiated instruction as an effective strategy for teachers to incorporate in the classroom with students of differing abilities (Anderson, 2007; Levy 2008; Tomlinson, 2012). The problem at an elementary school district in rural Georgia is general education and special education teachers' lack of understanding about their roles as coteachers to differentiate instruction for students with disabilities within the inclusion classroom. Although coteachers are willing to use

differentiated instruction, it is unknown what factors hinder teachers from applying

differentiated instruction consistently or what teachers regard as successful differentiated

teaching practices. Differentiated instruction requires coteachers to be knowledgeable

about various curriculum strategies; yet, many teachers struggle with implementing

differentiated instruction due to a lack of time, professional development, and needed

instructional materials (Patterson, Conolly, & Ritter, 2009). Conversations and concerns

from some teachers in the district under study corroborated evidence that implementing

differentiating instruction to accommodate the needs of a diverse student population is

challenging. These coteachers conveyed a multitude of frustration which basically stems

from a lack of professional preparation about appropriately implementing differentiated

instruction in cotaught classrooms (J. Washington, personal communication, September

9, 2013; S. Lanier, personal communication, September 16, 2013). De Jesus (2012)

stated, "The process of differentiating instruction may seem overwhelming at first

because the teacher has to take so much into consideration before planning" (p. 10). To

become successful at implementing differentiated instruction, De Jesus concluded

teachers can achieve differential knowledge simply by incorporating the use of

cooperative learning, project base learning, and multiple intelligences into their lessons.

The local setting of this study was a school district in rural Georgia. The district

includes three elementary Title I schools, one Title I middle school, one high school, and

one achievement center. There are 601 employees, including 286 classified staff.  Of the

total number of employees, 4% are administrators. Of the teaching staff, 194 have

advanced degrees. The student population consists of 4,089 students as of September 2015. The demographic makeup of the setting includes 26% African American, 69% Caucasian, 2% Multi–racial, and 2% Hispanic. Furthermore, 10% of students receive gifted services, and 10% of students receive special education services.

Administrators actively encourage continuous participation in training sessions to improve teachers' professional growth for supporting students in the cotaught classroom. Each inclusion class may consist of one team of teachers per grade level. Coteachers have reported to the administration during grade level meetings that they were experiencing trouble collaborating on effective differentiated instructional practices, an indication that the teachers needed professional development. Although the district offers periodic professional development for coteachers, explicit facilitation on how to incorporate effective differentiated strategies for students with disabilities remains problematic. Training in differentiated instruction does not always transfer into classroom practices; therefore, successful coteaching may not always occur in all inclusion classrooms. The lack of knowledge about implementing differentiated instruction in cotaught classrooms impacts student learning.

Implementing differentiated instruction in an elementary inclusion classroom has the potential to meet the learning needs of students with varying abilities. Further research was required to ascertain what differentiated practices coteachers needed to increase student performance. There was a need to gather input about coteachers' perceptions toward their differentiated practices in elementary inclusion classrooms with

the intent to improve teacher efficacy. The need for this case study was evident in the

limited body of knowledge in order to bring about awareness and sensitivity in sustaining

effective differentiated instructional practices. The findings led to positive social change

for teachers by resulting in a project to provide support to students with disabilities in

inclusive classrooms.

Consequently, I explored coteachers' perceptions about what constitutes

successful differentiated instruction for students with disabilities in a rural Georgia

elementary school district. The research questions guided the study, followed by current

literature collected from a multitude of sources to address the problem. An effort to

coordinate the perceived needs of coteachers implementing differentiated instruction can

advance teachers' professional growth to increase student achievement. Suggestions

supported by professional literature regarding differentiated instruction advocated the

need for professional development to improve student learning.

## Rationale

### Evidence of the Problem at the Local Level

Local school districts across the United States charge educators with the task of

creating an optimal learning environment for any student with an appropriate education,

including students with diverse learning needs. The NCLB called for educators to

improve student achievement as measured by mandated standardized tests (NCLB, 2002).

School districts face penalties when schools fail to make annual yearly progress (AYP;

Maleyko & Gawlik, 2011). The district under study has seen an increase in the number of

special needs students receiving services in general education classrooms. According to the Georgia Department of Education (GADOE; 2014), the percentage of students with disabilities aged 6 through 21 receiving specialized support within the general education classroom increased from 78.8% in 2011 to 81.7% in 2012. The lack of resources due to budget cuts to hire additional special education teachers compounded the problem to address the growing number of students with disabilities and their learning needs. Teachers were affected because many do not have the adequate professional development to effectively differentiate instruction for students with disabilities taught in inclusion classrooms. The individual needs of special education students were affected because these students underperform academically on classroom and state assessments.

Furthermore, Georgia implemented The Teacher Keys Effectiveness System (TKES), a new teacher evaluation instrument requiring that teachers apply differentiated instruction to engage each child in the classroom (GADOE, 2014). The TKES evaluation consists of a qualitative rubric-based tool that administrators use to evaluate classroom teachers performance (GADOE, 2014). Differentiating tasks to accommodate students with disabilities were a significant concern among general education and special education teachers at the study site. Every cotaught classroom contained students with varying academic abilities, learning preferences, and experiences. Differentiated instruction requires each teacher to evaluate every student's unique learning styles and to customize teaching strategies to meet the needs of learners (Tomlinson, 2012). Since teachers' personal views about implementing differentiated instruction in the cotaught

classroom have never been assessed to identify which factors specifically enhance or hinder successful student outcomes, it was unclear what practices were used to close the achievement gap for students with disabilities. Conversations that I had with coteachers indicated that they needed help with unifying their approach to employ strategies that would maximize effective instruction for educating special needs students in spite of the coteaching professional development training the system provided. Coteachers' beliefs towards implementing differentiated instruction for students with disabilities may become the impetus for transforming their instructional practice.

Many educators know about differentiated instruction, but few are putting it into practice (Latz, Speirs, Neumeister, Adams, & Pierce, 2009). Consequently, there was a need for coteachers to take individual learning differences into consideration when instructing students with disabilities. Griffith (2011) noted that teachers must be prepared to implement curriculum standards effectively in their classrooms and make the standards applicable for students in the real world. Effective coteachers differentiate lessons according to each student's unique abilities. Research indicated that student's attitudes and academic performance improve when they actively engage in their learning (Causton-Theoharis & Theoharis, 2008; Sternberg, 2008; Pritchard, 2009). Rather than using a traditional learning approach for all students, effective coteachers create lessons that motivate students so that they can comprehend the content according to their prior knowledge and ability (Friend, 2014). Coteachers in the rural Georgia school district under study voiced their concerns that they have inadequate preparation with

implementing differentiated instruction for educating students with disabilities in the inclusion learning environment. The need for coteachers to improve their instructional practices indicated that teachers' perceptions of differentiated instruction were a relevant topic for research. Several of my conversations with teachers in grade level and departmental meetings indicated that they were indeed struggling with accommodating for a wide range of student abilities. These teachers must modify the curriculum with specific instructional strategies to provide academic support for all students within their culturally and intellectually diverse classrooms. Without the appropriate training, factors such as differing teaching philosophies, teaching styles, or teachers' personalities can hinder the delivery of planning differentiated instruction to students taught in inclusive classrooms.

Moreover, the attitudes and expectations of the teacher impact student learning in the classroom (McLeskey & Waldron, 2007). The teachers' perceptions that exist in this school district and their attitudes towards differentiated instructional practices were significant for improving student performance on classroom and state assessments. In an interview, Carol Ann Tomlinson (as cited in Wu, 2013) commented that not all students learn the same stating, "Almost all regular classrooms have a spread of kids working at different levels, and we know that they learn in different ways" (p.127). There was a need to address general education and special education teachers' perspectives of their existing coteaching practices about how to differentiate instruction in an inclusion classroom to close the achievement gap for students with disabilities. Researching this problem led to

successful strategies to help teachers facilitate the learning process in diverse ability classrooms for students who needed additional assistance beyond the normal delivery model. Hence, I collected data through surveys, semistructured interviews with coteachers, and lesson plan documents. The findings from investigating current, research-based evaluations led to a protocol that educational professionals can use to plan better and implement realistic and manageable differentiated strategies for coteachers at the elementary level.

**Evidence of the Problem from the Professional Literature**

Legislative demands and annual progress of students with disabilities have become a significant focus for educators. School districts across the United States are employing coteaching as an instructional approach for educating students in diverse classrooms by using the expertise of two certified teachers (Conderman, 2011). Since school districts are moving toward coteach model classrooms, general education and special education teachers may have concerns that need to be alleviated to work effectively as a team to differentiate their instruction. Although the school district under study adopted the goal of providing differentiated instruction to all learners, a plan for professional development to arm coteachers with the needed skills to consistently implement the approach needed to be adjusted. Tomlinson (2012) suggested that differentiated instruction appears to be a way to reach the individual student, no matter what the readiness, the diverse background, the learning style, or the interest of the student. Much of the literature focused on the advantages and disadvantages of

differentiating instruction. The literature review also accounted for inclusion teachers to implement differentiated instruction best practices.

Additionally, the research highlighted several instructional tools and techniques accessible to the needs of a diverse group of students. Studies suggested that professional development was critical to acquiring and applying the knowledge needed to create learning environments where students can succeed (Darling-Hammond & Richardson, 2009; Nieto, 2009). As evidenced across the literature, the traditional approach to teaching does not meet the diverse needs of students; thus, schools have turned to enlisting the aid of professional development for elementary coteachers to implement differentiated instruction. There is a gap in the literature when it comes to general education and special education teachers embracing the acceptance of using effective differentiated instructional practices in the cotaught classroom. Successful differentiated instruction without well-trained, highly motivated coteachers hinders the progress of all learners. As coteachers differentiate their lessons, Tomlinson (2006) suggested teachers follow three requirements to guide students toward positive educational outcomes. First, teachers should develop a positive relationship with each student in an effort to motivate the student to learn (Tomlinson, 2006). Second, teachers must adjust their instruction to satisfy each student's interest (Tomlinson, 2006). Finally, teachers should cautiously analyze the learners' profiles to determine what adjustments may be needed to increase academic growth (Tomlinson, 2006). These three requirements allow teachers to make

the necessary lesson modifications to the content, instruction, and assessment (Tomlinson, 2006).

A major focus in the field of education is providing quality instruction to students with disabilities. The purpose of this case study was to describe the challenges of elementary coteachers in kindergarten through fifth grade who implemented differentiated instruction as a method of decreasing the achievement gap in an inclusion classroom. Differentiated instruction is an effective means of reducing the achievement gap (Santangelo & Tomlinson, 2009). I desired to explore what elementary coteachers in one school district were doing to differentiate instruction in their inclusion classrooms to accommodate different learning styles for students with disabilities. My intent was to identify supports that other coteachers need in order to implement successful differentiated instructional practices for students with disabilities. Areas explored were inclusive education, challenges with implementing differentiated instruction, the need for differentiated instruction in cotaught classrooms, keys to successful differentiated strategies used in the classroom, teachers' perceptions of differentiated instruction, and professional development. Researching coteachers' perception toward differentiated instruction can result in increasing their knowledge about implementing successful differentiated instructional practices.

With these concerns, there was a need to develop a more in-depth understanding about how coteachers overcame the barriers that kept them from practicing differentiated instruction on a consistent basis. The study justified further investigation about factors

regarding coteachers' attitudes toward differentiating instruction for students with disabilities. The data obtained were an indispensable tool necessary to determine coteachers' understanding of implementing differentiating instruction to increase the potential growth of all learners.

## Definitions

For the purpose of this research study, the following key words are operationally defined as follows:

*Annual yearly progress (AYP)*: A federally designed system of each state's distinct measure of annual progress toward meeting the NCLB goal for having all students attain proficient levels in specific subjects by the 2013–2014 academic year (DeSimone, 2009).

*Coteaching*: An instructional delivery approach in which a general education teacher and special education teacher share responsibility for planning, delivering, and evaluating instruction in order to enrich the learning environment for all students (Friend, 2014).

*Differentiated instruction*: The tailoring of instruction to meet individual learning needs (Tomlinson & Imbeau, 2010).

*Inclusion*: The education of all students, regardless of their ability, in the same age-appropriate general education classrooms (Patterson, Connolly, & Ritter, 2009).

*Individualized education program (IEP)*: An educational program designed specifically for an individual student based on the appropriate needs of the child (GADOE, 2015).

*Least restrictive environment (LRE)*: The placement of students with disabilities with their nondisabled peers to the maximum degree possible in the general education environment (Gokdere, 2012).

*No Child Left Behind Act of 2001 (NCLB)*: *"*A reform of the Elementary and Secondary Education Act, which was enacted in 1965, NCLB is based on four basic principles: stronger accountability for results, increased flexibility and local control, expanded options for parents, and proven teaching methods" (NCLB, 2002).

*Professional development*: Defined as intensive, content-rich, and collegial learning opportunities resulting in improved teachers' knowledge, instructional practices, and student learning outcomes (Darling-Hammond & Richardson, 2009).

*Student affect*: The emotions or environment of the classroom that impact student learning (Tomlinson & Imbeau, 2010).

*Student interest*: "Topics of study that engages a student's enthusiasm and curiosity" (Tomlinson & Imbeau, 2010, p. 16).

*Student learning profile:* "A contextual approach in which a student learns best according to his or her learning modality, learning style, or learning preference" (Tomlinson & Imbeau, 2010, p. 17).

*Student readiness:* The specific background knowledge and skills a student brings to a unit of study (Tomlinson & Imbeau, 2010).

*Students with disabilities*: Students who are identified with disabilities, have an IEP, and qualify for special education services (GADOE, 2015).

## Significance of the Study

This study has significance for elementary educators who coteach in an inclusion classroom and for those who are in administrative roles facilitating coteach teams. The significance of this project study resided in the exploration of specific questions central to understanding the importance of teacher needs as they related to the pedagogic changes coteachers deem necessary to integrate differentiated instruction within the inclusion classroom. Differentiated instruction involves providing instruction to students by incorporating multiple learning approaches (Rock, Gregg, Ells, & Gable, 2008). For this research project, a qualitative case study design was selected for a small population of coteachers willing to participate in the study. Merriam (2009) wrote that the case study is "an in-depth description and analysis of a bounded system" (p. 40). Coteachers' perceptions of differentiated instruction for this rural Georgia school district were significant to meet the diverse needs of students with disabilities. Students with disabilities may suffer the consequences of not having their individual needs met in the general education environment when coteachers fail to incorporate effective differentiated teaching strategies.

Since coteachers' perceptions of differentiated instruction have never been taken into account at the elementary level, I found through analysis of data that teachers and administrators felt significant aspects of differentiated practices positively impacted student achievement. Coteachers gained insightful knowledge as they uncovered effective strategies or challenges for the delivery of rigorous instruction to a diverse group of learners. In addition, coteachers found new ways to support each other as equal partners as they worked together in the inclusion classroom setting. Furthermore, this project has the potential to benefit administrators who supervise coteachers' efforts to deliver best practices to increase student achievement. If teachers develop a positive view of differentiated instructional practices, coteaching in an inclusive setting can be a successful approach that benefits the entire school community. The discovered results of individual experiences of successful differentiated strategies assisted coteachers in this rural Georgia school district in increasing their knowledge about delivering successful differentiated strategies. In addition, professional development, as supported by the literature, proved to be an effective way to train coteachers to implement effective differentiated strategies in their classrooms. The advancements with differentiated instruction gleaned from this research project enabled coteachers to work more effectively as a team to improve the academic success for students with disabilities and their nondisabled peers. Positive social change has the potential to occur once coteachers' beliefs about the reluctance of implementing differentiated instruction on a consistent basis change. The significance of this study was crucial to current general education and

special education teachers at the public school district under study as well as to future coteachers across the country. An additional social change is the collaborative relationship of general education and special education teachers as they plan instruction effectively to meet the needs not only for students with disabilities, but for all students.

**Guiding/Research Questions**

In order to understand how to help coteachers as they implemented differentiated instruction for students with disabilities, it was important to explore general education and special education teachers' perceptions about differentiated instruction. Additionally, it was necessary to gain insight about what support teachers felt they needed to implement successful differentiated instruction. Evidence from the local setting and current research showed that general education and special education teachers who taught students with disabilities struggled with implementing differentiated instruction. The following research questions gave direction to this study:

Research Question 1: What are general education and special education coteachers' perceptions about implementing differentiated instruction for students with disabilities?

Research Question 2: How do general education and special education coteachers practice differentiated instruction for students with disabilities in a rural Georgia elementary inclusion classroom?

Research Question 3: What types of support do general education and special

education coteachers feel are needed to implement differentiated instruction

effectively for students with disabilities in their inclusion classrooms?

Hatch (2002) contended that a major step in research design involves the

identification of the research question to guide the study (p. 41). Although the literature

suggested that differentiated instruction is effective for student learning, there was an

absence of literature regarding how coteachers widely implement differentiated

instruction in cotaught classrooms. In this study, I employed qualitative data collection

techniques that described how these elementary coteachers experiences may or may not

shape their beliefs about implementing differentiated instruction to increase student

learning. Artifacts included coteachers' lesson plans to provide evidence of differentiated

instruction. By offering research-based strategies, the gap between differentiating

teaching methods and the way coteachers apply differentiated instruction may close and a

path to support the thought that elementary coteachers can incorporate successful

differentiated instructional practices was provided. Gaining knowledge about coteachers'

perceptions of differentiated instruction, how coteachers implement differentiated

instruction, and the school-based supports teachers needed to differentiate their

instruction may become an avenue that benefits all learners.

**Conceptual/Theoretical Framework**

The theoretical framework for this study was rooted "in Vygotsky's (1978)

constructivist learning theory in which students create their understanding and knowledge

of the world" (Gordon, 2008, p. 324). Constructivists assert that students bring in prior knowledge to the learning environment, which serves as the foundation for constructing their understanding (Ultanir, 2012).  Similarly, Nagowah and Nagowah (2009) noted that in constructivism, the teachers' focus is on "facilitating student understanding" (p. 280). The constructivist approach links differentiating instruction with how coteachers create varied instructional lessons that connect what each student already knows to what each student needs to learn. According to the constructivist theory, the students are actively engaged in meaningful discussions guided by the teachers who assist them in comprehending new knowledge (Pritchard, 2009). Constructivist theorists posit that new understanding supports the teacher's ability to carefully and explicitly teach to create an environment where learning occurs (Garbett, 2011). Since students enter the learning environment with varying experiences, prior knowledge, and learning styles, teachers implement instruction that shape the academic growth of each student (Tomlinson and Imbeau, 2010).

Coteaching teams play an influential role in shaping the ways students learn from each other by creating a learning environment and opportunities for student progression through classroom discussions, social interactions with peers, and constructive feedback from teachers. Teachers create differentiated lessons based on the student's learning style, interest, readiness, and affect to allow learning opportunities that the student can independently accomplish successfully with teacher assistance (Tomlinson & Imbeau, 2010).). The inclusion classroom learning environment offers instruction for students on

varying academic levels. Vygotsky (1978) commented that students with disabilities benefit when receiving support with higher learning peers in the inclusion setting. Students of differing educational needs can benefit from learning opportunities as they work with each other in inclusion classrooms. Teachers must provide instruction to ensure proficient content material to meet the individualized needs of students (Linz, Heater, & Howard, 2008). Coteachers must also be willing to adapt their behaviors and self-efficacy beliefs for best meeting the diverse needs of all students receiving differentiated instruction within the inclusion classroom environment. Differentiated instruction is an approach that elementary coteachers can use to balance the educational needs of students with disabilities.

Furthermore, Tomlinson and Imbeau (2010) stated that the basis of differentiated instruction is on "students' readiness, interests, and learning profiles" (p. 16). To effectively differentiate instruction, teachers must know how each student learns. Vygotsky (1978) explained that the educators' job is to assist students in acquiring the needed learning experiences as they develop their knowledge. The zone of proximal development (ZPD) was defined by Vygotsky as "the distance between the actual development as determined through problem-solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p. 86). The ZPD requires educators to identify each student's instructional level to develop instruction that fosters students to attain advanced learning progression. The students can comprehend

unfamiliar information if coteachers provide support during instruction to help students link their current knowledge with their new knowledge.

Vygotsky's (1978) social development theory also supports inclusive education and coteachers' belief in their ability to provide students with disabilities with practical instruction. Vygotsky believed that social environments influenced an individual's learning experience. Vygotsky's theory also proposed the idea that shared learning and cognitive development take place in the interactions students have with their peers as well as with teachers and other adults who can contribute to increased students' academic performance. Vygotsky conveyed that students with disabilities can benefit from social and academic interactions and can feel a sense of belonging as they work with their nondisabled peers. The cotaught classroom appears to support this concept and could lead to greater cognitive and academic gains for students with disabilities. The social constructivist theory in this study helped to determine how coteachers collaborated when using successful differentiated practices for meeting each student's individual needs.

The constructivist learning theory was appropriate for this study since coteachers must bring their level of expertise together to provide effective differentiated lessons. Since general education and special education teachers come from various backgrounds and grade levels, they can build and construct knowledge as they collaborate to bring different views to the classroom structure. Professional development for teachers in the constructivist model may enhance the success level of coteachers providing differentiated instruction that may lead to improved student performance.

**Review of the Literature**

The literature review subsection provides insight into differentiated instruction as an educational reform initiative aimed at decreasing the achievement gap. The purpose of the literature review in this study was to focus on differentiated instruction in inclusion classrooms that may positively impact academic learning for students with disabilities. In the literature review, I demonstrate evidence of the efficacy of differentiated instruction as having the potential for meeting diverse learning needs. Differentiated instruction embraces constructivism by challenging traditional teaching techniques where the teacher is the dispenser of knowledge (Tomlinson, 2012). The theoretical framework for this project study embraced the constructivist learning theory. The constructivist theory describes a process in which students learn through actively engaging lessons (Pritchard, 2009). This review of the literature encompassed a comprehensive discussion of differentiated strategies that supports the research questions and problem statement for the current study. In addition, the literature explores teachers' beliefs about differentiated instruction, thereby establishing a need for further research on the approach. I describe teachers' perceptions about implementing differentiated instruction in the inclusion classroom environment, provide studies that investigate teachers using effective differentiated instructional strategies, and examine studies that investigate what coteachers need to implement successful differentiated instruction. The topics included in this review are inclusive education, coteaching and differentiated instruction, differentiated instructional strategies, and assessment. Finally, the literature reviewed

advocated the need for continuous learning opportunities for teachers through professional development.

This study used journal article searches, book reviews, and current legislation for evaluating and reviewing the related scholarly literature. Additionally, this study used the following sources in gathering materials and information for the review of the literature through the Walden University Library Internet search engines: (a) EBSCOhost, (b) ProQuest, (c) Education Resources Information Center (ERIC), and (d) Education Research Complete. The following websites were also used to seek information for the review of the literature: (a) Georgia Department of Education and (b) U. S. Department of Education. Keywords used to search for literature included *inclusive education, coteaching, differentiated instruction, assessments, teacher perceptions of differentiated instruction, constructivism,* and *case study.* These sources examined teachers' understanding of differentiated classroom instruction as an approach to teaching students with disabilities as well as explored previous studies on the approach.

**Inclusive Education**

The literature in the field presented research that focused on general education and special education teachers' perceptions about differentiated instruction in an inclusive classroom environment. Inclusion classrooms are becoming increasingly common because students with disabilities are granted access to the general education curriculum for a complete educational learning experience alongside their peers without disabilities. An estimated 6 million students between the ages of 3–21 receive

individualized special education services (National Center for Education Statistics, 2013). Inclusion allows special needs students to receive their education with their nondisabled peers in the general education environment rather than in a separate classroom setting. Yell (2012) defined inclusion as "a placement in the general education environment for educating students with disabilities among their nondisabled peers" (p. 310). There have been federal and legislative changes focused on instructing students with disabilities in the general education setting for the majority of the school day (McCray & McHatton, 2011).

Special needs students were once isolated from receiving instruction in the general education environment only to learn from a specialized curriculum with a specialized teacher (Ernest, Heckaman, Thompson, Hull, & Carter, 2011). Teachers' inadequate time to collaborate with other teachers and specialists, a lack of time to attend meetings to discuss students' academic performance, and insufficient time to accept the obligation to instruct students with disabilities in the general education environment hindered students' progress (Santoli, Sachs, Romey, & McClurg, 2008). Conversely, Causton-Theoharis and Theoharis (2008) found that when both students with disabilities and their nondisabled peers were confident they belonged in the classroom, they were motivated, engaged, and more likely to learn.

The inclusion school environment embraces the acceptance of students with disabilities as integral members within the general classroom environment. Advocates of inclusion believe that integrating students with disabilities into the general education

environment is critical for increasing student learning (Begeny & Martens, 2007; Savich, 2008). In a study, Hill (2009) explored teachers' beliefs about inclusive education. The findings of that study indicated that many teachers have positive beliefs about including students in the inclusive environments. However, Hill found that the teachers did not have a favorable view about their confidence to instruct students with disabilities. According to Hill, a majority of the teachers felt that additional professional development would lead to better understanding about teaching special needs students in inclusive environments.

School districts must incorporate instructional changes for educating students with disabilities through new approaches as a result of federal mandates. Since different school districts implement inclusion environments differently, identifying the best practices is difficult for educators. Legislative mandates, such as NCLB and the reauthorization of the IDEA, challenge teachers to design and implement teaching strategies that will ensure success for all student groups, including children with disabilities (Conderman, 2011).

Coteaching offers a wide range of instructional practices to enhance the academic learning of students with disabilities. The increased number of inclusion classrooms for students with disabilities leads to coteachers' responsibility for providing effective differentiated practices that will benefit these learners. In the inclusion classroom, coteachers need to understand individual differences to determine each student's learning styles, interest level, and academic performance (Friend, 2014). Differentiated instruction

is one approach schools can use to accomplish the task of educating students with disabilities in inclusive classrooms. As the demand for inclusive education has increased due to legislative mandates, many teachers have found coteaching in the differentiated classroom as beneficial, but also challenging (Friend, 2014). Students learn through different steps in different ways. The literature supported differentiated instruction as an effective strategy that coteachers can use to teach varying academic levels within the inclusion classroom environment. Differentiated instruction begins with the coteachers assessing each student's unique learning styles to address individual differences (Friend, 2014). The premise of differentiated instruction is that students with disabilities can gain understanding of concepts when presented with multiples instructional strategies (Friend, 2014).

Differentiated instruction is not a short-lived concept, but offers alternative teaching methods for students with different learning styles (Rock, Gregg, Ellis, & Gable, 2008). Villa, Thousand, Liston, McNeil, and Nevin (2005) reported, "students with disabilities often met with failure in general education because content areas were unrelated, out of context, practiced only a few minutes per day, and without consideration of generalization and transfer" (p. 36). The absence of differentiated instruction in the cotaught environment may negatively hinder student success. Implementing differentiated instruction in the inclusion classroom can aid coteachers in adapting their instruction to meet the educational needs of students with disabilities in response to federal legislation. Differentiated instruction allows each student to receive instruction

from knowledgeable, skilled coteachers who individualize learning settings to maximize student growth.

**Coteaching and Differentiated Instruction**

Coteaching is a service delivery approach used frequently to educate students in general education classes while also providing additional specialized instructional support to students with disabilities (Conderman, 2011). In the past, students with disabilities were granted limited access to the general education curriculum. Differentiated instruction in the cotaught classroom is essential for the success of students with disabilities. As a result of the educational reform laws, coteaching is one method that can address educating students with disabilities alongside their nondisabled peers (Friend & Hurley-Chamberlain, 2007; Sileo & van Garderen, 2010). A study by Scheeler, Congdon, and Stansbery (2010) found that coteaching in inclusive classrooms is becoming a prevalent service delivery model for educating students with disabilities. Many times the special education teacher assumes a subordinate role with less than equal status (Friend, 2014). Coteaching provides a means for coteachers to "support each other in their common goal of delivering a quality education to students in the shared setting of a general education classroom" (Pugach & Winn, 2011, p. 36).  Likewise, Servilio (2009) stated, "Many professionals in the field of education know in order for instruction to be successful for students with disabilities, the general education teacher and the special education teacher need to collaborate to design and implement effective strategies" (p. 3).

Moreover, Obiakor, Harris, Mutua, Rotatori, & Algozzine (2012) added, "for inclusion to

become a reality within the school, teachers and service providers must be willing to

provide differentiated instruction in schools and have the wherewithal to implement it

within their classrooms" (p.483).

Inclusion efforts challenge educators to modify the curriculum and differentiate

classroom instruction. Moreover, teaching students with disabilities in the general

education environment has brought about a change in the delivery of instruction. The

growing presence of diverse learning styles calls for many school districts to implement

differentiated instruction as a measure to effectively meet student learning (Heubner,

2010). Although there is no one prevailing method that will satisfy the needs of all

students in diverse classrooms, differentiated instruction is an effective process for

working successfully with multiple learning styles (Tomlinson & Imbeau, 2010).

Differentiated instruction challenges students with disabilities to grasp information at

their own pace while providing them the support to achieve similar goals as their peers.

Research indicated that coteaching increases instructional options and enhances

participation and performance for students with disabilities (Nichols, Dowdy, & Nichols,

2010). There are several approaches to coteaching. One approach is when one teacher

teaches, and the other teacher observes and provides support to students while circulating

around the room (Friend, 2014). A second approach is incorporating teaching stations to

divide the delivery of the content as well as the students into groups (Friend, 2014).

Parallel teaching is a third approach, where the coteachers divide the class into two

groups, but ensure both groups receive the same content (Friend, 2014). A fourth approach is alternative teaching, where the teachers divide the class into a large group and a small group in order for a smaller group of students to receive more individualized instruction (Friend, 2014). Finally, team teaching involves both teachers developing lessons and presenting the curriculum (Friend, 2014). Scruggs, Mastropieri, and McDuffie (2007) identified one teach, one assist as the predominant strategy used in a cotaught classroom. In this strategy, the general education teacher most often takes the lead role providing most of the direct instruction with the special education teacher assisting in making adaptations for the students with disabilities (Scruggs et al., 2007).

Regardless of which model a classroom employs, the effects of coteaching are difficult to research because of the various implementations of coteaching (Carpenter & Dyal, 2007; Tannock, 2009; Volonino & Zigmond, 2007). Lingo, Barton-Arwood, and Jolivette (2011) pointed out that teaching student with disabilities in general education classrooms with their nondisabled peers led to instructional challenges for teachers. Hang and Rabren (2009) commented that teachers and students "showed agreement with statements that students with disabilities increased their self-confidence, learned more, had sufficient support, and exhibited better behavior" (p. 266). Piquette-Tomei (2009) added that differentiating instruction is crucial for educating all students in inclusion classrooms. Differentiated instruction permits innovative learning methods to ensure students acquire advanced knowledge (Sousa & Tomlinson, 2011). Coteachers must be cognizant of student differences when creating and adjusting their teaching methods and

lesson plans. Differentiated instruction allows coteachers the flexibility to create lessons that can aid students to reach their maximum growth as learners in the cotaught classroom.

### Challenges to Implementing Differentiated Instruction

Challenges arise when educational leaders require coteachers to become familiar with new concepts that they must add to their instruction. Although the literature supported differentiated instruction as an effective strategy for educating students with disabilities, successful implementation poses several challenges for coteachers. The literature suggested that teachers are willing to differentiate their instruction, but struggle with applying it into actual practice (Latz et al., 2009).

First, coteachers may experience anxiety without completely understanding what is required to instruct a diverse population of students regarding curriculum expectations in the differentiated classroom. Differentiated instruction places significant demands on coteachers to collaborate in extensive planning. Tomlinson (2006) found that while most teachers comprehend the content taught, they have difficulty with prioritizing the necessary curriculum content. Teachers may desire to teach all content material when they lack the knowledge of the curriculum's expectations (Tomlinson, 2006).

Differentiated instruction allows coteachers to proceed through the educational standards at a rate that does not restrict the amount of time for students to grasp the necessary concepts. Although coteachers must have knowledge of each student's readiness level when creating lessons to meet an array of academic abilities, they may

feel obligated to adhere to detailed curriculum guidelines regardless of the students'

learning styles. Learning styles include auditory, visual, kinesthetic, and verbal (Levy,

2008). Coteachers can help students find the method that work best to maximize their

learning. Cusumano and Mueller (2007) found that incorporating differentiated

instruction in the inclusion classroom environment can be useful to support all learners.

Second, coteachers are resistant to differentiation because of the difficulty with

managing a differentiated classroom. Prior to initiating differentiated instruction each

teacher needs to learn how to apply effective classroom management, learning strategies,

and methods of controlling the environment of the class so that students can learn in an

orderly and safe environment (Holloway, 2000). Tomlinson and Imbeau (2010)

recommended that teachers use "flexible grouping, and design group tasks to ensure that

each student works with a rich curriculum" (p. 90). The authors also suggested teachers

"use multiple tasks that have more than one right way to solve a problem, assign

individual roles within groups, make the content accessible to everyone, and note

students' strengths, skills and insights they bring to group work" (p. 91). Robb (2008)

cautioned teachers to establish class routines to manage flexible groups effectively.

Dugger (2008) found that teachers struggling with discipline problems may seem

opposed to implementing differentiated instruction. Callahan, Tomlison, Moon, Brighton,

and Hertberg (2003) reported inflexible classroom management as a major challenge with

implementing differentiated instruction. Sousa and Tomlinson (2011) agreed that the lack

of classroom management is a major concern for teachers implementing differentiated

instruction. Although classroom management is crucial in a differentiated classroom, teachers must allow students chances to show their independent learning by offering various levels of assignments that occur at the same time (Sousa & Tomlinson, 2011). Tomlinson and Imbeau stated, "It is the classroom teacher who has an unspoken contract with each learner to make productive use to time spent in the classroom" (p. 9).

Third, research indicated insufficient time is the greatest challenge when implementing differentiated instruction (Hess, 2011). Elementary coteachers may experience a lack of time with collaborating with each other to assess students' learning needs, interests, readiness levels, and ascertaining important concepts for planning quality lessons for the student through the use of different learning modalities. Integrating differentiated instruction requires using multiple instructional strategies for meeting the needs of all students.

Finally, when coteachers lack professional development with differentiating instruction, student learning is greatly impacted. Hawkins (2009) concluded that teachers may lack confidence with applying differentiated instruction, lack instructional resources, need collaborative instructional time, and lack administrative support, thus requiring consistent professional development training. Coteachers need adequate training in assisting students with diverse learning levels either struggling to meet expectations or exceeding learning expectations. Successful differentiated instruction appears to require intense professional development. The lack of professional development often results in

teachers' failure to accommodate for varying learning needs of students in the cotaught classroom. Teacher resistance indicates the significance for professional development.

**Components of Differentiated Instruction**

Several components of differentiated instruction must be intact for coteachers to provide maximum educational opportunities for students to achieve academically. Tomlinson and Imbeau (2010) specified three elements that teachers can use to differentiate their instruction. The areas for differentiation includes by content, or what students need to learn, by process, or the ways students learn the content taught, which will lead to mastering the material, and by product, or how students present or demonstrate what they have learned.

**Content.** The first component of differentiated instruction is content. Differentiating the content allows the teacher to become familiar with the multiple ways students gain access to essential information (Tomlinson, 2003). Tomlinson and Imbeau (2010) defined content as the learning that teachers want students to achieve. Teachers achieve successful differentiation by varying the content in multiple ways so that students can access essential learning concepts. General education and special education coteachers can customize the content based on each student's readiness, interests, and learning profile. Tomlinson and Imbeau believed that a students' readiness occurs when teachers match the students' needs to what they are expected to learn.

One way of differentiating instruction by content is allowing students to select interesting texts at their reading level (Landrum & McDuffie, 2010). The students'

learning profile is identified as a "preference for taking in, exploring, or expressing content" (Landrum & McDuffie, 2010, p. 15). Content variations in a differentiated curriculum allow choices for varying reading assignments, lessons on tape, or the use of partners or groups for peer support. Strategies coteachers can use to differentiate the content include varying the reading level of the material, providing graphic organizers, teaching in a small group setting, or offering the content in audio form. Teachers can adjust the complexity by tiering the lesson or providing learning contracts to aid students in the learning process (Bailey & Williams-Black, 2008).

**Process.** The second component of differentiated instruction is the process of how learning takes place based on the content that the teachers choose to deliver for expected student mastery. Process refers to how students learn essential information. Differentiating the process helps students to increase their understanding of essential skills. Tomlinson and Imbeau (2010) ascertained that process is "how learners come to understand or make sense of the content" (p. 15). Coteachers should be aware of the varying levels of support students need to learn by creating lessons that give students opportunities to gain understanding about a specific learning goal. An effective activity promotes students to use their critical thinking skills to think in an abstract way about the learning task. Teachers can incorporate tiered assignments, learning centers, and anchor activities as choices for diverse learners. Differentiating the process allows teachers to exercise flexibility to give students a way to demonstrate knowledge based on their learning styles (Rock, Gregg, Ellis, & Gable, 2008). The learning activity engages

students and allows students to make connections with learning new information. When coteachers differentiate the process, students may be better able to understand what is being taught, which can help ensure student success.

Tomlinson (2001) suggested differentiating process by "using tiered activities through which all students work on the same skills, but proceed with tiered levels and hands-on support for students who need them" (p. 80). Coteachers can differentiate students' process by modifying how learning is assessed such as offering fewer answer choices on an assessment. For the coteacher this means providing such strategies as varying the levels of assignments, varying the amount of support, varying the amount of structure, varying the time requirement or varying the topics for students to learn (Santangelo & Tomlinson, 2009). When differentiating the process, the coteacher is aware of the way a student learns best. Students may benefit from the use of hands-on activities for kinesthetic learners and by using videos for visual learners. Coteachers can use these strategies to meet the federal mandates for all students, including students with disabilities in the inclusion classroom environment.

**Product.** The final component of differentiated instruction is the product. Differentiating by product refers to what students complete to show that they have mastered a lesson's objective (Levy, 2008). The product is also the culminating task that students complete to show they have mastered the skills taught. Tomlinson and Imbeau (2010) agreed that the product is "how students demonstrate what they have come to know, comprehend, and perform after a prolonged learning period" (p.15). The product

can be differentiated according to the students' learning strengths, learning styles, and interests. Products can include any form of authentic assessments such as performance tasks, rubrics, interviews, writing assignments, performances, or artwork (Tomlinson, 2000). Gregory and Chapman (2007) suggested teachers use various genres, instructional materials at varying levels, a variety of student choices, and exclusion of irrelevant content. Coteachers can vary the complexity of lessons through tiered levels of activities without diminishing the performance expectations of the learning goal to help students make connections to what they are learning. The teaching approach stems from Vygotsky's (1978) ZPD. Vygotsky's ZPD theory posits that learners must be in the zone of learning according to what they can do independently and what they can do with assistance from the teacher.

Differentiating by product means providing students with a list of assignments and giving them a choice in how they will apply their understanding of the content. Tomlinson (2003) reported products could include problem-based learning or tests, but could also include the use of projects. An effective product provides multiple pathways to demonstrate student understanding, promotes high levels of thinking and creativity, and specifically outlines how to assess the product (Santangelo & Tomlinson, 2009). The products include the different tiered activities to assess student learning. The product also serves as an assessment to show student's progress about understanding the content taught. Tomlinson and Imbeau (2010) believed that the product assignments allow each student to demonstrate what they have learned over a prolonged period. Tomlinson and

Imbeau stated, "Teachers who lead for differentiation do many things to shape classroom culture on behalf of student achievement" (p. 148).

**The Need for Differentiated Instruction in Cotaught Classrooms**

Coteachers need to understand differentiated instruction within the inclusion classroom environment to accommodate all students so students can become lifelong learners. Without differentiated instruction, these students will remain in teacher-centered classrooms (Santamaria, 2009). Students do not acquire knowledge at the same rate. Teachers experienced frustration implementing differentiated instruction to meet the varying learning styles (Subban, 2006). An innovative, differentiated classroom provides different ways to acquire content, as the students make sense of ideas through the product of effective learning (Tomlinson, 2001). Unfortunately, few teachers automatically knew how to lead and manage the differentiated classroom (Tomlinson and Imbeau, 2010). According to Hawkins (2009), "The case for differentiating instruction has long been identified as the most logical and fair way to respond to ever increasing students' cognitive, demographic, and racial diversity and their disengagement regarding purposeful learning" (p. 11). Teachers are expected to have the necessary knowledge to teach students with varying academic needs in the general education classroom (Goodnough, 2009). De Jesus (2012) added that teachers are also expected to provide a curriculum that effectively emphasizes the different needs of a diverse student population. Educators continually seek ways to maximize the academic potential for students of different ability levels (Tomlinson, 2008). Coteachers need guidance with

providing effective strategies that address each student's individual learning needs. The literature suggested differentiated instruction appears to be a way to reach each student in spite of the readiness, diverse background, learning style, or the interest of the student (Rock, Gregg, Ellis, & Gable, 2008). Tomlinson and Imbeau (2010) posited differentiated instruction can help teachers to focus on teaching each student to learn specific content. The authors wrote that "readiness refers to the level of understanding a student has for a skill" (Tomlinson & Imbeau, 2010, p. 16). Additionally, Tomlinson and Imbeau defined student interests as "engaging the attention, curiosity and involvement of a student" (p. 16). Moreover, Tomlinson and Imbeau stated that the student's "learning profile is a preference for taking in, exploring, or expressing content" (p. 17).

**Keys to Successful Differentiated Instruction**

Several steps ensure coteachers develop effective lessons for students taught in the differentiated classroom. The first step in differentiated planning is to create lessons according to how each student learns best (Santangelo & Tomlinson, 2009). The second step in creating a differentiated lesson is to refer to student's interests about the skills they are expected to learn. Rosen and Beck-Hill (2012) found that using student interest improved achievement, decreased discipline problems, and increased student attendance. The third step is to create lessons that match a student's readiness or prerequisite skills to those needed to learn new content and skills. Sheehy and Clemmons (2012) found that tiering literacy instruction allowed students to gain a greater understanding of the content. The final step is designing lessons according to student's affect. Student affect is defined

as the emotions a student feels impact his or her learning (Tomlinson & Imbeau, 2010).

Tomlinson (2003) argued that it takes several strategies to accommodate for student

learning differences.

**Differentiated Instruction and Assessments**

A major element that drives instruction in a differentiated classroom is

assessment. Georgia classrooms are exposing students to the same assessment measures

to evaluate all students at the elementary level regardless of their learning differences.

Students enter the learning environment with varying abilities and experiences. Since the

performances of students with disabilities include Georgia's accountability statewide

testing, teachers need to understand individual students' academic levels. Differentiating

assessment is one way to alleviate these issues.

Coteachers must continuously evaluate and assess students' current academic

functioning. Tomlinson and Imbeau (2010) referred to assessment as "a data-gathering

analysis process that determines the degree to which students have achieved essential

outcomes and informed decisions about planning for instruction" (p. 21). Ongoing

assessments measure the instructional goals that students master or identify student

weaknesses. Nisbett (2010) affirmed that continuous assessment is crucial for adjusting

instruction. Not all assessments need to be the same for all students. Before developing

differentiated content, process, or product, Roe (2010) concluded that preassessments and

ongoing formative assessments that target specific student needs can help teachers more

effectively differentiate in classrooms. Coteachers can use assessment tools to evaluate

students' understanding of a topic, concept, or essential skills. The key to effective assessment of student learning is that it is rapid, frequent, and continuous. Teachers should evaluate student performance daily, weekly, monthly, and annually (Beecher & Sweeny, 2008). Tomlinson and Imbeau (2010) indicated three types of assessment practices:

> Diagnostic assessments (preassessments) are designed to uncover what learners know about a curriculum unit before they receive formal instruction. Formative (ongoing) assessments are designed by teachers to follow a student's progress as the student attains academic outcomes during the learning process. Formative assessments also identify students' abilities, preferences, and learning styles, thereby allowing teachers to adapt their continuous instruction. Summative assessments measure student outcomes as a unit of study concludes. (p. 21)

Summative assessments are used at benchmark points to record student growth. Teachers can obtain information from small-group discussions, portfolios, skills inventories, and preassessments.

Coteachers may also construct differentiated assessments by giving their students choices that allow them to decide. Anderson (2007) suggested teachers provide students with a variety of assessments that demonstrate student learning of concepts rather than the one size fits all assessment. For example, authentic assessment is crucial in the differentiation process. Incorporating authentic assessments allow teachers to differentiate according to the students' learning needs. Frey and Schmitt (2007) defined

authentic assessment as an evaluation tool that looks at students' everyday application of learning. Authentic assessments require students to demonstrate what they have learned by applying their knowledge about a particular skill. This type of assessment provides coteachers with the flexibility to assess individual students and to make appropriate instructional decisions for students with disabilities. Anderson concurred that authentic assessments offer information on an individual level and make sense for each student to meet the appropriate learning standards. Additionally, teachers may offer learning contracts that students and teachers create together to indicate each student's knowledge upon completing a learning task (Anderson, 2007).

Furthermore, differentiated assessments can include portfolio assessment, self-assessment, and goal setting. Assessing students allows coteachers to become familiar with students' strengths and weaknesses. Portfolio assessments are collections of student work samples that allow coteachers to view various assigned lessons to ascertain informed decisions about grades through the use of rubrics. Both teachers and students collaborate to determine guidelines used in portfolios that show the students growth (Tomlinson, 2003). Self-assessment is another way coteachers can incorporate differentiated assessment into the classroom. Self-assessments give students a sense of control over their learning over time. Teachers can provide a checklist of specific skills that students can use to guide the self-assessment process.

According to Tomlinson and Imbeau (2010), teachers may also encourage students to set their educational goals. Goal setting allows students to acknowledge their

strengths and weaknesses and give students an opportunity to develop class rubrics with the teacher that they can use to prepare their individual learning goals. The rubric is a differentiated assessment tool often used by teachers to establish grades for students. Student-teacher conferences allow the teacher to guide the students in the goal setting process throughout the school year (Tomlinson, 2003). While students are given some control over his or her progress, the students are always under teacher supervision to ensure they meet curriculum standards. Teachers use multiple assessments to guide their instruction, provide continuous feedback to students, believe that rigorous standards are essential for student learning, and incorporate various instructional strategies in the differentiated classroom (Tomlinson, 2003). Employing multiple instructional methods and assessments can benefit learners so that they can demonstrate their full range of knowledge (Tomlinson, 2003).

**Effective Differentiated Instructional Strategies**

Differentiated instruction is a learning strategy that suggests students differ in their learning profiles and learn best when teachers instruct through different learning modalities that appeal to various interests (Levy, 2008). A student's learning profile refers to the students' preferred method of learning, which incorporates the student's culture, gender, intelligence preference, and learning style. Student diversity and varying ability level is ultimately difficult for educators to disregard. Hawkins (2009) found that teachers often feel they do not have the needed learning material to differentiate their instruction appropriately.

Coteachers need different instructional strategies from which to select to address the varied learning styles of a diverse student population. Differentiated instruction employs a collection of instructional approaches teachers can use in inclusive classrooms. Boutelle (2008) shared that differentiated instruction is one way to ensure each student grasp the same academic goal. Tomlinson and Imbeau (2010) added that evidence-based strategies such as flexible grouping, tiered assignments, learning centers, and anchor activities can help provide students access to successful learning experiences.

**Flexible Grouping.** A critical component for a successful differentiated classroom is flexible grouping. According to Tomlinson and Imbeau (2010), flexible grouping is an "aspect of effective differentiation that allows students to perform and learn differently in different circumstances" (p. 90). Flexible grouping considers individual differences by incorporating multiple grouping strategies. Coteachers can use flexible grouping in the differentiated classroom by placing students in specific groups to work on the same assignments. Teachers can scaffold, guide, and challenge students on their instructional level within a small group setting. The successful differentiated classroom requires teachers to restructure their instructional practices according to each student's learning profile, ability, and interests (Scigliano & Hipsky 2010).

Coteachers have the flexibility to plan groups according to each student's readiness, interests, and learning profile. Vlach and Burcie (2010) noted that teachers spend the majority of their instructional time meeting diverse learning needs through flexible grouping. In order to maximize learning, coteachers can incorporate flexible

grouping for students who do not comprehend a concept or skill by providing additional

instruction and practice. Flexible grouping allows students to engage actively with each

other on meaningful assignments (Fisher, Frey, & Lapp, 2012). Teachers can deliver their

instructions through temporary group arrangement for students of differing abilities to

work on assigned tasks. Tyner (2009) noted that small flexible reading groups offered

students meaningful learning based on their instructional level. Robb (2008) suggested

teachers establish class routines to avoid frustration with managing multiple groups of

students. Tobin and McInnes (2008) recommended that teachers should begin by

incorporating only one small flexible group instead of several different groups.

  **Tiered Instruction.** Tiered instruction is another differentiated strategy that

coteachers can employ to ensure meaningful learning occurs for a diverse student

population. The movement toward inclusive education has impacted classrooms by

requiring coteachers to plan for a broad range of academic needs. Effective differentiated

classroom instruction begins with thorough curriculum planning (Carolan & Guinn,

2007). In a differentiated classroom, coteachers employ various levels of tasks to ensure

students with disabilities can access the curriculum at a level that builds on what they

may already know. While students work on assigned tasks at varied levels of difficulty,

they receive the same content or similar tasks according to individual ability levels.

Teachers must effectively collaborate to plan tiered assignments to ensure that the student

can demonstrate their knowledge about the content. One instructional benefit of tiered

assignments is that they challenge students to be successful at their level of readiness to

learn the same content regardless of their ability level. Teachers can differentiate instruction by tiering assignments for those students who are above, at, or below readiness level (Levy, 2008).

Tomlinson and Imbeau (2010) indicated that teachers can focus on student characteristics other than their ability level when assignments are tiered by interest or by learning profile. These assignments are temporary so that the groups are constantly changing for students to learn the same content material in meaningful ways. Teachers must be creative and offer a variety of learning options to challenge students to perform at increasingly higher levels. As an example, a lesson could be tiered to focus on auditory, visual, and kinesthetic learning styles (Tomlinson & Imbeau, 2010). Robb (2008) indicated that teachers can tier their reading instruction by matching the text to the students' instructional reading level. Coteachers should provide students with multiple tasks at different levels of difficulty. Scigliano and Hipsky (2010) recommended that teachers provide tiered assignments to ensure that students working on advanced leveled assignments have basic knowledge of the content while challenging those students working at lower leveled tasks. Sousa and Tomlinson (2011) agreed that teachers design tiered lessons incorporating varying levels for students to build upon skills they already know and skills that challenge them to attain higher levels of academic performance. Coteachers can tier their lessons with varying degrees of complexity to guide their instruction to match students' individual needs.

**Learning Centers.** Coteachers can create a specific space in their inclusion classrooms that allow students easy access to multiple learning resources. Learning centers are designed to offer students an opportunity to work on group assignments or independent tasks (King-Sears, 2007). Learning centers can accommodate for student differences by engaging students with multiple ways to reach their performance levels. Students can enhance their learning of crucial concepts relating to curriculum standards. Teachers can check for ongoing progress through appropriately challenging tasks that address a specific objective. Learning centers include assigned stations for students to have productive work options (Tomlinson & Imbeau, 2010).

Furthermore, learning centers present students with a pathway to attain essential skills. Teachers can assign students to transition to learning stations in the classroom to work individually on meaningful skills, with a partner, or in a small group. Learning centers also encourage students to make choices about what they are learning. Coteachers can provide direct instruction with small groups after each student transitions to various learning stations in the classroom. Students need to be aware of the teachers' expectations at each center in order to maximize their learning experience. Teachers can use learning centers to extend student learning through differentiated learning tasks (King-Sears, 2007).

**Anchor Activities.** Coteachers can use anchor activities to manage diverse learning groups in a differentiated classroom. Anchor activities are purposeful, self-directed tasks that students can work to deepen their understanding of a specific learning

concept. Anchor activities provide engaging tasks for students to complete without teacher guidance. Teachers can use anchor activities to engage students in meaningful lessons at their independent learning level while the coteacher provides instruction to other students. Tomlinson and Imbeau (2010) stated, "Access to these activities ensures that students always have productive work options, especially when they need to start and stop work at a different time or when they finish an assignment ahead of others" (p. 170). These activities are continuous tasks such as learning packets, journals, and website tasks that are specifically linked to learning objectives for students to practice. Coteachers can tie the activities into the content and their instruction. Additionally, anchor activities are a valuable, differentiated strategy teachers can use with students who struggle with completing assignments within a designated time. Servilio (2009) suggested anchor activities should support student engagement by elaborating, "The combination of a differentiated curriculum and options for student choice is ideal for promoting success for students with disabilities and it can improve outcomes for other students as well" (p. 10).

### Teacher Perceptions of Differentiating Instruction

The gap in the literature exists regarding coteachers' perceptions about successful implementation of differentiated instructional practices. Coteachers' perceptions about differentiated instruction in the inclusion classroom play a significant role in its success or failure. The literature is unclear about specific factors for elementary teachers' reluctance to implement differentiated instruction. The teachers' positive attitude is

essential to successful differentiated instruction (Tomlinson, 2010). Bosier (2007) found

that elementary teachers in Grades 3 through 5 had a positive perception of differentiated

instruction regarding improved students' scores in math. However, implementation of

differentiated instruction is less likely to occur unless teachers fully embrace it as an

effective instructional practice (Latz et al., 2009). Dugger (2008) surveyed teachers to

evaluate their beliefs about implementing differentiated instruction. Teachers believed the

absence of consistent professional development hindered a comfortable transition using

differentiated practices. Dixon et al. (2014) suggested " allowing teachers to observe each

other differentiate lessons, providing opportunities for teachers to give each other

feedback after the observation, and giving teachers time to collaborate on shared lessons

to provide reinforcement for practicing what they have learned" (p.115 ).

Coteachers may have trouble when trying to implement multiple teaching

strategies. Tomlinson and Imbeau (2010) explained by saying:

Over time, a teacher should aspire to know some general things, such as how

well the students read. Teachers need to know what students like to do with their

spare time, what students' dreams are, how students relate to their peers, and how

students see themselves as learners.  Teachers need to understand the best way

students learn and how students' culture shape their learning. (p. 58)

Rock, Gregg, Ellis, and Gable (2008) reported that teachers tend to harbor

negative perceptions towards implementing differentiated instruction due to increased

workload, insufficient time for planning, and lack of available resources. Integrating

differentiated instruction requires using multiple teaching strategies to meet the learning needs of all students. King-Shaver (2008) also found that teachers tend to harbor negative views when they feel ill-prepared to implement differentiated instruction. Integrating differentiated instruction will lead to teacher success in their efforts to teach to each student's readiness levels (McTighe & Brown, 2005). More modeling of differentiated practices in professional development is needed to address preconceptions and obstacles to full implementation of differentiated practices (Latz et al., 2009). Teachers' perceptions of coteaching in the differentiated classroom are critical for working to meet the needs of students with disabilities. Once established at the school level, investigating the perceptions of the coteachers' attitude toward differentiated instruction within cotaught classrooms has the potential to improve curriculum planning and student outcomes.

**Effective Differentiated Instruction Studies**

The literature on differentiated instruction indicated mixed results. Several literacy and math researchers' findings indicated differentiated instruction as a successful method for improving student achievement while one study found that teachers seldom implemented differentiated instruction. Reis, McCoach, Little, Muller, and Kaniskan (2011) conducted research on the effect of differentiating instruction in reading comprehension and fluency in five elementary schools. The schools were located in either an urban or rural district with a population of at risk struggling learners in reading, ranging from second grade through fifth grade. In this study, 37 classrooms received the

treatment condition while 33 classrooms received the control condition. The findings

suggested that differentiated enrichment reading activities positively impacted students'

reading performance than the traditional approach. Two schools scored significantly

higher on their reading fluency levels (Ries et al., 2011). The high-poverty urban school

indicated significantly higher scores pertaining to reading comprehension with

implementing differentiated instructional strategies. Ries et al. (2011) noted that the other

schools did not show any academic differences in reading.

In a study examining the effectiveness of differentiated instruction, Brimijoin

(2005) noted high-stakes testing in a fifth-grade differentiated classroom improved.

Brimijoin found that 47% of students previously passed the statewide reading assessment,

53% passed the mathematics assessment, 34% passed the social studies assessment, and

42% passed the science assessment. By the end of one year, the students in the

differentiated classroom scored significantly higher with 74% passing reading, 58%

passing math, 58% passing social studies, and 74% passing science (Brimijoin, 2005).

The results indicated that several students increased their individual scores by nearly 30%

(Brimijoin, 2005).

Luster (2008) conducted a quantitative study with Grade 4 math students in an

urban school district over an 8-week time frame. A total of 67 students in the control

group for Group A received the traditional learning approach during whole group

instruction. Group B included 68 students who practiced differentiated instruction in the

experimental group. The experimental group in this study improved their mean score on

tests whereas the control group scores that received whole group instruction decreased. The findings suggested implementing differentiating instruction increased students' performance on state standardized test scores.

Beck and McKeown (2007) conducted a study using trade books that included words that students in kindergarten and first grade would unlikely learn without hearing them repeated and explained. Beck and McKeown concluded that students who participated in the read-aloud method learned more words compared to students who were exposed only to traditional read-alouds. Rowe (2012) indicated that increasing students' exposure to a variety of read-aloud practices and providing opportunities for them to share the information they have read positively improved their reading performance. Differentiated classrooms incorporate read-alouds as a differentiated instructional strategy.

Servilio (2009) conducted a single case study pertaining to using effective differentiated lessons to encourage students with learning disabilities to read. In this study, students had a choice of Grade 5 reading tasks to help them to make a connection to the text through memorization, pictures, or by creating a song to explain their reasoning. Servilio found that "an average of 83.4% of the students' grades improved in reading, while 12.5% remained the same, and 4.1% of the grades decreased" (p. 10).

Patterson, Connolly, and Ritter (2009) conducted a study regarding differentiated instruction in inclusion math classrooms. The sixth-grade teachers in this study restructured their 90-minute class and changed their instructional practices from

predominately traditional lectured teaching using a four-part model. The model included teaching new instruction, reviewing, remediating basic skills, providing students with computer-based instruction, and previewing upcoming lessons. The findings showed that students with disabilities demonstrated significant progress in their content area classes after a year of exposure to differentiated instructional practices. Additionally, incorporating differentiated instruction in inclusion classrooms proves effective beyond the elementary school years.

Tieso (2003) conducted a study on flexible grouping practices on the mathematics achievement of fourth and fifth-grade gifted students combined with differentiated curriculum adjustments. According to the author, incorporating flexible grouping through differentiated instruction addresses individual differences. The findings confirmed that flexible grouping and differentiated instructional practices increased student's academic performance from their pretest to the posttest scores.

Bailey and Williams-Black (2008) conducted a study to explore implementing differentiation in the general education classroom. Fourteen teachers completed surveys and participated in informal interviews. The findings indicated that classrooms where teachers implemented differentiated instruction with any degree of fidelity demonstrated significant increases in student learning. Bailey and Williams-Black concluded that differentiating instruction is a meaningful approach employed by teachers to improve the academic performance of a diverse student population.

In another study, Latz et al. (2009) found that general education teachers rarely used differentiated instruction. The study sought to understand how teachers' understanding of differentiated instruction through peer coaching influenced their ability to facilitate differentiated lessons for students of varying academic levels. The findings of their study indicated that a lack of professional development and mentoring program hindered teachers' from implementing differentiated instruction in the classroom.

**Professional Development**

Professional development was noted a key component of effective coteaching (Hang & Rabren, 2009). Coteachers reported a lack of professional development as a hindrance to effective coteaching (Scruggs et al., 2007). Coteachers may benefit from continuous professional development in differentiated instruction to blend their specialized teaching techniques. Teachers need an opportunity to increase their professional growth to learn new techniques as they work together in the cotaught classroom (Friend & Cook, 2010; Scruggs et al., 2007). Teacher attitudes towards working in an inclusion setting were more positive through participation in training (Scruggs et al., 2007). McDuffie, Mastropieri, and Scruggs (2009) also found that teachers had an overall positive view of coteaching. In their study, teachers shared that coteaching allowed students to receive additional support that led to increased academic performance. Paulsen (2008) suggested providing coteachers with professional development training can help develop the academic progress of students with disabilities and their nondisabled peers.

Successful differentiated instruction requires coteachers to be confident about incorporating a variety of instructional strategies. Musanti and Pence (2010) asserted that "Professional development is difficult because teachers are resistant to change" (p. 78). Thus, professional development can create a dialogue among coteachers while providing opportunities to discuss differentiated practices that support increasing student achievement. The literature agreed that teachers need professional development to implement differentiated instruction successfully (Latz et al., 2009). Dixon, Yssel, McConnell, and Hardin (2014) conducted a study on teacher efficacy and willingness to differentiate instruction. Two school districts participated in this study. The findings indicated teachers attaining a greater number of professional development hours positively impacted their efficacy towards implementing the process of differentiation regardless of content or grade level taught. Teachers who received more professional development in differentiated instruction had more efficacy beliefs that they could implement this process in the classroom (Dixon et al., 2014). Moreover, Dixon et al. noted that professional development that tries to accomplish too much in one half-day session may not impact the instructional competencies that allow teachers to differentiate lessons (p. 114).

Additionally, Kosko and Wilkins (2009) investigated the relationship regarding the amount of hours teachers attended professional development training and teachers' perceived ability to adjust their assignments for students with diverse learning needs. The authors established that teachers needed at least 8 hours of professional development over

3 years to improve their ability to provide successful instruction for students with IEPs. Hence, teachers who received more hours of professional development felt more confident with adapting their instructional practices. Hill (2007) suggested that professional development sessions benefited teachers if it continued over multiple days, focused on subject matter specific instruction, aligned with the school's instructional goals, and provided teachers with feedback. Likewise, Musanti and Pence (2010) asserted that professional development training should be meaningful and foster teacher collaboration over a sustained period.

Differentiated instruction provides opportunities for students to work at their instructional level. Negative perceptions of differentiated instruction and irregular implementation may lead to an adverse effect on student achievement (Rock et al., 2008). Dixon et al. (2014) suggested schools offer practice in differentiation through professional development that allow teachers to develop leveled or tiered lessons together (p. 125). Collaborating with other teachers allows each coteacher to map out and try a lesson, receive feedback, and revise the lesson. When planning the curriculum, coteachers must be knowledgeable about the learning objectives and how each student will demonstrate his or her learning. Teachers must also factor in the instructional strategies towards achieving specific goals. Professional development will allow coteach teams the necessary training to implement instructional strategies to increase their communication skills as partners in the classroom (Friend & Cook, 2010). Understanding how coteachers perceive themselves as learners within the inclusion classroom

environment can lead to constructive instructional changes. As Dixon et al. noted, most teachers are expected to use differentiated in their classes, but receive little more than one day of professional development. If conducted well, professional development is a way for coteachers to increase their understanding of differentiated instruction and how to implement differentiated lessons properly in their classrooms.

Effective professional development supports teachers with learning opportunities to acquire new knowledge for promoting student growth. Professional development has to be instrumental in allowing coteachers to learn new innovative techniques and differentiated instructional strategies that will assist them in becoming better teachers, thus increasing student achievement for all learners, including student with disabilities. Professional development can equip coteachers with extensive and efficient knowledge to apply innovative instructional strategies that may positively affect the teacher's sense of efficacy towards improving their craft in the differentiated classroom.

**Implications**

In an effort to address the special education mandates, coteachers must feel comfortable with each other to plan effective differentiated lessons. Administrators must facilitate classrooms that foster active student learning in an inclusion classroom environment. This study attempted to uncover effective strategies among coteachers who achieved success in their differentiated classrooms. The literature review indicated that teachers felt they needed continuous professional development and a clear understanding of their roles as partners in the classroom to successfully implement differentiated

instruction. The findings in this study enhanced coteachers' understanding and favorable views toward differentiated instructional classroom practices. This study promoted positive social change by advocating the need for professional development training for coteachers, administrators, and educational support specialists who are responsible for planning and providing best practices for educating students with disabilities in the inclusion classroom environment. As teachers examined their coteaching practices at the school district under study, ideas for improving student performance emerged.

The study focused on elementary coteachers' perceptions about differentiated instruction as they work together to improve academic gains for students with disabilities. The results lead to developing a deeper understanding about how teachers implement successful differentiated instructional practices in the cotaught classroom, therefore allowing for a more positive inclusive learning experience for students with disabilities. The implication for social change can prove valuable to educators and staff members at the state and district level.

## Summary

The shift to educating students with disabilities taught in inclusion classrooms calls for educators to facilitate the learning process in innovative ways to decrease learning gaps. Differentiated instruction is increasingly expanding to support students with disabilities in cotaught classrooms. Coteachers' perceptions about implementing successful differentiated instruction have implications for the administrators, students, and the entire school community. An understanding of the factors that may or may not

hinder coteachers' confidence about differentiated instruction may aid in developing

adequate training that will help teachers to differentiate their lessons more successfully.

 In Section 2, I detail the case study methodology and justification, participants,

ethical considerations, role of the researcher, instrumentation, data collection procedures,

data analysis, and evidence of quality. I also present a thorough explanation of the

findings. Furthermore, in Sections 3, I provide a detailed description that explains the

project study and intent of the study to the education arena and this local school district.

Finally, in Section 4, I conclude with a reflection of the project and detail

recommendations for future research that culminated from the findings of the research.

Section 2: The Methodology

**Introduction**

In this section, I discuss the rationale for choosing a qualitative case study to seek insights into elementary coteachers' perceptions about implementing successful differentiated instruction for students with disabilities in the inclusion classroom. I compare several qualitative approaches, explain the researcher's role, the data collection timeframe and collection methods, data analysis, and project feasibility related to the project. This section also explains how I used a survey, individual interviews, lesson plan documents, and how I validated the findings. Researching a problem requires selecting a research design (Creswell, 2012). I selected the case study method as the research design for this study.

A qualitative approach allowed me to explore coteachers' beliefs about differentiated instruction. Creswell (2012) wrote that qualitative researchers "seek to explore and understand the views of one group or single individuals while considering multiple forces that shape the phenomenon" (p. 130). Additionally, qualitative researchers employ different data collection methods that require an investigation of subjective data (Creswell, 2012). Twelve elementary coteachers employed in a rural Georgia Title I school district were invited to participate in the study. To explore how coteachers differentiate their instruction for students with disabilities, I asked the selected teachers to participate in a survey (Appendix F). In addition, I asked the teachers to participate in semistructured interviews (Appendix G). I also asked participants to share

their instructional lesson plans and used a checklist to determine how teachers incorporated differentiated instruction in their lessons (Appendix H). Analysis of the data helped to construct a plan to address teachers' perceived concerns. The literature suggested positive coteacher engagement leads to teachers providing high-quality instruction to students with disabilities and their nondisabled peers within an inclusive classroom setting. Furthermore, in this section, I describe the case study research approach, the participants, and the sampling technique used to select them. The ethical issues are presented as well as the validity and reliability of the data in the study.

## Research Design and Approach

The purpose of this study was to explore elementary general education and special education teachers' perceptions about differentiated instruction for students with disabilities. To accomplish this purpose, I used a qualitative approach for data collection and analysis to represent the results from the study. According to Merriam (2009), a qualitative methodology helps researchers explore experiences that they want to understand clearly. Lodico, Spaulding, and Voegtle (2010) stated that qualitative researchers "focus on the study of social phenomena and on giving voice to the feelings and perceptions of the participants under study" (p. 264). I selected the qualitative approach because it described the meaning for several teachers' experiences of a concept of a phenomenon (Creswell, 2007).

When selecting a research design to answer research questions for this study, I considered other qualitative approaches such as phenomenology, ethnography, and

grounded theory. Hancock and Algozzine (2011) explained that "phenomenological studies explore the meaning of several people's lived experiences around a specific issue or phenomenon" (p. 10). Since I did not capture the participants' lived experiences, the phenomenology design was rejected. Ethnography is used primarily to describe the behavioral patterns, conditions, or beliefs within the confines of a cultural group in a natural setting (Creswell, 2012). While an ethnographical design may be relevant for parts of this project, this design was not considered since the study focused on understanding coteachers' perceptions and preparedness about implementing differentiated instruction in inclusion classrooms and not a specific culture. Creswell (2012) stated, "A grounded theory design is a systematic, qualitative procedure used to generate a theory that explains, at a broad conceptual level, a process, an action, or an interaction about a substantive topic" (p. 423). The purpose of the grounded theory was to "construct a theory from the inquiry process" (Creswell, 2012, p. 423). I rejected the qualitative tradition of grounded theory because the purpose of this study was not to generate or discover a theory.

Furthermore, I did not select a quantitative methodology since this approach is concerned with collection and analysis of data in numeric form (Creswell, 2012). A quantitative design would not allow for the intensive inquiry into the perspectives and practices of general education and special education coteachers regarding differentiated instruction for students with disabilities. A case study design was the most appropriate approach to present the issues in this study because each participant's reply to the

research questions described their individual experiences. Hancock and Algozzine stated, "Through case studies, researchers hope to gain in-depth understanding of situations and meaning from those involved" (p. 10). Since my goal was to describe elementary coteachers' beliefs toward differentiated instruction and to determine how their current instructional practices may need improving, I used a case study method.

A case study design allowed me to gather rich data in order to obtain an in-depth understanding of teachers' perceptions of differentiated instruction. The case study design requires a thorough exploration of a single entity, in this case, coteachers in differentiated classrooms (Yin, 2009). As Merriam (2009) suggested, the case study design is crucial for focusing on the research questions. Selecting this design allowed me to explore how elementary coteachers use differentiated strategies in the cotaught classroom. The study asked the following research questions:

Research Question 1: What are general education and special education coteachers' perceptions about implementing differentiated instruction for students with disabilities?

Research Question 2: How do general education and special education coteachers practice differentiated instruction for students with disabilities in a rural Georgia elementary inclusion classroom?

Research Question 3: What types of support do general education and special education coteachers feel are needed to implement differentiated instruction effectively for students with disabilities in their inclusion classrooms?

Interviews were the primary method of data collection for this study. At the time of the study, elementary coteachers were willing to implement differentiated instruction for students with disabilities at the district under study. However, advocating the need for additional training that goes beyond their knowledge about coteaching models may help to develop these and other coteachers' professional growth. In order to gain in-depth information about elementary coteachers' views towards differentiated instruction, I used the case study approach.

## Setting

The local setting of this study was a rural school district that lies in the center of central Georgia and offers its residents a small community atmosphere as well as the big town amenities of nearby Atlanta. Two elementary Title I schools were under the supervision of one principal and one assistant principal while the other elementary Title I school was under the supervision of one principal and two assistant principals. All three elementary schools employed teachers who taught Grades PreK–5 and provided inclusion classes for students with disabilities with a commitment for all students to excel academically.

## Participants

The district employs many elementary school teachers and is known throughout the state of Georgia for its tradition of and investment in academic excellence in each school. However, I limited the project to how adequately coteachers at the elementary level felt they were prepared to implement differentiated instruction for students with

disabilities. The rural Georgia school district is the host to Grades Pre–K through 5 at the elementary level. Although I work with general education and special education teachers as my professional colleagues within the school district, I have no authority or supervisory role over them. Upon permission from my school district to conduct a study to gather information about coteachers' perceptions of successful differentiated instruction following Institutional Review Board (IRB) approval, I recruited 12 participants to voluntarily contribute to this study. The participants were invited because of their role of teaching core subjects in an elementary inclusion classroom that supports differentiated instruction for students with disabilities. I completed a Web-based training course according to ethical guidelines set forth by the National Institutes of Health Office of Extramural Research for protecting human research participants (Appendix B).

Additionally, administrators selected coteachers for participation in this study according to the specific indicator based upon the Georgia teachers' evaluation tool indicating teachers as needing improvement, are proficient, or exemplary in differentiated instruction. The population of general education and special education teacher participants in this study had various years of teaching and grade level experience and was able to provide a wide range of perceptions about differentiated instruction. After receiving IRB approval and permission from the superintendent to conduct the research (Appendix C), I asked the superintendent to sign a letter of cooperation as a research partner (Appendix D). I also asked permission from the school's principal (Appendix E) to contact each teacher who scored proficient or exemplary in differentiated instruction

according to the TKES evaluation rubric used by the state of Georgia. I then contacted each coteacher face-to-face to explain my study and invited him or her to participate voluntarily.

The participants included six general education teachers and six special education teachers. According to Creswell (2007), conducting in-depth interviews with a limited number of participants who experienced the phenomenon may pose less challenge for the researcher to determine common themes for data analysis. Additionally, the smaller sample size allowed for in-depth answers from the participants in response to my open-ended questions regarding the research problem. Purposeful sampling was appropriate for selecting the participants because the specific individuals in the study can "inform an understanding of the research problem and central phenomenon in the study" (Creswell, 2012, p. 206). Furthermore, Lodico et al. (2010) explained purposeful sampling is "used when time and resources are limited and the study is limited to a single school building or school district" (p. 140).

In this study, participation was voluntary. The participants were not identified by name, and all information was kept confidential. Data collection consisted of a survey, semistructured interviews, and lesson plan documents. All participants were kept free from harm. Prior to each interview, I provided participants with an informed consent form. The consent form specified the goals of the study and explained that participation was voluntary. Furthermore, the informed consent explained that the participants may refuse to respond to the questions posed and may withdraw from the interview at any

time. A consent form was signed by all parties prior to data collection allowing me to gather information to use in the study.

**Criteria for Selecting Participants**

I purposefully selected a sample of 12 coteachers with varying grade levels and years of teaching experience who implemented differentiated instruction in their classrooms. According to Rubin and Rubin (2005), a researcher should select participants who have a thorough understanding of the research topic. All participants for this study were currently certified teachers, who were teaching or had taught in an inclusive setting and had differing opinions on differentiated instruction. These teachers were purposefully selected because they provided detailed and explicit information about differentiated instruction. The sample size for this study was appropriate because the homogenous population required a small size sample (Creswell, 2012). Using a minimal number of participants allowed for a more in-depth exploration of the research problem and decreased threats to validity.

Collecting data from a knowledgeable sample provided a better understanding of the phenomenon. Each of these participants' unique perspective on the problem positively contributed to increased understanding of the issues. General education teachers offered suggestions about the academic, social, and behavior expectations for supporting students with disabilities in the differentiated classroom. Special education teachers provided insights about the needs to accommodate students with disabilities in the general education setting. Regarding the sample size, the key factor in a case study is

to choose participants who can provide rich and detailed accounts of their experiences

relating to the topic (Merriam, 2009).

## Procedures for Gaining Access to Participants

In order to gain access to the participants, entry to the school's site was obtained

through a face-to-face conference with the principal to share an overview of my study,

following IRB approval and permission from the superintendent to conduct the research.

I asked the principal for participant' contact information. After I received a record of

coteachers who scored proficient or exemplary on Georgia's teacher evaluation tool in

the area of differentiated instruction from the principal, I met face-to-face with teachers

to discuss the project and clarify any questions. I informed the coteachers that

participation was strictly voluntary and that they may withdraw from the study at any

time. I provided the participants with a paper copy of the informed consent and survey.

Accessibility was feasible since all participants work in the same school district. I

hand delivered each participant a copy of the signed consent form along with a letter

thanking each participant for his or her willingness to participate in the study. Other

means of gaining participant cooperation included providing detailed information about

the purpose of the project and ensuring privacy and confidentiality for all participants.

## Establishing Participant-Researcher Relationship

The research project involved participation in a survey, semistructured interviews,

and lesson plan documents submission. One week prior to the survey and interview

sessions, I met with each participant to discuss the project. The participants in this study

included general education and special education teachers who work with students with educational disabilities in an inclusion environment. As a special education teacher, I provide a combination of coteach and pull-out instructional support in a resource classroom for students receiving special education services as required by the students' IEP. I have spent much time corroborating with elementary coteachers and other educational specialists to create a conducive learning atmosphere for instructing students with disabilities. From my experience as an educator and with my passion for providing all students opportunities for experiencing academic success, I have built a rapport and trust with many of the general education teachers, special education teachers, and administrators.

Establishing a positive rapport with the research participants was significant in creating a sense of trust. Although I work with teachers as my professional colleagues in the district, I did not work as a coteacher in their classrooms but desired to know what other coteachers do to differentiate instruction for students with disabilities. I have no authority or supervisory role over the general education and special education teachers. I communicated to the teachers that my prior experience is in special education and that I was open to all thoughts and ideas that they were willing to share with me. Acknowledging the potential for researcher bias, I had a colleague review the data and check to assess the accuracy of transcription and interpretation. Participants reviewed their survey, interview transcripts, and lesson plan documentation.

**Ethical Considerations**

All participants were informed of the research process and had the right to withdraw from the study at any time. I completed ethical guidelines for protecting human research participants. An application was submitted to the Walden University (IRB)  to conduct the study because the research design involved data collection and required participation of human subjects (Walden University, 2015). The application highlighted information regarding the data collection process. After I received approval (# 04-28-15-0261853) from the IRB, I obtained permission from the superintendent and the principal of the participating elementary school to conduct the study. Yin (2009) asserted that research needs to be conducted with the highest level of ethical standards. Participants received specific information explaining the purpose of the study, procedures, risks, benefits, and confidentiality. I asked participants to sign a consent form granting permission for me to record the individual interviews. I informed the teachers that they could discontinue their participation at any time and that there would not be any monetary compensation. All information regarding this study was fully disclosed, and none of the participants were subjected to misrepresentation.

Participants were informed that minimal risks were inherent in the study. However, under no circumstances did I intentionally cause physical harm or emotional distress to participants. Once the consent was signed, each participant received a copy. All data were collected to safeguard the personal rights and protection of all participants. Pseudonyms protected the identities of the participants. The names of general education and special education teachers were number coded when analyzing the data. In addition,

the collected data were kept using a personal computer that required a password to gain access to the material. Data were stored in a locked cabinet accessible on a personal computer in my home. All data will be deleted from my personal computer, and all materials will be destroyed after a period of 5 years as required by Walden University.

According to Yin (2009), the researcher takes advantage of all opportunities and makes every attempt to reduce bias. As the sole researcher, I made every effort to eliminate any elements of bias during all my communication and in reporting the data by conveying only the facts as they related to the study. I developed 10 semistructured interview questions to gather in-depth detailed information regarding elementary coteachers' perceptions about implementing differentiated instruction within a rural Georgia school district. The general education and special education teachers worked in the same elementary school district with varying educational backgrounds in the Southeastern region of the United States. I did not have authority or supervision over the teachers. I used probing questions to gather relevant information from each participant to allow the participants an opportunity to clarify their responses or encourage them to explain their answers more fully (Lodico et al., 2010). I acknowledged any bias regarding differentiated instruction and set aside any preconceived notions to maintain an impartial stance throughout the entire research process. Furthermore, I used triangulation, member checking, rich, thick descriptions, and peer debriefing to provide accuracy and dependability of the findings.

**Data Collection Procedures**

Within qualitative studies, several sources may be used for data collection. The choice is contingent upon the research purpose and selected research design. Individual interviews are usually the main source of data collection in qualitative, case studies. After receiving IRB approval from Walden University, the initial data collection procedure for this study occurred during the spring semester of the 2014–15 school year. The participants were professional colleagues whom I work, but did not coteach with in their inclusion classrooms. The first segment of data collection was with the use of a survey to gather thorough information about the participants and open-ended questions about differentiated instruction. The second data collection method consisted of semistructured interviews. An interview protocol specifically designed for the study guided the interviews during the second segment of data collection. Additionally, I used lesson plan documentation providing evidence of constructive differentiated instructional strategies implemented in the classrooms during the third phase of data collection.

## Open-Ended Survey

I utilized several data collection methods. Lodico et al. (2010) wrote that comparing various forms of data assist in validating the findings. The first phase of the data collection involved an open-ended survey (Appendix F). I created a demographic survey that included questions to help gather information about each coteacher such as the grade level taught, level of education, years of teaching experience, professional development attended, and views toward differentiated instruction. I provided the participants with a paper copy of the survey. The survey took approximately 10–15

minutes to complete. Participants were asked not to include any personal identifying

information in their survey answers. Furthermore, teachers were prompted to read all

directions carefully. I was available to clarify questions, but the participants responded to

the survey independently.

## Semistructured Interviews

The second phase of data collection included semistructured interviews with each

general education and special education teacher. Prior to interviewing the participants and

reviewing any data, I set aside any predetermined beliefs that may have interfered with or

impeded my ability to listen to and interpret the meanings of the participants. Participants

had a choice of a face-to-face or phone interview. The purpose of interviewing in

qualitative research is to allow researchers the opportunity to consider another person's

perception about the topic of interest (Patton, 2002). The data collection process entailed

conducting in-depth interviews of selected participants who experienced the phenomenon

of differentiating instruction for students with disabilities in an inclusion classroom. The

guided, structured questions ensured that each interview was consistent and increased the

ability to compare responses. The interview protocol included 10 open-ended questions

(Appendix G). According to Merriam (2009), the interview is the most common form of

qualitative data collection. I conducted the face-to-face interviews after school in each

teacher's classroom to promote a feeling of comfort. I did not have any phone interviews.

Each face-to-face interview occurred for approximately 45 minutes. The interview

allowed the coteachers to express their thoughts and experiences without distress.

The interview process also allowed the participants an opportunity to elaborate on their experiences whereas the survey limited their responses to only the options included in the survey. Prior to each interview, participants were reminded that I would digitally record the interviews. I also informed the participants that they had the right to discontinue the interview or decline any questions they may not wish to respond. I obtained permission to audio record the interviews to ensure accurate transcription of each conversation. Detailed notes were taken in case recording the interview posed a problem. After the interviews, I listened to audio recordings several times to analyze the true meaning of the participants' conversations. Data recordings were transcribed verbatim as soon as possible following each interview and stored.

In addition, I took notes during the interviews regarding the direct quotes of the participants, nonverbal transmissions of gestures, tones, silences, and voice inflections. Each interview followed the same protocol. Member checks provided participants an opportunity to react to tentative findings and provide feedback on the interpretation (Merriam, 2009). The findings from the study will be released to each participant within 1 month following final approval of the doctoral study. Since the semistructured interviews were the chief methods of data collection, feasibility did not pose a concern due to availability of participants for informal interviews (Creswell, 2012).

**Lesson Plan Documents**

The third phase of data collection involved lesson plan documentation. I asked coteachers to provide a copy of their weekly lesson plans demonstrating that they

incorporated differentiated instruction for educating students with disabilities and their

nondisabled peers in the inclusion classroom environment. The lesson plan required less

than 10 minutes for the teachers to submit to me via e-mail. The lesson plan documents

served as evidence that coteachers collaboratively plan to provide such strategies as tiered

lessons, flexible grouping, and the teaching of multiple standards to meet the varying

learning styles of each student. Additionally lesson plan documents indicated other

methods of differentiated instruction. I used a lesson plan checklist (Appendix H) to

confirm teachers' evidence of implementing differentiated instruction in their weekly

lesson plans.

## Role of the Researcher

As a doctoral candidate and an elementary teacher with 29 years of classroom

experience, my current position is a resource support case manager and special education

coteacher for kindergarten through fifth-grade students receiving special education

services. Although I have a relationship with the participants in the study, I served

various roles throughout the data collection phase but have no authority over the

participants. As a researcher, my duty was to conduct a project study relating to general

education and special education teachers' perceptions about implementing differentiated

instruction in the inclusion classroom. Upon receiving approval from Walden's IRB, I

contacted the participants to ask their willingness to participate in the study and to clear

any feelings of uneasiness. I collected data through a survey and conducted

semistructured interviews. Additionally, I reviewed participants' lesson plans for

evidence of incorporating differentiated instruction. To keep participants on track, I used personal contact to remind them of their upcoming survey and interview sessions. I established the interview times, interview location, and provided the participants with the option of either a face-to-face or phone interview at their convenience. I analyzed all of the data collected.

## Data Analysis

The data analysis process entailed multiple steps for organizing and analyzing the data to identify emerging patterns and themes. Merriam (2009) commented that all data are generated together to make a large amount of data more manageable. Data for this study consisted of participants' responses to surveys, semistructured interviews, and a review of lesson plan documentation. Inductive analysis began upon completion of all interviews and member checks. Before analyzing the data, it was essential to create files to organize the information. I created a Microsoft Word document for recording and sorting all analyzed data (Yin, 2009). Hatch (2002) suggested that analysis means organizing and interpreting data in ways that allow qualitative researchers to see patterns, themes, and relationships. The data analysis procedures aligned with Creswell's (2012) view of the data analysis process. Creswell recommended a six-step process for analyzing and interpreting qualitative data. I adhered to the following steps suggested by Creswell: (a) preparing and organizing the data by coding, (b) coding the data to develop a general idea, (c) using codes to establish themes, (d) representing and reporting the findings through narratives and visuals, (e) interpreting the meaning of the results, and (f)

conducting validation strategies to ensure accurate findings. To analyze the data, I searched for patterns and themes using the following strategies: open coding, axial coding, and selective coding (Merriam, 2009). Open coding was the first step of categorization of data that related responses into categories. The next step occurred with grouping the open codes or axial coding once I established connections between the categories to show the relationship between themes and subthemes. The final step of data analysis was selective coding which entailed the naming of the main theme and relating all other themes that emerged. I number coded the data collected to identify each participant.

The interviews were converted and transcribed verbatim into textual data. Following verification of the transcripts by the participants, I read through all of the data to acquire a general sense of the information and to consider the overall meaning of the data (Merriam, 2009). I analyzed data from interviews by hand coding. I marked notes in the margins and highlighted important information about each research question. I reviewed the data to identify commonalities. Using the collected data from the interviews, I coded the participants' recurring words phrases or ideas (Saldana, 2013). Next, I established themes and patterns and reduced the list to a minimal number or emerging themes. I color coded and categorized the data based on commonalities (Creswell. 2012).

When reporting the results, I included dialogue that supported the developed themes. I interpreted the results to provide the reader with in-depth information about the

participants' perceptions regarding differentiated instruction. A rich description of the data helps the reader visualize what the researcher is conveying (Creswell, 2012). I wrote the results in a narrative form and presented a detailed description of the findings. Finally, to assure accurate findings of the study, I reviewed the themes and codes that emerged from the participants' interview responses several times. The triangulation of the data collected and analysis from the surveys, interviews, and lesson plan documents helped to ensure validity of the study.

## Discrepant Cases

I was aware that discrepant cases may emerge during the study since identifying and analyzing discrepant data adds to the credibility and validity of the study (Creswell, 2012). I reviewed the data carefully to reduce the risk of accidentally disregarding a discrepant case. If a discrepant case emerged, I would have included the information in the research findings to allow the readers to evaluate the data and draw their conclusions regarding the accuracy of the study. I used a combination of triangulation, member checking, rich, thick descriptions, and peer debriefing. After I transcribed and interpreted each interview, I asked the participants if they wanted to review and comment on the accuracy of their statements in my written narratives. There were not any changes nor did the participants believe they were quoted incorrectly or misinterpreted. I documented and explained all relevant data. A colleague was asked to review some of the transcripts and provided feedback as to whether or not my interpretations were acceptable based on the

transcripts. I secured all tapes, transcripts, and notes in a locked file cabinet, where they will remain for 5 years.

## System for Keeping Track of Data

I used reflective journaling to keep track of data and document my experiences throughout the research process. I also kept track of the times and places for the scheduled interviews. Once I conducted the interviews, the transcription phase began. After I transcribed all of the interviews, the interviews were read thoroughly. Through this process, I identified significant statements from the participants to formulate themes.

## Evidence of Quality

To guarantee the quality of data collection, I incorporated procedures to validate the quality of the qualitative data collected. I conducted member checking of interviews to verify the accuracy of the information obtained from the participants. The individual interviews were audio recorded and transcribed. A peer reviewer with a doctoral degree was asked to examine the interview transcripts and asked to sign a confidentiality agreement (Appendix I). The peer reviewer provided feedback about the findings, suggested organizing the data in tables, and assisted in validating the accuracy of the transcripts. All transcripts had pseudonyms to protect the participants' confidentiality. I ensured that each participant was aware of my role as a special educator and I clearly disclosed any potential bias. The interviews were number coded to prevent the chance of identifying the names of the participants. The project entailed several data collection methods that contributed to internal validity by way of triangulation.

According to Creswell (2012), triangulation gives a more detailed and balanced picture of the situation being analyzed. Comparing and contrasting data through triangulation and involving the participant in the analysis stage helped remove bias interpretations, giving strength and credibility to the study (Creswell, 2007). The triangulation process strengthened the credibility by taking the data from the survey, interviews, and documents to substantiate the findings through comparison (Yin, 2009). Data triangulation assisted in preserving the trustworthiness of the study through multiple sources of evidence. Yin (2009) asserted that the research should ensure that no single source of evidence takes precedence over any other.

## Presentation of the Findings

### Survey Analysis

All 12 teachers participating in the study worked as coteachers within a rural Georgia school district responded to the survey. The surveys provided teachers' responses to several demographic questions and basic descriptive information about the participants (Creswell, 2012). Analysis began with reading each survey and recording my observations. All data were organized, sorted, and coded thematically and categorically into various databases that I created in Microsoft Word. I examined the participants' responses from the surveys and organized the demographic information into the following five categories: gender, grade, teacher certification, level of education, and years of teaching experience.

Additionally, the surveys indicated the coteachers' responses about their participation in a professional development seminar designed specifically for educating students with disabilities as well as their views about differentiated instruction. I organized the coteachers' responses into the following two categories: attended differentiated instruction professional development for students with disabilities and positive, negative, or both views of differentiated instruction. I used different colors to highlight the participants' responses for emerging patterns to sort similar words, phrases, or ideas into a broader category. Analysis of the data indicated that 100% ($N = 12$) of the participants had never attended differentiated instruction professional development for students with disabilities. All participants commented that they shared a positive view of differentiated instruction and perceived it as an integral part of instructing students with disabilities in cotaught classrooms.

The coteachers who participated in this study were all female with the exception of Participants 10 and 11. All general education teachers indicated the grade level they taught that ranged from kindergarten through fifth grade. All special education teachers were assigned multiple grades. The surveys also indicated that all participants held general education, special education or both areas of certification and earned various levels of educational degrees. All participants had a wide range of teaching experience that ranged from 3 years to 27 years of professional service. Two teachers began teaching only 3 years ago while three teachers recounted 20 years and above of teaching experience. The survey responses supported the first research question about coteachers'

perceptions of differentiated instruction. Table 1 presents a summary of the demographic

information for each participant in the study according to categories such as gender,

grade level taught, and years of teaching experience.

Table 1

*Participants' Demographics Survey Responses*

| Participant | Gender | Grade | General Education Special Education or Both | Level of Education | Years of Teaching Experience |
|---|---|---|---|---|---|
| #1 | F | 3rd | GE | M.ED | 10 |
| #2 | F | K–5 | Both | M.ED | 18 |
| #3 | F | K–5 | SE | M.ED | 13 |
| #4 | F | K–5 | SE | BA | 3 |
| #5 | F | 2nd | GE | M.ED | 6 |
| #6 | F | K–5 | Both | M.ED | 5 |
| #7 | F | 1st | GE | M.ED | 5 |
| #8 | F | K–5 | Both | M.ED | 20 |
| #9 | F | K | GE | BA | 23 |
| #10 | M | 4th | GE | BA | 3 |
| #11 | M | 5th | GE | M.ED | 6 |
| #12 | F | K–5 | Both | ED.S | 27 |

*Note.* F= Female, M=Male, GE=General Education, SE=Special Education

**Interview Analysis**

I privately conducted audiotaped interviews with the 12 participants in each teacher's classroom after school hours to minimize distractions. I asked the participants 10 interview questions regarding their perceptions about implementing differentiated instruction for students with disabilities. The interview guide can be viewed in Appendix G. Participants provided information about the benefits, challenges, and instructional supports regarding implementing differentiated instruction for students with disabilities. I noted relationships and similarities among the participants' comments about differentiating their instructional practices in the inclusion classroom environment.

After considering the themes that captured the teachers' thoughts about differentiated instruction, a more thorough reading of the themes produced the codes to develop a deeper meaning of the participants' responses. Once the patterns had emerged within the coding, I grouped the related themes under a broader category. Some similar words about differentiated instruction were "differentiated instruction, benefits, challenges, differentiated strategies, collaborative planning, and professional development." I transcribed the digitally recorded interview data into Microsoft Word for analysis after reading each participant's individual transcript. I noted several reoccurring themes while reviewing the participants' comments that could provide insight into an inclusion classroom that incorporates differentiated instruction. In analyzing the data, I found three common themes according to the participants' interview responses. Table 2 displays the categories and themes created by coding within this project study that are

aligned with the research questions to ascertain elementary coteachers' perceptions of differentiated instruction, instructional practices, and supports needed for successful implementation.

Table 2

*Alignment of Research Questions with Data Sources*

| Research Questions | Themes | Subthemes | Teacher Surveys | Interviews | Lesson Plans |
|---|---|---|---|---|---|
| 1. What are general education and special education coteachers' perceptions about implementing differentiated instruction for students with disabilities? | Teacher Perceptions | Benefits | Yes | Yes | No |
| | | Challenges | Yes | Yes | No |
| 2. How do general education and special education coteachers practice differentiated instruction for students with disabilities in a rural Georgia elementary inclusion classroom? | Instructional Practices | Incorporate Various Strategies | Yes | Yes | Yes |
| | | Employ Multiple Assessments | Yes | Yes | Yes |
| 3. What types of support do general education and special education coteachers feel are needed to implement differentiated instruction effectively for students with disabilities in their inclusion classrooms? | Supports Needed for Differentiated Instruction | Collaborative Planning Time | Yes | Yes | No |
| | | Professional Development | Yes | Yes | No |

**Lesson Plan Analysis**

All 12 participants submitted a copy of their lesson plans. An analysis of the lesson plan documentation indicated that teachers employed a variety of instructional strategies to accommodate students with disabilities in their inclusion classroom. Table 3 illustrates the reoccurring evidence of various successful differentiated instructional strategies teachers used.

Table 3

*Reoccurring Evidence of Weekly Lesson Plan Strategies*

| Participant | Curriculum Standards | Small Group Instruction | Tiered Instruction | Flexible Grouping | Learning Centers | Assessments | Technology |
|---|---|---|---|---|---|---|---|
| #1 | X | X | X | X | | X | X |
| #2 | X | X | X | X | X | X | X |
| #3 | X | X | X | | X | X | X |
| #4 | X | X | X | X | X | X | X |
| #5 | X | X | | X | X | X | X |
| #6 | X | X | X | X | | X | X |
| #7 | X | X | X | X | X | X | X |
| #8 | X | X | X | X | X | X | X |
| #9 | X | X | X | X | | X | X |
| #10 | X | X | X | X | X | X | X |
| #11 | X | X | X | X | X | X | X |
| #12 | X | X | X | X | X | X | X |

Lesson plan documentation included activities about the specific content that coteachers expected their students with disabilities to master. I highlighted and color coded numerous differentiated strategies in their lesson plans to ensure students with disabilities had access to the general education curriculum. After analyzing the codes found in the data, I compared them to information found in the participants' interview responses. Participants' organized weekly lesson plans showed evidence of teachers' instructional strategies, use of hands-on activities, ways to address students learning styles, real-world application, and insight into how coteachers implement differentiated instruction in their inclusion classroom to support Research Question 2. First, the lesson plan documents provided evidence of differentiated strategies and activities that each teacher used in the classroom on a daily basis. Second, the lesson plans included curriculum standards, essential questions, targeted instructional strategies, and assessments. Third, the lesson plans served to demonstrate an alignment of responses to the teacher survey about coteachers' views toward differentiated instruction and the interviews.

**Findings**

In this section the findings from the analysis of the teacher surveys, interviews, and lesson plan documentation are presented to answer the research questions with the themes. All participants indicated on the survey that they had a positive view towards differentiated instruction. When asked their perceptions about implementing differentiated instruction for students with disabilities, the teachers all confirmed that

differentiated instruction was necessary to improve student outcomes. Moreover, semistructured interviews indicated that the participants felt differentiated instruction was needed to meet the needs of all students.

During the interview process, the participants shared their understanding of implementing differentiated instruction for students with disabilities, their views towards differentiated instructional practices, and the resources needed for implementing successful differentiated instruction. The participants felt that consistently implementing differentiated instruction meets the needs of students with disabilities, but also takes a lot of time to implement successfully. Teachers expressed that they encountered challenges such as insufficient collaborative planning time, inadequate professional development, and wanted meaningful training that provided modeled lessons and hands-on activities to help them overcome the obstacles of instructing a diverse group of students.

Additionally, I reviewed each teacher's lesson plan for evidence of differentiated instruction. Teachers incorporated a multitude of differentiated strategies to support students with disabilities. All teachers incorporated a variety of instructional practices that included hands-on activities, real-life examples, and interactive technology to increase student learning. The majority of the participants used small group instruction, flexible grouping, tiered instruction, learning centers, and technology in their lesson plans as a differentiated approach to learning. Although teachers used differentiated instruction to support the diverse needs that students bring to the classroom, factors such as

inadequate planning time and insufficient professional development hindered them from consistently implementing differentiated instruction in their inclusion classrooms.

Findings suggested innovative ways for coteachers to use differentiated instruction in their inclusion classrooms. Similarities among the participants' responses indicated that they desired professional development that focused on employing a variety of relevant instructional practices to improve their professional growth for educating students with disabilities within the inclusion classroom environment. Likewise, participants shared the need for professional development to create a lesson plan database of differentiated lessons that all coteachers and administrators can access throughout the county during the interview process. The overwhelming theme expressed among the coteachers in the study was that successful differentiation takes time and teacher collaboration to develop effective lessons, activities, and assessments that they can consistently use in their inclusion classroom supported all three research questions. Both elementary general education and special education coteachers believed that differentiated instruction is an essential method, but there was a need for professional development that focused mainly on differentiating instruction specifically for students with disabilities. Furthermore, three themes emerged from the data. The following themes are presented in a narrative form in relationship to address each research question: (a) teacher perceptions, (b) instructional strategies, and (c) supports needed for implementing differentiated instruction. A description of the themes follows.

**Research Question 1**

Research Question 1 for this study was: What are general education and special education coteachers' perceptions about implementing differentiated instruction for students with disabilities? General education and special education teachers perceive differentiated instruction as an effective strategy for instructing students with disabilities in the inclusion classroom environment. All of the teachers had a positive attitude towards implementing differentiated instruction according to their survey and interview responses. Teachers noted that implementing differentiated instruction successfully attributed to many other factors such as providing appropriate small group instruction, flexible grouping, tiered assignments, and learning centers.

Although the teachers who participated in the interviews indicated differentiated instruction as an effective instructional strategy, they acknowledged the challenges they face for consistently implementing differentiated instructional practices. The challenges included a lack of professional development and time for teacher collaboration to help overcome factors that inhibit teachers from implementing differentiated instruction successfully. A review of the interview transcripts showed that all general education and special education teachers felt differentiating their instruction was beneficial for educating students with disabilities. According to the data collected, two subthemes were uncovered through data analysis. Table 4 presents the theme and subthemes found within the data and the times participants commented on the benefits and challenges of differentiated instruction during the interview process.

Table 4

*Participants' Perception of Differentiated Instruction*

| Perceived Teacher Perceptions | Times Referenced During Interviews |
| --- | --- |
| Benefits for Students | 12 |
| Challenging to Implement | 9 |

*Note.* Table 4 shows the perceived teacher perceptions to address Research Question 1.

**Theme 1: Teacher Perceptions (TP).** All participants shared similar views about implementing differentiated instruction for students with disabilities. The first theme that emerged from the interviews was the participants' understanding of differentiating instruction for students with disabilities during the interview process when asked the following interview question: How do you define differentiated instruction? The teachers' responses were overwhelmingly similar in that they acknowledged the value of differentiated instruction for meeting students various learning needs. The teachers' comments provided in-depth information about their beliefs of differentiating instruction to support students with disabilities in the inclusion classroom environment. The most frequent comment that served as an indication of teachers' understanding about differentiating instruction for students with disabilities was that differentiated instruction meets the needs of all students.

Participant 1 commented:

For me, differentiated instruction is instruction that meets the kids at their level with their interests in mind. It's the idea that instruction is not a one size fits all. The goals are the same, but how we reach them will be very different for each child.

Participant 2 stated, "It is learning the strengths and weaknesses of each child and using assessments to base where each child is, but using different ways." Participant 4 excitedly stated, "I would say differentiated instruction is providing the same lesson, but in a different way based on their learning style." Participant 5 stated, "Differentiated instruction is teaching and learning and assessing students in different ways according to their abilities and their needs."

Furthermore, Participant 8 added, "It's making sure that you are approaching your instruction in such a way that it reaches all students and all levels of learners." Participant 9 stated differentiated instruction is, "Meeting students at their ability level and providing the same standards, but going about it in different ways to meet their needs." Finally, Participant 11 concluded, "Differentiated instruction is being able to organize or develop your lessons so that it will reach all of the students in your classroom." Teachers acknowledged differentiated instruction as an effective instructional approach for empowering teachers to increase student outcomes. A pattern of two subthemes emerged from the participants' various interpretations of the question.

***Benefits.*** I questioned each coteacher to understand the significance of consistently implementing differentiated instructional practices for students with

disabilities. All of the participants believed that each student learns in different ways. The participants shared similar responses about the benefits of differentiated instruction when asked the following interview questions: In what way do you think differentiated instruction is constructive for students with disabilities in an elementary inclusion classroom? Do you believe differentiated instruction can be successful in an elementary inclusion classroom for students? Why or why not? Participant 10 disclosed, "Tiered assignments allow students to work at their readiness level and move toward a goal of more challenging concepts." Participants 3, 5 and 9 agreed that differentiated instruction engages students with disabilities in the learning process while they work with the teacher or their peers which also benefits the students.

Participant 8 stated:

Well, I think when you have students with disabilities in an inclusive classroom, you have children with different needs and different levels working on the same skill, so you have to modify the instruction to get everybody from point A to point B by meeting their needs. It may be a smaller assignment or manipulatives instead of worksheets. It may be oral instead of writing. You just have to take into account the child.

Participant 6 stated, "Well a lot of times in differentiated instruction, you meet them where they are so you can build on what they already know." All participants shared that differentiated instruction is crucial because all students have diverse educational needs, including students with disabilities. The data showed that both general

education and special education teachers were consistent in their views regarding the benefits of implementing differentiated instruction.

*Challenges.* Managing the differentiated classroom is major for successful differentiated instruction to occur. Participants felt that differentiated instruction helps teachers to meet the needs of students with disabilities, but also shared similar challenges about effectively implementing differentiated instructional strategies. Nine reoccurring comments indicated several concerns regarding the challenges of implementing differentiated instruction for students with disabilities in the inclusion classroom when participants were asked the following interview questions: What factors if any, do you feel inhibit your ability to implement differentiated instructional practices? Teachers mentioned that learning multiple ways to teach curriculum standards, maintaining classroom management, a lack of time to coordinate instructional activities with their coteach partner, and keeping students with disabilities actively engaged in the learning tasks as major challenges.

Participant 4 shared that differentiating instruction is hard, takes, a lot of time to plan, and requires her to teach curriculum standards incorporating various teaching modalities to meet the needs of students with disabilities. Participant 5 agreed with Participant 4 and shared that she taught her students to work with each other in their learning centers and how to transition to their centers while she and her coteacher provided small group instruction. Participant 9 stated,

"Sometimes, depending on their disability, it's hard to come up with activities that meet their needs. If it's significantly below kindergarten level, that's when I'm looking for a different way, and a different approach or a different activity to help them. It's just hard sometimes to know how to get the information out of students with disabilities."

Participant 10 elaborated,

There's the homeroom teacher and the special education teacher. The two of us have to come up with a plan that is going to work, or else, you know it's not going to work. We teach the same assignment, but make sure the tasks that we give to the children are different to accommodate for the diverse learning levels.

Participant 11 stated that sometimes he feels he doesn't have enough resources to differentiate a lesson that would allow a student to understand a lesson standard. He described how he wanted to use sorting and musical activities to help him teach the different animal kingdoms in a fifth-grade lesson that he devised, but limited resources inhibited his ability to differentiate the instruction. Finally, Participant 12 stated that her challenges were exposing students with disabilities to common core standards using smaller tasks along the way over multiple days instead of trying to teach every lesson on the same day without giving students an opportunity to practice the skills they needed to master. The commonalities in the participants' statements about the benefits and challenges provided the theme of teacher perceptions about differentiated instruction for students with disabilities.

**Research Question 2**

Research Question 2 was: How do general education and special education coteachers practice differentiated instruction for students with disabilities in a rural Georgia elementary inclusion classroom? Surveys, interview data, and lesson plan documentation indicated that teachers incorporated multiple differentiated strategies and activities that they used to increase the academic performance of students with disabilities. Teachers shared many differentiated instructional strategies such as small group instruction, tiered instruction, and learning centers, but wanted to learn how to differentiate their lessons by content, process, and product. Coteachers employed guided practice to facilitate student with disabilities understanding of the content.

Moreover, teachers wanted to learn more strategies to help them overcome challenges with implementing and managing differentiated instruction in their classrooms. The participants shared their passion for wanting to work with their coteach partner to develop differentiated lessons and hands-on activities and to see differentiated instruction modeled with proven differentiated strategies for educating students with disabilities in inclusion classrooms. According to the data collected, two subthemes were uncovered through data analysis. Teachers shared how they incorporated differentiated instruction strategies and employed multiple classroom assessments to meet the needs of learners in their inclusion classrooms. Table 5 presents the theme and subthemes found within the data and the times participants commented during the interview process about how coteachers differentiate instruction for students with disabilities.

Table 5

*Participants' Comments about How to Differentiate Instruction for Students with*

*Disabilities*

| Perceived Instructional Practices | Times Referenced During Interviews |
| --- | --- |
| Incorporate various instructional strategies | 12 |
| Employ multiple assessments | 9 |

*Note.* Table 5 shows perceived instructional practices used to address Research Question 2.

**Theme 2: Instructional Practices (IP).** The second theme to emerge from the interviews was the participant's instructional practices to address Research Question 2. Each participant shared various approaches for applying differentiated instructional strategies in their inclusion classroom when asked the following interview questions: What is the process of planning a differentiated lesson? How do you describe your experiences with dividing students into small groups for instruction? From your perspective, describe how you implement flexible grouping to meet the needs of your students. The way elementary general education and special education teachers implemented differentiated instructional strategies varied by each participant. A pattern of two subthemes emerged from the participants' various interpretations of the question.

***Incorporate a variety of manageable, differentiated instructional strategies.*** A common thread among all 12 participants' interview responses was the use of multiple

differentiated instructional strategies for meeting the needs of students with disabilities. Participant 2 was eager to describe an example of her differentiated math activity.

Participant 2 asserted:

If they are struggling with 2-digit multiplication, you don't have to give them a complete assessment. Give them a couple of problems and see how they are doing. Check back daily. Let that be something that they work on for 5 minutes either with a coteacher or yourself. You can't expect the same thing every day from all the children. Some are going to excel in areas like place value and some are going to excel in fractions and you have to be ready to have some information so you will know which way to continue.

A wide-spread practice utilized by the participants was small group and flexible grouping to help students meet learning goals but involved a lot of planning. Several participants provided examples of utilizing differentiated instructional practices. Participant 6 explained that she used flexible grouping for the student to work comfortably or at a rigorous level of learning in reading or math. Participant 9 stated, "We do guided reading and guided math and create small groups based on assessments. We are able to move students in and out of groups depending upon when they master the material." Participant 3 also mentioned the significance of using flexible grouping. Participant 11 agreed with the idea of employing flexible groups, but added that he used student data so that students are not "stuck in the same group all year. The groups are

constantly changing so that students have an opportunity to master the skills through various activities."

The data showed that teachers' similar responses indicated a predominant consensus for implementing a variety of differentiated strategies that aligned with curriculum standards benefited students with disabilities. Teachers discussed and suggested strategies that included tiered assignments, anchor activities, graphic organizers, and incorporating technology through the use of the computer, IPad, IPod, or Smartboard to help them plan effective lessons. Implementing these strategies allowed teachers to provide a positive learning environment to further the academic growth of each student.

***Employ multiple sources of data to inform instruction.*** Assessing student learning is a crucial element for coteachers to consider as they plan for differentiated instruction in the inclusion classroom environment. Nine participants shared similar views about utilizing various sources to guide their instruction to bridge the achievement gap among students with disabilities and their nondisabled peers. Participant 1 shared a lesson on rounding numbers that she used in her inclusion classroom. The lesson also focused on addition properties and patterns that highlighted the role of each coteacher, differentiated stations to engage learners, and assessments to evaluate student learning. During the interview, Participant 1 indicated that preassessment is crucial for planning a lesson.

Participant 4 indicated several ways that she assessed student learning and used the information to guide her instruction. She felt that student data such as teacher-made tests and quizzes were necessary to monitor student growth. Participant 6 stated, "I use data from weekly assignments, group work, students' journals and oral presentations to evaluate student learning. I also use data to help form my groups." Participant 7 responded, "I use assessments to determine if I need to present a skill or reteach it in a different way before I move on to the next lesson." Participant 9 shared the other participants' views regarding evaluating student learning. She stated, "I use the data on a continuous basis to look at where each student is performing and to see if I need to change anything in my instructional practices." Several other participants made similar comments. The theme that emerged was coded as how coteachers implement successful differentiated instructional practices.

**Research Question 3**

Research Question 3 was: What types of support do general education and special education coteachers feel are needed to implement differentiated instruction effectively for students with disabilities in their inclusion classroom? All participants believed differentiated instruction benefited students with disabilities, but they desired time for collaborative planning and adequate professional development for educating these students in the inclusion environment. Coteachers in this study perceived that they often lacked prerequisite skills necessary to successfully initiate differentiated instruction for students with disabilities and required more training to be successful. A lack of

professional development about differentiated instruction for students with disabilities was repeatedly cited as a factor that inhibited these educators to consistently implement differentiated instruction with fidelity. Teachers felt that meaningful professional development was needed to provide them with the tools to equip them with managing the differentiated classroom could help them to overcome the challenges of implementing differentiated instruction. Specifically, teachers desired an opportunity to collaboratively develop a lesson plan database of differentiated lessons that could be easily accessed throughout the county. All teachers commented that collaborative planning and professional development that focuses on implementing differentiated instruction specifically as critical factors for supporting student with disabilities within the inclusion classroom environment. Table 6 presents the theme and subthemes found within the data and the times participants commented about the supports needed for successful differentiated instruction during the interview process.

Table 6

*Participants' Comments about Supports Needed for Successful Differentiated Instruction*

| Perceived Needs for Implementing DI | Times Referenced During Interviews |
| --- | --- |
| Collaborative Planning | 12 |
| Professional Development | 12 |

*Note*. Table 6 shows perceived supports needed to address Research Question 3.

**Theme 3: Supports Needed (SN).** The theme that emerged from Research Question 3 addressed the supports needed for implementing successful differentiated instruction. The participants agreed that teacher collaboration is essential to the learning process. A consensus indicated that participants wanted collaborative planning time to learn strategies they could apply to help them implement differentiated practices for students with disabilities when asked the following interview question: What types of support do you feel are needed to improve your teaching and learning practices in the differentiated classroom? A pattern of two subthemes emerged from the participants' various interpretations of the question.

*Collaborative planning.* All 12 coteachers consistently conveyed a need for collaboratively planning effective lessons to engage students with disabilities. Teachers cited collaborative planning for working together to share ideas that will enhance their instructional strategies as a crucial element for effective differentiated instruction to occur. The participants shared several factors needed for planning successful differentiated lessons when asked the following interview question: What is the process of planning a differentiated lesson? Participant 1 reported, "It always starts with a preassessment. You've got to know where the kids are, what they already know and what they don't know so that you can plan tailored instruction towards their needs." Participant 1 also shared that she considers the time that a lesson may take students to comprehend when planning instruction. She stated, "It takes time to plan a really good lesson, and I

try to make sure that my students with disabilities have enough time to work on a skill."

Participant 2 shared similar thoughts. She stated:

> If you don't have enough time to plan, then you can't incorporate the strategies
> that the students need to learn the skills that are taught. That's why it is important
> to plan with your coteacher so that we can work as a team to make the lesson
> successful.

Participant 5 felt that teachers have to consider each child's strengths and weaknesses
when planning the differentiated lesson.

> Participant 5 noted:
>
> I am constantly aware that not all students learn the same and require the same
> instruction and that I have to present visually, auditory, or kinesthetically. I keep
> this is mind when I consider differentiated instruction especially for my students
> with disabilities.
>
> Participant 6 expressed that it was difficult to plan innovative ways to meet the

needs of all students in the classroom without being in the same place at the same time.

Two general education teachers agreed with participant 6 about challenges for

collaboratively planning effective differentiated lessons. Participant 7 desired an

opportunity to explore different avenues for developing effective lessons that will give

the teams time to practice the technology while creating a lesson to engage students with

disabilities. Furthermore, four teachers mentioned they needed collaborative planning

time to share lessons and ideas that they can implement for future lessons by creating a

database of lessons that teachers and administrators could easily access. Participant 8 felt the coteams would benefit from seeing modeled differentiated lessons.

Finally, Participant 9 acknowledged that she considers how to use peer tutoring in her lessons by pairing students with disabilities with a more advanced student to work on a concept, but could use ideas from her peers. All of the participants were unified about their teaching style for accommodating each student's learning needs, the time it takes to implement the lesson successfully or maximize learning opportunities for their students. Participants shared the belief that collaborative planning will equip them with instructional strategies to educate students with disabilities in the inclusion classroom environment. All of the participants felt they benefited from sharing ideas with their colleagues about the significance of differentiating their instruction.

*Professional development.* The participants shared similar views about supports needed to implement successful differentiated instruction. The participants indicated that they would welcome additional training as the previous professional development training they attended did not specifically address meeting the needs of students with disabilities when asked the following interview questions: Have you participated in differentiated instruction professional development? If so, what do you feel are some of the best practices you attained? Is there anything else you would like to add? All of the participants stated they had not participated in differentiated instruction professional development training that focused specifically on educating students with disabilities. Participants mentioned the need for an increase in a variety of easily accessed

differentiated strategies offered to them as instructional tools for gaining greater knowledge of developing effective lessons. Participant 1 elaborated:

> It's having that coteacher to grow with. Incorporating differentiated instruction for students with disabilities is challenging without professional development. I think more training will improve my professional growth. I would like an opportunity to share my successes with other teachers as well as learn about what they are doing in their classroom. I believe that teachers can help students with disabilities succeed more if given the time to collaborate, see modeled lessons, incorporate technology, and discuss differentiated strategies to help our students with disabilities.

One teacher commented that the workshop she attended addressed the roles of coteaching models rather than the subject of differentiated instruction. Similarly, Participant 10 stated that coteach workshops were held within the school district but did not address how to differentiate instruction for students with disabilities in detail. Another participant commented that she received training during several grade level sessions that sporadically touched on differentiated instruction, but the sessions failed to discuss meeting the needs of students with disabilities in the differentiated classroom. A consensus of teachers' responses indicated that they desired professional development to help them apply differentiated strategies for students with disabilities. These comments support the common thread that relevant professional development training could help foster the coteachers' professional growth for implementing differentiated instruction.

The results indicated that coteachers felt they needed to be trained on differentiated instruction for students with disabilities as well as receive ongoing training for new and experienced teachers about sharing resources and uploading lessons to share as a team. The data from the interviews supported all three research questions. Teachers reported inadequate professional development to effectively carry out differentiated instructional practices. The participants' responses about participation in differentiated instruction professional developments training were coded as coteachers' supports needed for implementing successful differentiated instruction.

**Outcomes**

The problem this study addressed was that elementary coteachers in a rural Georgia school district expressed the need for specific professional development for implementing differentiated instruction in their inclusion classroom. The purpose of this study was to explore elementary general education and special education teachers' perceptions about differentiated instruction for students with disabilities. Common themes according to the participants' survey responses, interview responses, and lesson plan documents were noted. Major findings of this study indicated that coteachers shared similar knowledge about differentiated instruction as evidenced in their response when asked to define differentiated instruction. Moreover insights into the participants' role as coteachers regarding the aspects for implementing successful differentiated instruction for students with disabilities materialized. Coteachers' understanding of differentiated instruction ranged from their input about implementing differentiated strategies to their

views regarding the instructional supports needed for successful classroom implementation. As these issues emerged, so did the need for professional development. Similarities among coteachers' responses indicated that differentiated instruction is significant for ensuring the success and meeting the needs of students with disabilities in the inclusion classroom.

Although the participants shared positive views about the significance for implementing differentiated instruction in a rural Georgia school district, they felt they would benefit from professional development that focused specifically on differentiating their instruction for students with disabilities. The surveys indicated that teachers did not participate in a professional development seminar that focused on differentiating instruction specifically for students with disabilities. I found that general education and special education teachers felt differentiated instruction benefited students by engaging the students in the learning process through small group instruction, flexible grouping, tiered assignments, and technology according to interviews sessions and lesson plan documentation.

I also found through analysis that there was little to no collaboration time for coteach partners to discuss students' strengths and weaknesses. There appeared to be little or no communication about best practices for implementing differentiated instruction in the inclusion classroom environment based on the participant's responses indicating a need for professional development. Teachers wanted time to collaborate with their peers to develop effective differentiated lessons. Specifically, the participants

expressed an interest in having opportunities to share how differentiated instructional strategies have led to student success with other coteachers. Teachers favored professional development that offered modeling of lessons and hands-on experiences to develop instructional activities with input from their colleagues across grade levels.

Moreover, the participants submitted lesson plan documents outlining various class activities that ensured students with disabilities had access to the general education curriculum standards as their same aged peers. The lesson plans detailed the aspects for planning an effective differentiated lesson to meet the needs of all learners and affirmed the theme for how and why coteachers use differentiated instruction. Coteachers in this study felt differentiated instruction require a considerable amount of time to implement, but the extra effort is worthwhile to increase student achievement. Teachers perceived that insufficient collaborative planning as a challenge for implementing successful differentiated instruction. All participants agreed that continued professional development training was a necessary resource for successful differentiated instruction to occur in their inclusion classroom and welcomed the opportunity to share successful strategies with other coteachers to increase students' academic progress.

Overwhelmingly, the coteachers indicated their understanding about differentiated instruction for students with disabilities, described how to implement successful differentiated instructional practices, and felt that collaborative planning time and professional development are necessary for supporting students with disabilities taught in the differentiated inclusion classroom. A predominant theme viewed by participants

suggested that differentiated instruction is crucial to the success of all students. The excerpts from the participants' responses, teacher surveys, and lesson plan documentation supported each theme. Therefore, an option for implementing these findings was to create a professional development program to help the coteachers have the tools to differentiate instruction consistently for students with disabilities. Thus, I developed a professional development plan that addresses the issues of differentiation, conceptual understanding for the teachers, and strategies for students with disabilities who are struggling to attain academic concepts.

## Conclusion

Elementary general education and special education coteachers shared their knowledge about differentiated instruction as an individualized instructional practice that targets the needs of all students, including students with disabilities. An in-depth narrative discussion of the findings presented the themes and subthemes that emerged from the coteachers' interviews. The most common differentiated method these coteachers implemented in the inclusion classroom included the various grouping of students for effective instruction to occur. The participants indicated the need for professional development as a needed resource for fully implementing differentiated instruction in the inclusion classroom. In Section 3, I discuss the project for this study, description and goals, the rationale for the project, review of the literature, potential barriers, proposal for implementation and timetable, roles and responsibilities of students and others, and implication for social change.

Section 3: The Project

**Introduction**

The purpose of this qualitative case study was to explore elementary general education and special education teachers' perceptions about implementing differentiated instruction for improving the academic performance of students with disabilities. The participants provided a wealth of information to help inform the research questions for this study. Teacher surveys and interviews indicated that coteachers had not attended a professional development seminar on differentiated instruction designed specifically for educating students with disabilities. The findings of this study were used to ascertain the appropriate content and components to include in a professional development seminar proposed to enhance coteachers' knowledge about implementing differentiated instruction within their inclusion classrooms. The project was developed to respond to the needs indicated by the teachers.

According to the findings, the coteachers implemented differentiated instructional strategies across various subject areas that included tiered lessons, small groups, flexible grouping, learning centers, and technology. All interviewed participants suggested the need for continuous training regarding differentiated instruction. These teachers expressed that they would welcome the opportunity to observe their colleagues as they model differentiated lessons to gain a better understanding of what differentiated instruction entails when working with a diverse population of students.

Furthermore, the participants stressed the need for more time to collaborate with their peers about planning differentiated lessons, managing the differentiated classrooms, and preparing differentiated activities to deliver effective instruction to their students. Coteachers felt that it was significant to participate in a meaningful and relevant professional development seminar that would allow them to fully implement differentiated instruction. Helping coteachers to understand successful differentiated instruction is relevant in the field of education for students, teachers, stakeholders, and ultimately, the entire community. Hence, a major goal of the study was to develop a professional development project that would allow coteachers to collaborate in whole groups, small groups, and one-to-one paired groups. The professional development training also allows coteachers to explore differentiated ideas for improving student performance. The study emphasized uncovering the answers to the research questions. The project was used to address concerns identified in the study (Appendix A).

## Description and Goals

In this study, I explored general education and special education coteachers' beliefs about using differentiated instruction in the elementary inclusion classroom. The participants expressed that students with disabilities continued to academically lag behind their peers. Coteachers' understanding of differentiated instruction is significant for facilitating learning concepts to help students with disabilities meet the standards on curriculum and state-mandated tests. Furthermore, coteachers in this rural Georgia district

are evaluated on the new state teacher evaluation model that administrators use to record how teachers incorporate differentiated instruction in inclusion classrooms.

In order to explore coteachers' experiences of implementing differentiated instruction in their classrooms, it was necessary for me to have conversations directly with teachers to hear their views on the benefits and challenges of implementing differentiated instruction. I found that the majority of coteachers had similar ideas about differentiated instruction but needed and desired time to create a plethora of effective differentiated lessons with their peers that they can update and easily access throughout the year. The teachers spoke candidly about their exemplary practices that would enhance the professional growth for other teachers needing support with differentiating instruction in inclusion settings.

The goals of this project study were based upon coteachers' need to improve consistency in implementing differentiated instruction and in creating a central base for teachers to access easily differentiated lesson documents to use in their inclusion classroom. One of the goals for coteachers will be to create a resource binder with differentiated lessons, assessments, and activities that can become an instructional tool to accommodate all learners. The resource binder will need to be updated by coteach teams as well as stored and shared through Google Docs. The professional development plan that resulted from this study's findings includes three sessions that spotlight target areas based on the data results for teacher perceptions of differentiated instruction. The first session focuses on defining differentiated instruction and discussing differentiated

strategies. The second session focuses on teacher collaboration and allowing time for teachers to develop differentiated lesson plans. The third session focuses on teachers overcoming challenges with implementing differentiated instruction to create the optimally differentiated classroom. I determined that a 3-day professional development could address the needs of teachers who work as coteachers within an elementary inclusion classroom.

## Rationale for Project

The purpose of this study was to explore elementary general education and special education teachers' perceptions about differentiated instruction for students with disabilities. The findings indicated that participants were concerned about the lack of academic gains for their students with disabilities. Students with disabilities must show their knowledge towards the same academic standards as their peers without disabilities. As a result of the findings, this study provided a framework for developing a professional development plan to help elementary coteachers understand how to demonstrate proficient or exemplary practices as they collaborate directly with their peers.

The teachers may benefit from a 3-day training session that provides them with the skills needed to integrate differentiated instruction within their inclusion classrooms. The study offered a framework for fostering a professional development seminar on the topic of differentiated instruction enabling elementary coteachers to deliver high-quality instruction for teaching a diverse population of students within their inclusion classrooms. By participating in this project, coteachers will have time to review student

assessment data for strengths and weaknesses. The differentiated instruction professional development seminar offers teachers the confidence to integrate differentiated strategies, create differentiated instructional materials, and a chance to view websites to engage their students in the learning process.

Finally, the project provides teachers with the knowledge needed to demonstrate proficiency when evaluated by administrators on Georgia's new evaluation model for teachers. Since elementary teachers need to demonstrate proficiency or exemplary practices on the state's teaching evaluation tool, the project may be useful for helping them acquire the skills necessary to implement successful differentiated instruction. The project includes an evaluation to provide information about how coteachers can share their ideas in collaborative ways to improve the academic performance of students with disabilities.

## Review of Literature

Based on the research, I concluded that professional development sessions should offer opportunities that allow the adult learner to acquire and apply new knowledge. The literature suggested that when adult learning principles are used to guide the professional development seminars, the learning principles may become more relevant to teachers (Knowles, Holton, & Swanson, 2011). The primary focus of this literature review was the theory and literature that informed the study's findings and the genre of the project. The databases, accessed through Walden University's Library, that were used to identify research related to this project included ProQuest Dissertations and Theses, Education

Research Complete, and ERIC. Search terms such as *professional development, adult*

*learning theory*, *differentiated instruction*, and *teacher collaboration* produced several

results. Based on the search using these keywords and topics, all relevant studies were

found until reaching saturation.

**Professional Development**

The product of this project study was a professional development model that

establishes a coteach data team in which general education and special education teachers

can acquire new skills to differentiate the learning environment for students with

disabilities. Professional development for teachers is an avenue to guide teachers in

improving classroom instruction to close the achievement gap (Farr, 2011; Petrie &

McGee, 2012). Coteachers need to have opportunities to learn and apply new skills

within their inclusion classroom. The project was designed to create teacher collaboration

with long-term aspirations for improving teaching and learning through professional

development. Professional development encourages teachers to become active learners in

their pursuit to support their development as successful learners (Petrie & McGee, 2012).

Similarly, effective professional development involves ongoing learning for teachers who

support their school improvement plans (Desimone, 2011; Hunzicker, 2011).

Moreover, professional development for coteachers should be job-embedded and

provide collaborative opportunities for differentiating their instruction based on teacher

interests and needs as an adult learner (Dixon, Yssel, McConnell, & Hardin, 2014).

Differentiation allows coteachers to remediate and enrich student outcomes through

effective professional development. Dixon et al. noted teachers' understanding of differentiated instruction promotes maximum student learning. Hood-Williams (2010) stated that coteachers need professional development that relates to teacher collaboration for planning, modeling, lesson delivery, and defining their roles and responsibilities in the cotaught environment. However, Lama, Sula, and Gjokutaja (2011) found that professional development often lacks providing teachers with knowledge and skills needed to provide effective instruction. Effective professional development must target subject-matter content, the pedagogy of instruction, and differentiated instruction (Desimone, 2011; Van Driel & Berry, 2012).

A primary goal of professional development is to change teachers' instructional practices in a way that benefits student learning. Research shows that incorporating hands-on learning activities engage students in the learning process and help teachers to develop confidence in their ability to teach students (Gulamhussein, 2014; Hung, 2013; Hillman, 2011). Furthermore, Biancarosa, Bryk, and Dexter (2010) conducted a 4-year longitudinal study on effective professional development strategies. They found that strategies could only be successful in classrooms where teachers were evaluated and supported by other teachers and administrators. Their study showed a 32% gain in student achievement through supporting teachers with instructional coaching and frequent feedback. Likewise, Marrongelle, Sztain, and Smith (2013) proposed presenting teachers with a variety of professional development that increases their knowledge to practice these skills in their classrooms. Professional development training with an emphasis on

adult learners and teacher collaboration can aid coteachers in learning how to work together. Professional development encourages teachers to improve their attitude, knowledge, and produce positive outcomes from school improvement efforts as they implement differentiated instruction.

Additionally, professional development training involves opportunities for teachers to practice, apply, reflect on, and evaluate the skills they have learned (Nishimura, 2014; Trybus, 2011). Similarly, professional development enhances teachers' knowledge and skills for increasing the quality of the teacher learning (Gulamhussein, 2014; Koellner & Jacobs, 2015). Professional development is not only about increasing the knowledge base of teachers but ultimately about creating learning environments where the final result is improved learning for students. A professional development presented with adult learners in mind, teacher accountability for student learning, and respecting those in attendance makes the training not only professional but meaningful.

**The Adult Learning Theory**

Employed as a collaborative approach, Knowles' (2011) adult learning theory, guides my professional development project (Knowles, Holton, & Swanson, 2011). The theory involves the assumption that adults learn through experience (Harper & Ross, 2011). Adult learners seek a need for change to advance improvement in their life and bring numerous experiences that may be relevant to their learning situation (Knowles et al., 2011). In many instances, adults are goal-oriented and have a need to learn, grow, and

be successful (Knowles et al., 2011). Adults desire to understand the purpose of what they are taught and how it may benefit them (Chan, 2010). When it comes to adult learning, the educator should consider what works in a particular area, the purpose for learning, and how to expand the purpose of learning (Easton, 2012). As adult learners, teachers often want to put what they learn immediately into action (Knowles et al., 2011). Darling-Hammond and McLaughlin (2011) commented that professional development has the potential to foster change in teachers' pedagogy when they have the desire to improve their teaching practices. Professional development provides teachers an opportunity to learn actively and practice skills that can lead to a change in their instructional practices. By providing collaborative opportunities through professional development, teachers can enhance their method of teaching as adult learners (Danielowich, 2012; McNicholl, 2013).

Creating a professional development plan requires understanding about the adult as a learner. The design of professional development accentuates teachers as adult learners using what they already know and cultivating the adult's experience to improve their instruction (Koellner & Jacobs, 2014). Brown, Dotson, and Yontz (2011) acknowledged that planning effective professional development entails designing content and instructional activities that are relevant to adult learners. Knowles et al. (2011) suggested educators must be aware of the learning styles of the students they teach as well as their personal style of learning and teaching. Professional development should offer extensive opportunities for application, practice, reflection, and evaluation

(Nishimura, 2014). Curwood (2013) agreed that professional development provides opportunities for teachers to share ideas with each other as well as observe their colleagues' instructional practices that they can continue to use beyond the professional development training seminar.

The professional development content corresponds with Knowles' adult learning theory that adult learners are self-driven problem solvers and are interested in what is relevant to their learning (Merriam, Caffarella, & Baumgartner, 2007). Allowing participants choices for their self-direction makes the professional development training and application pertinent to real life issues while enabling participants to draw on their knowledge and experiences. McLeskey (2011) also found that teachers felt empowered when they were allowed choices to invest in what they wanted to learn. Applying the adult learning theory may help elementary coteachers develop their craft in educating students with disabilities in the inclusion classroom environment.

**Teacher Collaboration**

In addition to Knowles's adult learning theory, teacher collaboration is incorporated into this project study (Knowles et al., 2011). Teacher collaboration is critical for implementing effective differentiated instruction in the inclusion classroom environment. Successful differentiated instruction requires that teachers collaborate and learn new ways of implementing best practices for students to understand essential concepts. Teachers benefit from a variety of professional development formats that involve active learning and teacher collaboration (Darling-Hammond & Richardson,

2009). DuFour (2011) believed that the time educators spend in collaboration with their peers significantly contributed to an effective school culture to enhance student learning. Coteachers work together as equal partners to make decisions that will lead to positive student outcomes. Dee (2011) stated that general educators lack the skills to teach students with differing learning needs. Parks, Roberts, and Stodden (2012) described a 3-day professional development program for teachers providing support to students with disabilities. The faculty embraced a positive view towards acquiring knowledge in the areas of disabilities, rights and responsibilities, and assistive technologies after participation in professional development. The researchers concluded that the faculty increased their confidence for supporting students with disabilities and advocated for a system of change.

An emphasis on teacher collaboration and collaborative environments through professional development can help teachers learn to work effectively together, improve attitudes and their knowledge, and produce positive outcomes for students (Darling-Hammond & Richardson, 2009). In a study conducted by Gallagher (2012), educators embraced collaboration and differentiation at two California high-poverty school districts as an essential component of strong school culture accountability. The findings suggested that teacher collaboration impacted high teacher retention and teacher effectiveness at both schools. For effective professional development to occur, teachers need to be included in the collaborative process (Gemmed, Fiorucci, & Catarci, 2014).

Moreover, Kollener, Jacobs, and Borko (2011) conducted a study and found that a sustainable professional development program entails opportunities for the teacher to collaborate with their peers, modify the professional development objectives to support the district's goals, and a time for teachers to reflect and make changes to their instructional practices. Similarly, Van Driel and Berry (2012) reported that successful professional development involves time for teachers to reflect on new initiatives and time to implement new instructional practices. Teacher collaboration can strengthen coteach partnerships that will enhance student success through differentiated instruction. Since the learning environment is continuously changing, it is crucial for coteachers to receive professional development to provide effective differentiated instruction for students with disabilities in a changing learning environment.

**Implementation, Potential Resources, and Existing Supports**

Many of the basic supports necessary for this project to be successful already exist. Each school has a data room that is equipped with a computer and Smartboard for visuals, and all teachers have laptops to access the internet. Coteachers will need handouts and other resources that may be needed to create lessons, activities, and materials. Utilizing a facilitator already employed by the district will eliminate financial burdens. An administrator is in charge of preparing a calendar for professional development seminars and documenting hours for professional learning units. The district employs a full-time technology team to provide assistance if any technical issues arise.

**Potential Barriers**

The project was designed to meet the training needs of all coteachers in the district. Potential barriers to incorporating a successful project could include, teacher resistance, time to conduct the professional development session, and the district's financial burdens. Teachers may feel participating in another workshop is not beneficial. Scheduling substitutes for teachers to attend the workshop may be costly. A possible solution to the barriers is to schedule the professional development session during preplanning or coteacher workdays to minimize the cost of substitutes. Another alternative solution is to offer supplementary training sessions.

Additionally, other coteachers in the district can lead the training to alleviate the cost. It is my desire that the coteachers will maintain a positive attitude as they gain a better understanding and appreciation for serving students with disabilities in the cotaught environment. Finally, the findings from this study may encourage coteachers to consistently continue to use differentiated instruction in their inclusion classrooms.

## Proposal for Implementation and Timetable

Sharing the findings from this study with an audience of administrators and the community stakeholders is essential. The proposed project entailed developing a 3-day professional development seminar that incorporated three major themes based on the findings and literature. The seminar will include guest teacher speakers from the county who will share their experiences with differentiated instruction. Time will be allotted for teacher collaboration about student assessment data, development of lesson plans and creation of hands-on materials and activities that teachers can take back to their

classrooms. The completion time for creating the professional development is anticipated to take between 3 to 4 months and approximately 1 year to adequately train all elementary coteachers in the county. The ideal location is contingent upon accessibility to trainers. The availability of multiple professional development trainers may expedite the training. Once teachers become trained, they can form teams to serve as on-site trainers to address the needs of new coteachers in need of differentiated professional development. Differentiated instruction for new coteachers can then take place at the beginning of each school year with established teams within the building to offer assistance. The professional development seminar will allow coteachers to develop differentiated instruction lessons and activities through Google Docs so that they can have access in their classrooms or throughout the county along with other coteachers (Appendix A).

## Project Development and Evaluation

The project entails developing a 3-day professional development seminar on differentiated instruction best practices based on the finding from the study. Coteachers will participate in a formative, outcome-based, and summative evaluation. The first evaluation begins with a formative evaluation that the teachers will be asked to complete about the professional development seminar (Appendix A). Items on the evaluation form include guest speakers who talk about their experiences with differentiating instruction in the inclusion classroom, the usefulness of teacher collaboration, the presentation of materials, contribution with developing lesson plans and activities, and teachers' overall experience with participating in the professional development seminar. Also, coteachers

will be asked to share relevant feedback about the training session. The items on the evaluation form are labeled on a scale from one to three, with one signifying that the professional development seminar as not helpful, two indicating somewhat helpful, and three indicating very helpful.

The second evaluation is outcome based (Appendix A). The outcomes evaluation includes the lessons coteachers develop in their classrooms. The lesson plans will be measured for ease of applying effective lessons. The goal is for coteachers to have sufficient time to develop approximately 10 lessons that they can immediately implement in their classrooms. Teachers can also share their lesson plans, assessments, and activities with other coteachers using Google Docs. An outcome-based open-ended evaluation will offer coteachers an opportunity to share their ideas for participation in future sessions.

The third evaluation is a summative evaluation that teachers will complete approximately 2 to 3 weeks after attending the professional development seminar (Appendix A). Teachers can expand on their instructional practices once they are implementing the lesson plans and activities they created during the training sessions. The evaluation will be open-ended to provide the facilitator with insights about specific aspects of the training that teachers found helpful or may need adjusting. The evaluation will also help the facilitator make the necessary changes to the training sessions in order for future coteachers to experience success with implementing differentiated instruction. The key stakeholders and coteachers will benefit from the professional development seminar based on the needs of the teachers. Administrators will gain awareness of how

coteachers will implement differentiated instruction in their inclusion classrooms that can lead to providing additional support to teachers who may continue to need assistance after the seminars conclude. Other key stakeholders such as local community members and administrators will gain insight of the time and devotion that educators put forth towards advocating for the success of all students taught in the differentiated classroom.

Furthermore, student stakeholders would benefit from their teachers being more knowledgeable in understanding how to differentiate content material. Teacher participation in the professional development seminar is beneficial for students with disabilities. When students make gains on district and state-mandated assessments, students will acquire the skills needed to prepare to progress to the next grade level, graduation, and beyond to become productive citizens within their community.

## Roles and Responsibilities of Students and Others

My role is now to communicate the value of the professional development project to the school and district leaders who will decide the significance of implementing the project. I will be responsible for implementing the project. The role of the coteachers would be the benefits from the collaboration with their colleagues during the training sessions to address students' interests, learning styles and readiness levels. The role of the administrators would be to promote a collegiate learning environment for coteachers to increase their professional growth. Furthermore, administrators would witness students actively engaged in differentiated lessons as a result of coteachers participating in a

training that lessens the burdens for teachers concerning their evaluation during administrative observations.

## Implications for Social Change

### Local Community

General education and special teachers described their experiences that support incorporating differentiated instruction in inclusion classrooms and its benefits for educating a diverse population of students in a rural Georgia school district. The study includes several implications for social change that include providing opportunities for teachers to collaborate with their peers, employing professional development to build teacher efficacy with differentiating instruction according to each students' learning style, and increasing teacher accountability for student learning. As coteachers redeliver best practices for implementing differentiated instruction, new coteachers entering the education arena may be more willing to incorporate differentiated instructional strategies such as flexible grouping or tiered assignments into their daily teaching practices.

Furthermore, the study has the potential to create change by providing students with disabilities with the strategies they need to narrow the achievement gap. A significant goal of education is to provide all students with written, spoken, analytical, and social skills that will enable them to successfully contribute in a global society. The results of this project study details possible solutions for elementary coteachers to consistently differentiate instruction to increase low achievement on standardized tests for students with disabilities. Educators exploring this study are encouraged to try new

and innovative initiatives to guide students with disabilities to be successful contributors in the 21st century. By guiding students to increase their academic outcomes, educators are making a positive impact on social change. By incorporating insights from teachers' thoughts about differentiated instruction into the professional development seminar, change is evident in including the elementary coteachers efforts to create differentiated lessons that they can immediately use to increase students with disabilities academic performance.

In this study, I targeted implementing differentiated instruction mainly for students with disabilities, but teaching differentiated strategies can be beneficial for all learners. Implementing differentiation instruction in lessons encourages higher achievement on standardized test scores that can help students progress through the grade levels, into high school, beyond high school, and ultimately to become citizens within their community. Participation in professional development could be a key factor in helping current and new coteachers to acquire knowledge to practice new ideas in their inclusion classrooms. The stakeholders reviewing this research will become aware of coteachers' thoughts about differentiating instructional practices for students with disabilities.

The overall project implications would ultimately be for elementary coteachers to help increase the academic performance of students with disabilities. Short term implications for the district will be an increased awareness of the importance of differentiating instruction for students with disabilities to close academic achievement

gaps. This project study would address the needs of the students with disabilities by providing evidence that coteachers who work in inclusion classrooms value the professional development opportunities to employ innovative ways to increase student learning. Additionally, the project will address the need for professional development and encourage other coteachers to become familiar with proven and successful differentiated strategies for increased academic achievement for students with disabilities.

**Far-Reaching**

The professional development model has implications for social change in other school districts. Coteachers in every school need professional development to become proficient or exemplary with implementing differentiated instruction. The social change implications extend beyond the walls of the school building. Short term implications for the district will be an increased awareness of the significance of differentiating instruction for the students with disabilities. On a larger scale, the neighboring and far-reaching school districts could conduct similar studies regarding coteachers' perceptions of differentiated instruction professional development for the students with disabilities receiving support in inclusion classrooms.

The project may promote positive social change by engaging coteachers in ongoing collaborative professional development that allows reflective thinking, professional collaboration, and decision making aimed at improving differentiated instruction to enhance the academic performance of students with disabilities. Thus, this project study has potential for encouraging social change beyond the local school district

to other school systems with similar demographics across the state of Georgia as well as across the nation.

**Summary**

The professional development seminar was created to help elementary coteachers further their understanding of differentiated instructional practices and how to better incorporate specific differentiated strategies into their inclusion classrooms. Giving general education and special education teachers opportunities to learn, collaborate, and reflect on differentiated instruction is an important step in encouraging best practices and will allow them to improve their professional growth. Students with disabilities also benefit because coteachers would be using a more up-to-date approach to teaching. Administrators benefit when teachers exhibit proficient or exemplary practices on the state's new teacher evaluation as they implement differentiated instruction to teach new knowledge to their students. Combining information gathered from surveys, interviews, lesson plan documentation, and research on the topic of differentiated instruction, I created a 3-day professional development seminar for elementary coteachers in my district. In section 4, I offer a detailed description of the project study along with my reflections, conclusions, and recommendations.

Section 4: Reflections and Conclusions

**Introduction**

The purpose of this case study was to explore how elementary general education and special education coteachers in a rural Georgia school district implemented differentiated instruction for students with disabilities within their inclusion classrooms. In Section 4, I offer my reflections on this study and discuss my role as a scholar, practitioner, and project developer. To conclude, I address the implications this study has on social change and areas of future research around the topic.

**Project Strengths**

The strengths of the project are structured professional development sessions for coteachers to take during the school day while providing teachers with in-house support throughout the academic year. The first strength of the project is providing elementary coteachers with organized professional development to differentiate their instructional practices for students with disabilities for school improvement. The second strength is that general and special education teachers may be more inclined to renew their passion for providing quality instruction by participating in a professional development seminar regarding implementing differentiated instruction. The third strength is the ongoing support that administrators can use to guide coteachers to become risk takers that can lead to teachers acquiring advanced knowledge to share with others in the field of education. By sharing with their colleagues, a collaborative environment could be created for coteachers to learn innovative ideas from each another. Finally, the district can become a

model for other counties throughout the state and school districts across the United States.

## Recommendations for Remediation of Limitations

The project does present some limitations. The first limitation is the cost of obtaining substitutes for coteachers to attend professional development seminars and for hiring professional consultants to conduct the workshops. An alternative solution for reducing the financial burdens is to use other coteachers within the system who have acquired knowledge about differentiated instructional practices instead of hiring professional presenters. Another option is to schedule professional development seminars on teacher in-service days instead of hiring substitute teachers. Additionally, department or grade level lead teachers can attend the training sessions to redeliver the goals of the study in smaller chunks throughout a portion of the year. The third limitation is that a qualitative methodology with a small sample size of 12 participants in the rural Georgia district does not allow the data to be generalizable to a larger population (Lodico et al., 2010). A future study could be conducted in other districts across the United States to make the data more generalizable.

Possible limitations also include coteachers who are reluctant to particpate in the professional development seminar due to various reasons such as time, lack of understanding about what the project involves, and overall concerns about their ability to fully commit themselves to the study. For this project to benefit all teachers, it is important that all coteach teams have a thorough understanding of what the project

entails. Although the process of implementing differentiated instruction may pose

challenges, a commitment by those involved will ensure the success of the project,

particularly when others witness its actual implementation in progress for increasing

student outcomes.

**Scholarship**

Developing this project study led me to a far greater understanding of the positive

impact that differentiated instruction can have on students, especially students with

disabilities. The project study provided the opportunity for me to develop critical thinking

skills to comprehend and respond to peer-reviewed literature and contributed to my

professional growth as a qualitative researcher. The review of the literature indicated the

value and challenges of implementing differentiated instruction to adult learners through

a professional development format that also involves teacher collaboration. Reading

about the experiences that others have faced when trying to implement differentiated

instruction, provided in-depth knowledge about the process of successfully applying

differentiated instructional practices. I decided to conduct a case study so that I could

listen to teachers' insights about how they perceived differentiated instruction. As a

result, I proposed a 3-day professional development program for elementary general

education and special education coteachers according to their needs based on the findings

of the study.

I have used differentiated instruction in my classroom for years. The research,

teacher surveys, interviews, and review of teachers' lesson plans indicated a number of

new strategies that coteachers can employ for supporting students with disabilities receiving services in the inclusion classroom setting. I have now arrived at a fuller understanding of what differentiating by content, process, and product are and how these concepts shape student learning.

My knowledge of scholarship began before the creation of this project. After earning my Ed.S, I continued to be a life-long learner and sought to pursue my dream of writing a dissertation and obtaining a doctoral degree. Many of the courses I completed at the beginning of my studies at Walden provided a framework for me to fully understand the significance of implementing differentiated instruction. My project study finally emerged after completing several courses at Walden and learning about educational theorists, qualitative research, and collecting data. I began this research desiring to improve my knowledge of differentiation as an educator. I have gained the knowledge to explore issues and solutions, write in a scholarly manner about the issues, collect and analyze data, and propose recommendations for change. Upon completion of this study, I will share the knowledge I have acquired in the research process and my mission to make a difference with students, the community, and the education arena.

## Leadership and Change

A significant concern of the coteacher participants in this study was the low pass rates on district and state assessments for their students with disabilities. I wanted to explore this problem and seek a possible solution that could help these students achieve and meet the necessary criteria on standardized tests while also being able to help

coteachers understand how to differentiate lessons for these struggling students. Meeting with the superintendent to defend the significance of my project study and voice the concerns of my colleagues about the issue took leadership skills I was not aware I possessed.

During my time at Walden, through research, I learned the many components of coteaching and the significance of incorporating differentiated instruction when working with a diverse student population. Because of the additional knowledge I have gained in these areas, I have been able to apply numerous differentiated instructional practices directly in my classroom as well as share several interventions with my colleagues. By applying this knowledge, I have increased my confidence in my abilities as a teacher in my school and have been able to add to the conversation concerning some of the questions teachers have about various aspects of differentiated instruction such as tiered lessons, flexible groups, or interpreting data. I have also employed many of the differentiated strategies that new coteachers can use to adjust their instruction. Although I have incorporated several differentiated strategies, I learned about other strategies as well as how to better implement new concepts to help my students. I also gained knowledge about how to collaborate more effectively with teachers in my department to develop effective lessons through collaborative planning. This project study allowed me to change how I interpret assessment data to monitor my students' progress.

As I continued to research the topic of differentiated instruction, I changed the way I designed and delivered differentiated lessons in my inclusion classroom. I also

developed the confidence to discuss differentiated instruction concerning student

assessment with team members and administrators for my professional growth as a

teacher leader. Not only did the coteachers participating in this study offer valuable

insight regarding their views about differentiated instruction but also their beliefs about

what was essential to have in a meaningful professional development seminar. With this

knowledge, I created a professional development training seminar that incorporated the

coteachers' worthwhile suggestions. This insight allowed for a change in the typical

sessions as many coteachers shared training they received in the past was not

constructive. By incorporating these improvements into the professional development

seminar, a change is evident in involving the teachers through collaborating with peers in

the same discipline and creating differentiated lessons they can execute directly in their

classrooms.

Completing this project study has strengthened my passion for teaching and

learning. The project allowed me to sharpen my leadership skills to motivate others to

accept new ideas. This experience empowered me to guide my project towards success to

foster change in others. I believe this project study will be useful for the teachers in my

community and to other school districts seeking to implement differentiated instructional

practices in the cotaught classroom.

**Analysis of Self as Scholar**

My doctoral journey at Walden University allowed me to grow professionally and

as a scholar. I gained a deeper understanding of qualitative research. A significant part of

the research process entailed accessing, examining, and analyzing peer-reviewed articles to corroborate or refute the research questions. I have identified weaknesses that I can build upon as it relates to improving student achievement through differentiated instruction. The project provided me with a platform to address the needs of coteachers' efforts to implement successful differentiated instruction in their inclusion classrooms. Conducting research over the course of this study has led to an innovative project study that will contribute to the education arena.

## Analysis of Self as Practitioner

As a practitioner, I identified a problem in my school district regarding the significance of implementing differentiated instruction to improve the academic outcomes of students with disabilities. Identifying this problem guided me to review pertinent literature, conduct research, and analyze the findings. I was then able to construct a professional development model geared to promote social change while also improving my organizational and management skills. I continue to build my skills as I work with other colleagues to produce a positive learning environment in my school district and beyond. My passion for implementing differentiated instruction grew to a level that takes me beyond this study so that I can become an agent of change to increase the use of differentiated instruction in my local school district. Walden University has given me the opportunity to enhance my professional growth and enhance my scholarly knowledge as a teacher leader and as an agent of change.

## Analysis of Self as Project Developer

The demands of the educational systems and technology require educators to move beyond their comfort zones to explore new approaches to learning. My desire is to learn and provide the most effective educational practices in my classroom. As a project developer, I envisioned creating a research-based project to help other educators to grow in their profession. The idea originated from a small idea into a powerful purpose to empower coteachers to embrace differentiated instruction not only for students with disabilities but all learners in their inclusion classroom. Embarking on this doctoral journey allowed me to become a student and learn how to conduct research as well as learn current strategies in differentiated instruction. I am enthusiastic about improving the quality of instruction and offering better learning opportunities for all students. This project reinforced my love of learning and passion for teaching and as a teacher leader.

One of my interests was using my teacher leadership skills to help general education and special education teachers become more informed about implementing differentiated instruction for students with the disabilities. Since differentiated instruction is a component of Georgia's new teacher evaluation model, I wanted to explore the topic to help more teachers showcase their exemplary practices to help students master curriculum standards. Conducting this project allowed me to gain confidence in myself as a project developer.

## The Project's Potential Impact for Social Change

The field of education is constantly evolving. Hence, it is imperative that educators continue to learn and grow professionally to present new ideas within their

diverse classroom environment. Since differentiated instruction has become a widespread

topic at the local level and a much larger level, I wanted to learn more about how I could

help general education and special education coteachers address the needs of all learners,

including students with disabilities. At the local level, social change is addressed as

coteachers in a rural Georgia school district learn innovative ways of teaching, not only

students with disabilities but all students. Students will benefit academically from their

teachers consistently implementing differentiated strategies. A professional development

process for continuous professional development that includes creating a notebook of

research-based differentiated instructional lessons plans and activities through Google

Docs can guide teachers with effectively differentiating instruction in their inclusion

classrooms. Coteachers having difficulty with implementing differentiated instruction

will have access to view the differentiated activities individually or as a team with

opportunities to keep the binder updated for future use. As teachers collaborate to employ

differentiated strategies consistently to meet the needs of students with disabilities, they

have the potential to improve their professional growth within their inclusion classroom

both individually and collectively. When students with disabilities receive the support to

bridge the achievement gap with their nondisabled peers, more students in this subgroup

can experience successful learning to improve their individual potential that will benefit

them and expand beyond the walls of their school into their communities. The

professional development opportunity will serve as a model to help coteachers to improve

their differentiated practices and support teachers' efforts to preside over implementing

future differentiated instructional practices to bridge the academic performance of students with disabilities and their nondisabled peers. The district will benefit from coteachers' proficient teaching practices, enhanced student learning, and increased student scores.

This project study provides a valuable resource for helping students with disabilities master content material that will build their confidence to become productive members of a global society. The implications of social change for the elementary coteachers using differentiated instruction that incorporates hands-on strategies are substantial for increasing student achievement. Beyond the local level, other school districts within the state and across the United States can use this professional development project to help their districts to provide best practices for implementing differentiated instruction for their students with disabilities population. The research from the successful implementation of this project may impact other local school districts looking for innovative ideas to ensure students with disabilities receive a high-quality education while also increasing teachers' knowledge of applying differentiated instruction with fidelity to improve teacher efficacy.

The implementation and application of this project study will serve to facilitate an understanding of the demands of school districts to utilize differentiated instruction and to aid students with disabilities to achieve higher academic success, be globally competitive as well as leaders in the community. Differentiating instruction has the

potential to help solve our nation's problems of high school dropout rates and eliminating academic achievement gaps.

**Implications, Applications, and Directions for Future Research**

The product of this study is a comprehensive, 3-day professional development training session which was based on the needs of the general education and special education coteachers in this local district. Coteacher participation in a professional development seminar that allows teachers to create lessons and hands-on activities for their students can be very meaningful for future success. While elementary coteachers in the district have previously attended professional development on coteaching, survey responses indicated none of the participants attended professional development sessions that focused on implementing differentiated instruction for students with disabilities. The seminar will allow teachers to collaborate about their students' performance and develop lessons and activities based on curriculum standards that they can directly use in their classrooms. Establishing peer partnerships creates a collaborative coteaching community for implementing differentiated instruction. Furthermore, the coteachers would meet during subsequent times to share their instructional practices with new teachers in the county, reflect on any changes that need to occur, and observe their colleagues modeling differentiated lessons. I only explored elementary coteachers perceptions, but there remains more to discover about implementing differentiated instruction. The study can be easily adapted for other schools using differentiated instruction to meet adequately the needs of students with disabilities.

Directions for future research include perceptions of new coteachers providing differentiated strategies before and after implementing differentiated instruction in the inclusion classroom environment. Additionally, recommendations for future research include conducting a similar study with general education and special education coteachers at the middle school and high school level to provide a more comprehensive view of which differentiated instructional strategies are more effective among different grade levels.

## Conclusion

The completion of this project study calls for self-reflection in my roles as a scholar, practitioner, and project developer. This study adds to the available research on teachers' beliefs about differentiated instruction in an elementary inclusion environment. I located a wealth of research on differentiated instruction and professional development. However, the research on professional development for differentiated instruction for students with disabilities was not abundant thus emphasizing the need for my research and the potential value of my project. A culminating professional development was developed based on the reported needs of general education and special education coteachers involved in implementing differentiated instruction that resulted in an accomplished final product. Through this project study, I have renewed my passion as an educator to lead and empower other coteachers with the knowledge they need to understand and embrace differentiated instruction for educating students with disabilities in their inclusion classrooms. At the conclusion of the professional development training

session, teachers, and staff will adequately employ several differentiated instructional strategies to positively impact student outcomes in their classrooms.

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Appendix A

The Project

**Professional Development: Differentiated Instruction Support Through CoTeach**

**Collaboration**

**2016–2017**



by

Betty King

This project is intended to be a practical and easy way to use differentiated instructional practices and strategies for current and new inclusion coteachers at the elementary level. The professional development seminar is based on current research in the area of differentiated instruction as well as the findings of a study done at a rural, central Georgia school district. Results of this study advocated a need for a 3-day professional development through teacher collaboration pertaining to differentiated instruction and time to develop and create hands-on lessons and activities.

## Target Audience

The target audience for the project will consist of beginning and experienced general education and special education coteachers teachers who teach kindergarten through fifth grade.

## Professional Development Seminar Schedule

The project entails three sessions for the professional development seminar that will occur over the course of 3 days. Knowles' adult learning theory is employed as a guide to ensure the effectiveness of the seminar.

## Program Goals

**A.** Educate coteachers on understanding what differentiated instruction is or is not through small and whole group discussions.

**B.** Provide coteachers with the essential skills to implement differentiated instruction lessons in their inclusion classrooms.

**C.** Provide coteachers with the opportunity to collaborate through peer interaction regarding how to implement differentiated instruction in their inclusion classrooms.

**D.** Provide support to current and beginning coteachers with adequate time to create differentiated lessons to share through Google Docs and hands-on teaching materials to support their instruction through teacher collaboration.

**E.** Initiate coteach teams to train and support new coteachers, to update resources, and reflect on time for planning professional development in subsequent years.

## Program Outcomes

**A.1**. Coteachers will recognize the need for differentiation and demonstrate an increased base knowledge about what is or what is not differentiated instruction.

**B.1.** Coteachers will demonstrate an understanding of how to implement differentiated lessons for students with disabilities within their inclusion classrooms.

**C.1**. Coteachers will utilize their time with colleagues to develop successful differentiated lessons and create teaching materials to use in their inclusion classrooms.

**D.1.** Coteachers will have access to additional support and time to collaborate with other teachers once the project initiative is underway.

**E.1.** Established coteach teams will support and offer needed resources to new coteachers during various stages of implementing differentiated instruction in succeeding years.

## Program Objectives

**A.1.a**. As a result of the introduction to differentiated instruction, coteachers will identify the following three aspects of differentiated instruction: content, process (instructional

methods), and product (assessment). Teachers will demonstrate their understanding of the following student traits that influence learning: students' readiness level, students' interest, and students' learning profile.

**B.1.b**. As a result of listening to the needs of coteachers about what is needed to implement effective differentiated instructional practices for students with disabilities, coteachers will have access to training that will aid them to apply differentiated activities by content, process, and product to create differentiated lessons.

**C.1.c.** As a result of collaborating with peers, coteachers will depart from the professional development sessions with several sample lessons that they can use in their inclusion classrooms during the first 9 weeks of school.

**D.1.d.** As a result of the professional development seminar, coteachers will have a main coteach partner that they can contact for extra support.

**E.1.e.** As a result of the professional development seminar, new coteachers will have a contact team that can provide ongoing support through various stages of implementing differentiated instruction and access to a range of differentiated instructional resources for future professional development planning to improve student outcomes.

**Day 1 Resources:**

1. Table Tools: Notebook with tabs, note pads, chart paper, pens, Sharpie markers, laptops, printer

2. Smartboard

3. Videos**: https://www.youtube.com/watch?v=LGYa6ZacUTM**

4. Notebook of Differentiated Lesson Plans

**Program Goals**

**A.** Educate coteachers on understanding what differentiated instruction is or is not through small and whole group discussions.

**B.** Provide coteachers with the essential skills to implement differentiated instruction lessons in their inclusion classrooms.

**C.** Provide coteachers with the opportunity to collaborate through peer interaction regarding how to implement differentiated instruction in their inclusion classrooms.

**D.** Provide support to current and beginning coteachers with adequate time to create differentiated lessons to share through Google Docs and hands-on teaching materials to support their instruction through teacher collaboration.

**E.** Initiate coteach teams to train and support new coteachers, to update resources, and reflect on time for planning professional development in subsequent years.

**Program Outcomes**

**A.1**. Coteachers will recognize the need for differentiation and demonstrate an increased base knowledge about what is or what is not differentiated instruction.

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**C.1.c.** As a result of collaborating with peers, coteachers will depart the professional development sessions with several sample lessons that they use in their inclusion classrooms during the first 9 weeks of school.

**D.1.d.** As a result of the professional development seminar, coteachers will have a main coteach partner that they can contact for extra support.

**E.1.e.** As a result of the professional development seminar, new coteachers will have a contact team that can provide ongoing support through various stages of implementing differentiated instruction and access to a range of differentiated instructional resources for future planning to improve student outcomes.

**Day 1: Introduction to Differentiated Instruction and Strategies**

**Session 1: Timeline for Day 1**

| Time | Activity |
|---|---|
| 8:30-8:45 | Teacher Arrival/Sign in<br>Welcome/Housekeeping Rules (fruit, pastries, bagels, coffee, juice, and water) will be served in the school's data room for participants. |
| 8:45-9:00 | The session will begin with a getting to know you icebreaker to activate coteachers' prior knowledge about differentiated instruction. Coteachers will walk around the room using pens and colored sticky notes located in baskets on tables to ask their peers to share their ideas about the following questions:  What is your definition of differentiated instruction?  What would you like to learn about differentiated instruction?  What do you hope to bring to the differentiated classroom? Which coteach model do you feel is the most beneficial for implementing differentiated instruction?<br>What is a question about differentiated instruction that you hope is answered today? |

| 9:00-10:15 | The presenter will introduce the purpose of professional development and a PowerPoint presentation regarding differentiated instruction. Coteachers will take a Learning Styles Inventory on their laptops and discuss the results: **http://www.educationplanner.org/students/self-assessments/learning-styles.shtml** Participants will view and discuss a short video by Carol Ann Tomlinson explaining differentiated instruction and its components: **https://www.youtube.com/watch?v=LGYa6ZacUTM** Activity 1: Coteachers will compare and share their responses to the video with a table partner. |
|---|---|
| 10:15-10:30 | Restroom and snack break |
| 10:30-11:00 | Teacher Presenter 1 will share his/her individual coteaching experiences about applying successful differentiated instructional strategies and modifications for multiple learners, including students with disabilities. |
| 11:00-11:30 | To conclude morning session, Teacher Presenter 2 will share his/her coteaching role about planning differentiated instruction and managing a differentiated classroom. |
| 11-30-12:30 | Lunch on your own |

Differentiated Instruction in the Inclusion Classroom

Welcome Teachers!

**Note to Trainer:** Welcome coteachers to the professional development training seminar. Explain that the training is to increase teachers' understanding of implementing differentiated instruction to improve the academic performance of all students.

**Differentiated Instruction Professional Development Sessions**

- *Session I:* Introduction to Differentiated Instruction

- *Session II:* Teacher Collaboration for Developing Successful Differentiated Lessons

- *Session III:* Overcoming Challenges to Create the Optimal Differentiated Inclusion Classroom

**Note to Trainer:** Explain that the seminar will consist of 6 sessions about differentiated instruction.

**Session 1: Introduction to Differentiated Instruction**

❖ To define differentiated instruction.

❖ To learn how to implement differentiated lessons.

❖ To collaborate with peers regarding how to develop differentiated lessons to share in Google Docs.

❖ To create differentiated lessons and hands-on teaching materials through teacher collaboration.

❖ To establish coteach teams to train and support new co-teachers, update resources, and reflect on planning professional development in subsequent years.

**Note to Trainer:** Introduce purpose of professional development.

**Why Differentiate Instruction?**

- To maximize each student's academic performance.
- To adapt instructional practices to help students become independent learners.
- To engage students in the learning process.
- To offer learning choices for greater student investment.
- To aid students in mastering Common Core standards.

**Note to Trainer:** Trainer will engage coteachers in a discussion about the need to differentiate instruction.



**Successful Differentiated Instruction: What Does It Take?**

- Knowing students individually
- Teachers' openness to change instructional practices
- Student access to high-quality instruction
- Optimal classroom environment to promote learning
- Instructional delivery of differentiated strategies
- Ongoing assessments

**Note to Trainer:** The trainer will have coteachers to list other ways to differentiate instruction.

## Differentiating Instruction Checklist

In this example of D.I., there is evidence of:

| | Finding out about student: | √ | √ | √ |
|---|---|---|---|---|
| **PRINCIPLES** | 🍎 Readiness | ☐ | ☐ | ☐ |
| | 🍎 Interests | ☐ | ☐ | ☐ |
| | 🍎 Learning Preferences (e.g., styles, intelligences, environmental) | ☐ | ☐ | ☐ |
| | **Responding by differentiating:** | | | |
| | 🍎 Content (learning materials) | ☐ | ☐ | ☐ |
| | 🍎 Process (how we help students learn) | ☐ | ☐ | ☐ |
| | 🍎 Product (how students demonstrate their learning) | ☐ | ☐ | ☐ |
| | 🍎 Learning Environment (conditions for learning) | ☐ | ☐ | ☐ |
| **FEATURES** | **Instruction (including assessment and evaluation) that features:** | | | |
| | 🍎 Choice | ☐ | ☐ | ☐ |
| | 🍎 Respectful Tasks | ☐ | ☐ | ☐ |
| | 🍎 Flexible Groupings | ☐ | ☐ | ☐ |
| | 🍎 Shared Responsibility for Learning | ☐ | ☐ | ☐ |

**Note to Trainer:** Explain the DI Checklist and have coteachers to discuss.

## Ice Breaker

Ask:

• What is your definition of differentiated instruction?
• What is something that you would like to learn about differentiated instruction?
• What do you hope to bring to the differentiated classroom?
• Which coteach model do you feel is the most beneficial for implementing differentiated instruction?
• What is a question you have about differentiated instruction that you hope is answered today?

**Note to Trainer:** Have coteachers share their definitions about differentiated instruction.

## Getting Started with Differentiated Instruction Video Clip

• Take a look! Share your thoughts!

https://www.youtube.com/watch?v=LGYa6ZacUTM

**Note to Trainer:** Coteachers will view and discuss a short video by Carol Ann Tomlinson explaining differentiated instruction and its components.

## Teacher Presenter 1

Will discuss:
• Classroom Rules and Procedures
• Classroom Morning Meetings
• Beginning of each day
• Calendar time
• English Language Arts Differentiated Tasks
• Guided Reading groups
• Guided Math groups
• Science and Social Studies groups
• Classroom Modifications
• End of the day procedures
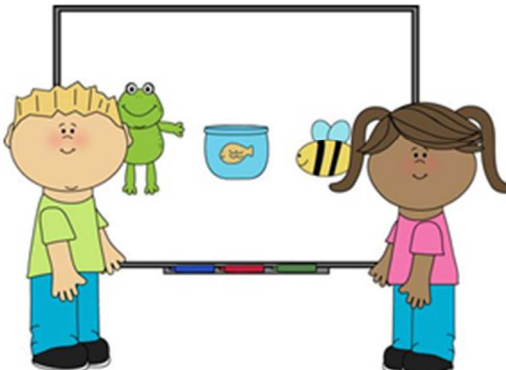
**Note to Trainer:** Explain that Teacher Presenter 1 will share his or her individual

coteaching experiences about applying successful differentiated instructional strategies and modifications for multiple learners, including students with disabilities.



**Note to Trainer:** Explain that Teacher Presenter 2 will discuss role of planning and managing the differentiated classroom.

| 12:30-1:00 | Teacher Presenter 3 will model how to incorporate technology and demonstrate how teachers can use Google Docs to share lessons, ideas, websites, differentiated products such as student work samples and student projects on the Smartboard. |
|---|---|
| 1:00-1:45 | Roundtable question and answer session with the presenters to discuss what differentiated instruction is or isn't, benefit and challenges about implementing differentiated instruction using various coteach models within the inclusion classroom, and resources needed for successful implementation. |
| 1:45-2:00 | Restroom and snack break |
| 2:00-3:15 | Coteachers will work in pairs to analyze student data to strengthen instructional practices. |
| 3:15-3:30 | Ticket out the door. An overview of the next session, including what supplies the coteachers need will be discussed. |

**Note to Trainer:** Explain to participants that Teacher Presenter 3 will discuss sharing lessons through Google Docs and using the Smartboard to reach learners through different modalities, creating a notebook of differentiated lesson plans, and procedures for updating its contents.

**Question and Answer**

- Round table question and answer session with the presenters to discuss what differentiated instruction is or isn't, benefits and challenges about implementing differentiated instruction using various coteach models within the inclusion classroom and resources needed for successful implementation

**Note to Trainer:** Explain to participants that they can ask the speaker questions about their experiences with implementing differentiating instruction and using the various coteach models.



**Student Data**

- Coteachers will work in pairs to collaborate about student data.

**Note to Trainer:** Explain to coteachers that they will look at student data for students

with disabilities so that they will become informed about when and with whom to use differentiated instructional strategies.
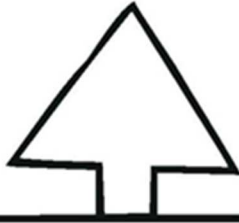


**Note to Trainer:** Discuss overview of the next session, including what supplies the coteachers need. Teachers will complete evaluation for Session 1. Collect evaluation forms and analyze results. Use feedback to help guide the next training sessions.

### Day 2 Resources:

1. Table Tools: Notebook with tabs, note pads, chart paper, pens, Sharpie markers,

laptops, printer

2. Smartboard

### Program Goals

**A.** Educate coteachers on understanding what differentiated instruction is or is not

through small and whole group discussions.

**B.** Provide coteachers with the essential skills to implement differentiated instruction lessons in their inclusion classrooms.

**C.** Provide coteachers with the opportunity to collaborate through peer interaction regarding how to implement differentiated instruction in their inclusion classrooms.

**D.** Provide support to current and beginning coteachers with adequate time to create differentiated lessons to share through Google Docs and hands-on teaching materials to support their instruction through teacher collaboration.

**E.** Initiate coteach teams to train and support new coteachers, to update resources, and reflect on time for planning professional development in subsequent years.

## Program Outcomes

**A.1**. Coteachers will recognize the need for differentiation and demonstrate an increased base knowledge about what is or what is not differentiated instruction.

**B.1.** Coteachers will demonstrate an understanding of how to implement differentiated lessons for students with disabilities within their inclusion classrooms.

**C.1**. Coteachers will utilize their time with colleagues to develop successful differentiated lessons and create teaching materials to use in their inclusion classrooms.

**D.1.** Coteachers will have access to additional support and time to collaborate with other teachers once the project initiative is underway.

**E.1.** Established coteach teams will support and offer needed resources to new coteachers during various stages of implementing differentiated instruction in succeeding years.

## Program Objectives

**A.1.a**. As a result of the introduction to differentiated instruction, coteachers will identify the following three aspects of instruction: content, process (instructional methods), and product (assessment). Teachers will demonstrate their understanding of the following students' traits that influence learning: students' readiness level, student interest, and students' learning profile.

**B.1.b**. As a result of listening to the needs of coteachers about what is needed to implement effective differentiated instructional practices for students with disabilities, coteachers will have access to training that offers help in managing a differentiated classroom through applying learned strategies such as flexible grouping, tiered lessons, learning centers, and anchor activities that will enable them to grow in their profession.

**C.1.c.** As a result of collaborating with peers, coteachers will depart the professional development sessions with several sample lessons that they use in their inclusion classrooms during the first 9 weeks of school.
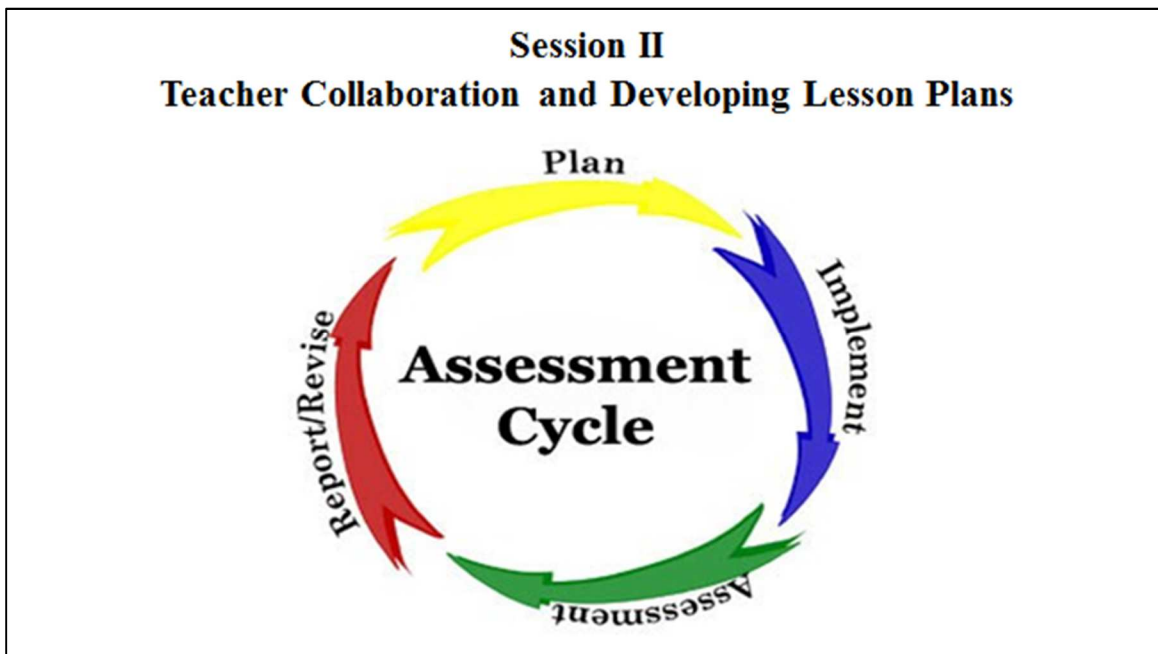
**D.1.d.** As a result of the professional development seminar, coteachers will have a main coteach partner that they can contact for extra support.

**E.1.e.** As a result of the professional development seminar, new coteachers will have a contact team that can provide ongoing support through various stages of implementing differentiated instruction and access to a range of differentiated instructional resources to improve student outcomes.

**Day 2: Teacher Collaboration for Developing Successful Differentiated Lesson Plans**
**Session 1: Timeline for Day 2**

| Time | Activity |
|---|---|
| 8:30-8:45 | Welcome back/Sign in (coffee/juice and donuts/bagels) in the school's data room. |
| 8:45-9:30 | Coteachers will meet in the data room and sit with other grade level teams to collaborate with their colleagues, review data for students with disabilities and discuss what warrants changes across grade levels. |
| 9:30-10:15 | Continue to review differentiated instruction. Coteachers will view a video presentation of a modeled lesson about how to incorporate differentiated instruction in their lesson plan. Video: **https://www.youtube.com/watch?v=zCxwLcdzOIM** Coteachers will divide into small groups to discuss video and use chart paper to highlight important points. Coteachers will brainstorm ways to encourage the use of differentiated instruction in other inclusion classrooms throughout the school. |
| 10:15-10:30 | Restroom and snack break |
| 10:30-11:30 | The presenter will guide coteachers with locating websites, books, and articles that they can bookmark as favorites or add to Google Docs to share with others. Coteachers will use colored tabs to begin inserting pertinent information in the notebooks. |
| 11:30-12:30 | Lunch on your own. |

**Note to Trainer:** Welcome coteachers to Session 2: Review DI definition. Explain to teachers that they will review data and work in groups of four to develop lesson plans with student assessments in mind to make informed decisions through teacher collaboration. Teachers will insert pertinent information in their notebook binder.

Part

## Data Review

- Coteachers will meet in the school's data room and sit with other grade level teams to collaborate with about student data.
- Coteachers will review data for students with disabilities and discuss what warrants changing across grade levels.



**Note to Trainer:** Explain to coteachers that they will continue to look at data for students with disabilities strengths and weaknesses so that they will become informed about when and with whom to use differentiated instructional strategies.

**What Must We Know About DI?**

Each learner's:
- Prior Learning Experiences
- Learning Styles
- Interests
- Readiness Levels

**Note to Trainer:** Have coteachers work in groups of four to discuss and chart responses. Circulate and listen to discussions. Teachers will post responses on wall. Bring group together for whole group discussion.

**4 Elements to Differentiate**

- **Content** – what the student needs to learn or how the student will get access to the information;
- **Process** – activities in which the student engages in order to make sense of or master the content;
- **Product** – culminating projects that ask the student to rehearse, apply, and extend what he or she has learned in a unit; and
- **Learning environment** – the way the classroom works and feels.

**Note to Trainer:** Lead coteachers in a discussion about how to differentiate by content, process, and products. Discuss examples of methods for differentiated instruction by student's readiness level, student's profile, and student's interest.

## Student Assessments

❖All differentiated instruction starts with assessments.

❖Assessment drives instruction.

❖Assessment is part of teaching for success.

❖Assessment information contributes to students growth.

❖Assessment allows teachers to assess students learning is more useful than grades.

**Note to Trainer:** All DI starts with student assessments. Have coteachers discuss.

## Modeled Differentiated Instruction Lesson

• **View modeled lesson:**

www.youtube.com/watch?v=zCxwLcdzOIM

• **Activity 1:** Use data to modify and develop a differentiated lesson by content, process, and product based on pre-assessments.

**Note to Trainer:** Coteachers will view and discuss a short video about using differentiated instruction.

**Teacher Collaboration**

- Coteachers will work in pairs to locate and analyze activities appropriate for their grade levels. The presentation will conclude with a survey and any additional questions that can be addressed in the next session.

**Note to Trainer:** The presenter will guide coteachers with locating websites, books, and articles that they can bookmark as favorites or add to Google Docs to share with others.

| 12:30-2:15 | Coteachers will continue to work in their grade level team to create and develop differentiated lessons. |
| --- | --- |
| 2:15-2:30 | Restroom and snack break |
| 2:30-3:15 | Coteachers will have an opportunity to check their lessons for the following: small group instruction, flexible grouping, tiered instruction, learning centers, anchor charts, graphic organizers, and technology into their instructional practices. Teachers will also explore websites in small groups and create a list for administrators to include links on the school's website and discuss how to incorporate technology into their instructional practices. |
| 3:15-3:30 | Wrap-up. Coteachers will complete an exit ticket out the door that will include any requests for additional support, what they learned, and what needs to be changed. |

**Peer Collaboration**

- Coteachers will collaborate with their peers in grade level teams and across the grade levels to create lessons and prepare hands-on materials that match the content of their lessons. Teachers will have an opportunity to check their lessons for small group instruction, flexible grouping, tiered instruction, learning centers, and anchor activities.
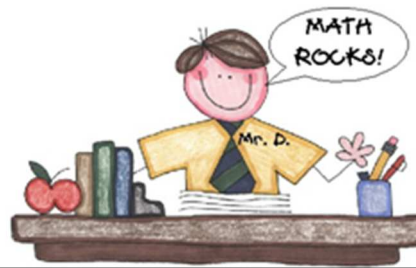
**Note to Trainer:** Explain to coteachers that they will work with their peers and grade-level teams to create and prepare hands-on lessons, assessments, and materials for their notebook binders.

## Peer Collaboration Continued…

- Coteachers will have this time to create lessons, hands-on materials, employ instructional tools such as graphic organizers, learning centers, and anchor charts to match the content of their lessons.

**KWL**
Graphic Organizers
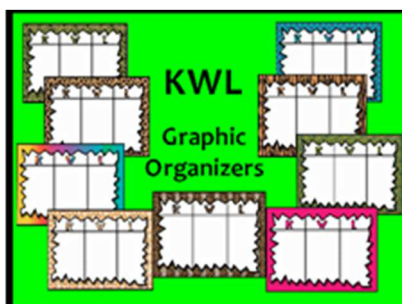
**Note to Trainer:** Explain to coteachers that they will use this time to continue working.

## Session 2 Evaluation

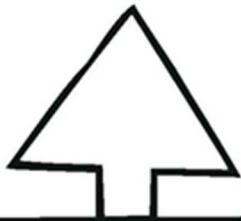**Please complete evaluation form. Thank you!**

Ticket Out the Door!

What I worked on today...

What I needed help with today...

What I learned today...

**Note to Trainer:** Discuss overview of the next session, including what supplies the coteachers need. Teachers will complete evaluation for Session 2. Collect evaluation forms and analyze results. Use feedback to help guide the next training sessions.

**Day 3 Resources:**

1. Table Tools: Notebook with tabs, note pads, chart paper, pens, Sharpie markers,

laptops, printer

2. Smart Board

3. Notebook of Differentiated Lesson Plans

## Program Goals

**A.** Educate coteachers on understanding what differentiated instruction is or is not

through small and whole group discussions.

**B.** Provide coteachers with the essential skills to implement differentiated instruction

lessons in their inclusion classrooms.

**C.** Provide coteachers with the opportunity to collaborate through peer interaction

regarding how to implement differentiated instruction in their inclusion classrooms.

**D.** Provide support to current and beginning coteachers with adequate time to create

differentiated lessons to share through Google Docs and hands-on teaching materials to

support their instruction through teacher collaboration.

**E.** Initiate coteach teams to train and support new coteachers, to update resources, and

reflect on time for planning professional development in subsequent years.

## Program Outcomes

**A.1**. Coteachers will recognize the need for differentiation and demonstrate an increased

base knowledge about what is or what is not differentiated instruction.

**B.1.** Coteachers will demonstrate an understanding about how to implement differentiated lessons for students with disabilities within their inclusion classrooms.

**C.1**. Coteachers will utilize their time with colleagues to develop successful differentiated lessons and create teaching materials to use in their inclusion classrooms.

**D.1.** Coteachers will have access to additional support and time to collaborate with other teachers once the project initiative is underway.

**E.1.** Established coteach teams will support and offer needed resources to new coteachers during various stages of implementing differentiated instruction in succeeding years.

## Program Objectives

**A.1.a**. As a result of the introduction to differentiated instruction, coteachers will identify the following three aspects of instruction: content, process (instructional methods), and product (assessment). Teachers will demonstrate their understanding of the following students' traits that influence learning: students' readiness level, students' interest, and students' learning profile.

**B.1.b**. As a result of listening to the needs of coteachers about what is needed to implement effective differentiated instructional practices for students with disabilities, coteachers will have access to training that offers help in managing a differentiated classroom through applying learned strategies such as flexible grouping, tiered lessons, learning centers, and anchor activities that will enable them to grow in their profession.

**C.1.c.** As a result of collaborating with peers, coteachers will depart the professional

development sessions with several sample lessons that they use in their inclusion

classrooms during the first nine weeks of school.

**D.1.d.** As a result of the professional development seminar, coteachers will have a main

coteach partner that they can contact for extra support.
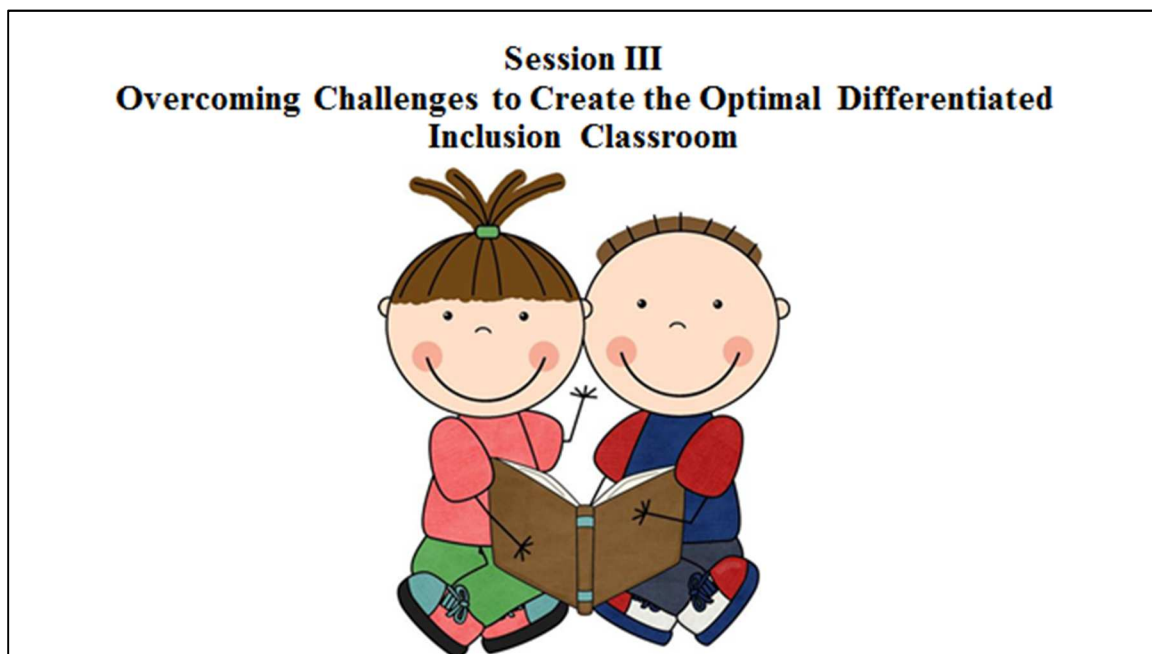
**E.1.e.** As a result of the professional development seminar, new coteachers will have a

contact team that can provide ongoing support through various stages of implementing

differentiated instruction and access to a range of differentiated instructional resources to

improve student outcomes.

**Day 3: Overcoming Challenges to Create the Optimal Differentiated Classroom**

**Session 1: Timeline for Day 3**

| Time | Activity |
|------|----------|
| 8:30-8:45 | Welcome back/Sign in (coffee/juice and donuts/bagels) in the school's data room. |
| 8:45-9:15 | Review differentiated instruction and principles. Whole group discussion about what coteachers are currently teaching in their classroom to differentiate instruction. Teachers will brainstorm ways to encourage the use of differentiated instruction in other elementary inclusion classrooms throughout the school district. |
| 9:15-10:30 | Discuss examples of differentiated instructional strategies. Coteachers will have this time to continue to create lessons, hands-on materials, employ instructional tools such as graphic organizers, learning centers, and anchor charts to match the content of their lessons. |
| 10:30-10:45 | Restroom and snack break |
| 10:45-11:30 | Coteachers will establish coteach teams to assist new coteachers with implementing differentiating instruction during various stages of the |

| | |
|---|---|
| | implementation process. |
| 11:30-12:30 | Break for lunch on your own. |



Session III
Overcoming Challenges to Create the Optimal Differentiated
Inclusion Classroom

**Note to Trainer:** Welcome coteachers to Session 3: The Optimal Classroom Learning Environment.

## Principles of a Differentiated Classroom

- The coteacher **builds** upon **student differences**.
- **Assessment** and **instruction** are **blended.**
- The coteacher modifies **content**, **process**, and **product** in response to students' **readiness**, **interests**, and **learning profile**.
- All students participate in **respectful learning**.
- Students and teachers are **partners** in learning.
- Goals of a differentiated classroom are **maximum growth** and **individual success**.
- **Flexibility** is essential in the differentiated classroom.

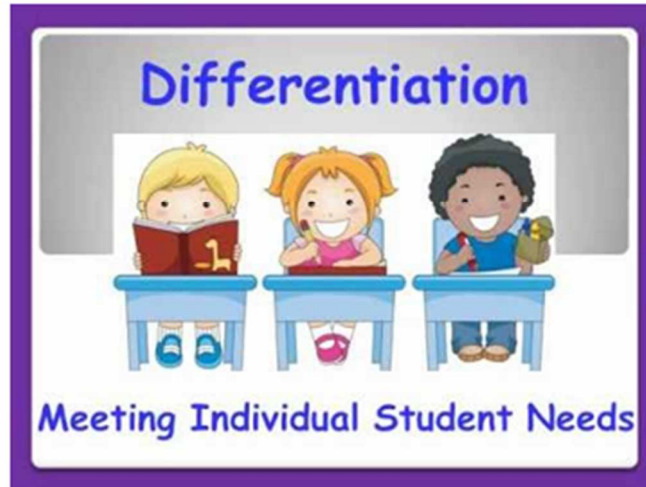**Note to Trainer:** Discuss differentiated instruction principles.

## Classroom Learning Environment

- What are you doing already to differentiate instruction in your classroom?

**Notes to Trainer:** Ask coteachers: What are you already doing in your classroom to differentiate instruction? Use the Think, Pair, Share strategy.

**What Does Differentiation in the Classroom Look Like?**

**Note to Trainer:** Teacher will describe what the differentiated classroom looks like in groups of four. One teacher will record the group's response on chart paper and post it on the wall. Each group will share their responses.

**Differentiated Instruction in the Inclusion Classroom**

- Activity 1: The participants will brainstorm ways to encourage the use of differentiated instruction in other inclusion classrooms throughout the school.

**Note to Trainer:** Explain to coteachers that they will brainstorm ways to encourage others to implement differentiated instruction.

## A Few Strategies Used by Co-teachers in the Differentiated Classroom…

| | |
|---|---|
| Varied Graphic Organizers | Learning Contracts |
| Literature Circles | Independent Study |
| Cubing | Varied Questioning Strategies |
| Tiered Assignments | Reading Buddies |
| Small Groups | Anchor Charts |

**Note to Trainer:** Teachers discuss examples of other strategies during research and add to list.

## Coteach Training Teams

- Coteachers will establish coteach teams to assist new coteachers with implementing differentiating instruction during various stages of the implementation process.
- Coteachers will set dates to observe each other modeling differentiated lessons beyond professional development seminar.

Small Group Instruction

Individualized attention and differentiation

**Note to Trainer:** Explain to coteachers that they will establish training teams to assist new teachers with implementing differentiated instruction. Coteachers will set dates to

observe and track colleagues in implementing differentiated instructional strategies beyond professional development training.

| 12:30-2:00 | Coteachers will continue to explore websites in small groups to create or add to list for administrators to include links on the school's website. |
| 2:00-2:15 | Restroom and snack break |
| 2:15-3:15 | Coteachers will work with their peers to discuss how to incorporate technology into their instructional practices and factors that hinders them from implementing differentiated instruction consistently. Teachers will also review their notebook binders and tabs for lessons, assessments, and activities, and share responses about how to use information to help them overcome the challenges with implementing differentiated instruction effectively. |
| 3:15-3:30 | Wrap-up, Sharing, and Reflection. Coteachers will complete a ticket out the door that will include any requests for additional support, what they learned, and what may need to be changed. Daily Evaluation – exit ticket: What worked What needs an upgrade What questions remain Additional comments |

**Differentiated Instruction Websites**

- Coteachers will explore websites in small groups and create list for administrators to include links on the school's website.

**Note to Trainer:** Explain to coteachers that they will continue to explore websites in small groups to create or add to list for administrators to include links on the school's website.

 **Note to Trainer:** Explain to coteachers that they will continue to work with their peers about integrating technology into their instructional practices.

## DI Reflection and Sharing

- Differentiated Instruction means trying to ensure that teaching and learning works for the full range of students, which really should be a teacher's goal (Tomlinson, 2011).

- Take a moment to reflect on the need for Differentiated Instruction.

- Reflect and share results of the Professional Development Seminar.

- Share thoughts, ideas, and plans.

**Note to Trainer:** Having coteachers discuss the resources for successful differentiated instruction.

## Resources

- Coteachers will use chart paper to identify resources needed for Day 3 and beyond completion of the training session.

**Note to Trainer:** Explain to coteachers that they will use chart paper to identify

resources needed for Day 3 and beyond completion of the training session. Teachers will also review their notebook binders and tabs for lessons, assessments, and activities.

**Differentiating Instruction Professional Development Plan Evaluation**

Thank you for your participation in this workshop. Please complete the evaluation form for the workshop.

**Note to Trainer:** Thank you for attending the 3-day professional development session.
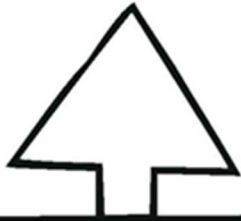
**Session 3 Evaluation**

**Please complete evaluation form. Thank you!**

Ticket Out the Door!

What I worked on today...

What I needed help with today...

What I learned today...

**Note to Trainer:** Discuss overview of the next session, including what supplies the coteachers need and what is needed to overcome the challenges that hinder them from implementing differentiated instruction on a daily basis. Teachers will complete evaluation for Session 3. Collect evaluation forms and analyze results. Use feedback to help guide the next training sessions.

**Evaluation of Professional Development Session**

**Evaluation 1: Formative Feedback**

Participant's Name:_____ Participant's  School:_____

Please answer the following questions:

1-Not helpful     2-Somewhat helpful     3-Very helpful

| | 1 | 2 | 3 |
|---|---|---|---|
| 1. Guest Teacher Speakers | 1 | 2 | 3 |
| 2. Teacher Collaboration | 1 | 2 | 3 |
| 3. Creating Lesson Plan Creation | 1 | 2 | 3 |
| 4. Materials Utilized | 1 | 2 | 3 |
| 5. Tools and Technology | 1 | 2 | 3 |
| 6. Overall Experience | 1 | 2 | 3 |

7. Helpful information for future presentation to others:

**Evaluation 2: Outcome Based**

Participant's Name:_____ Participant's  School:_____

Please answer the following questions:

1. How did collaboration with your colleagues assist you with developing differentiated lesson to use in your inclusion classroom?

2. Do you feel you had enough background knowledge about differentiated instruction to begin developing differentiated lessons?

3. How helpful were the material presented with helping you to develop your differentiated lessons and activities?

4. Which instructional tools (anchor charts, graphic organizers, or learning centers) will you use with your students with disabilities and how will you change them to meet the students' individual needs?

5. What do you predict will be effective with the differentiated lessons you created?

6. What are some reservations you have about implementing differentiated instruction within your inclusion classroom?

**Evaluation 3: Summative Evaluation**

Participant's Name:_____ Participant's School:_____

Please provide a thorough answer to each question.

1. Were the differentiated lessons you created effective?

2. How did the lessons and activities you developed impact your students?

3. What challenges did you face when implementing the differentiated lessons that you created through teacher collaboration?

4. What went well with the differentiated lessons you created through teacher collaboration?

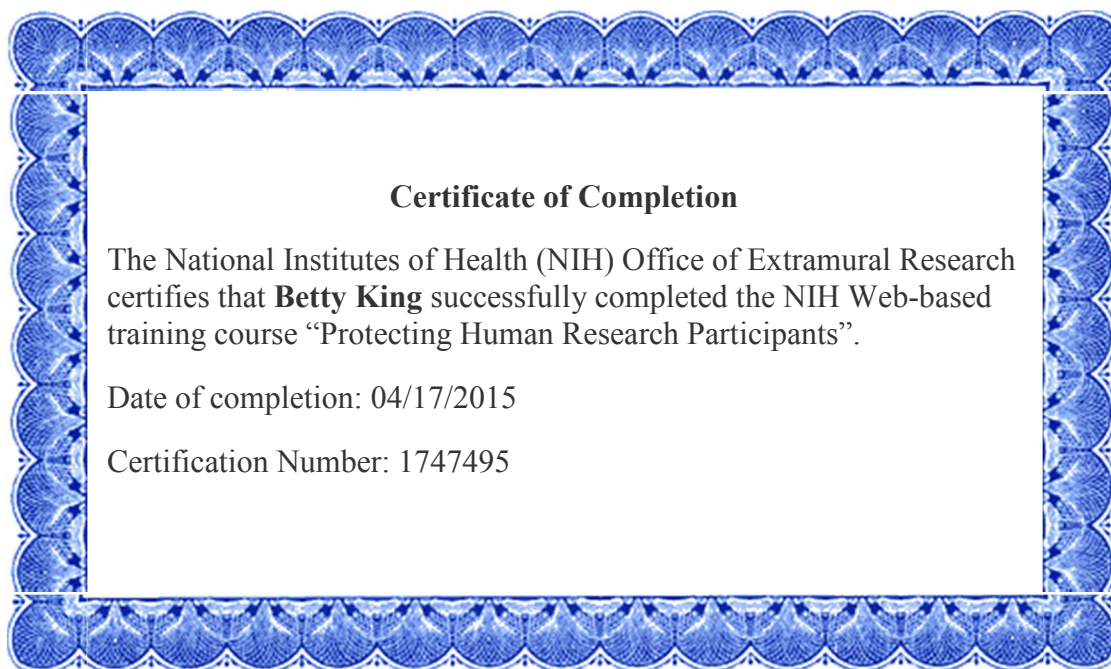5. What will you change the next time you develop differentiated lesson plans?

6. What other feedback would you like to add after implementing the differentiated instruction lesson plans that you created with your colleagues?

7. What additional information would you like to share that may be helpful to other coteachers in the future when creating and reflecting on lessons after implementing differentiated instruction?

Appendix B

National Institutes of Health Certification

**Certificate of Completion**

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Betty King** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 04/17/2015

Certification Number: 1747495

Appendix C

School District's Permission to Conduct Research

February 25, 2015

To: Local School Superintendent,

I am currently working towards my Ed.D at Walden University under the supervision of Dr. Anju Jolly. I am writing to request permission to conduct research in the district regarding elementary coteachers' understanding about successful differentiated instructional practices within the inclusion classroom environment. I believe this study will be beneficial to the district, and I hope that you will allow me to conduct this research project. I am enclosing a proposal of the doctoral project for you to review at your earliest convenience. The data instruments that I will use include an open-ended survey, semi-structured interviews with coteachers, and lesson plan documentation regarding differentiated instruction. A requirement to conduct the research entails approval from the Institutional Review Board (IRB) to ensure that my research is in compliance with Walden University's ethical standards. I will respect the confidentiality of all participants and keep all information under secure conditions. I will not reveal the participants' identity in any way.

Thank you for your consideration. I will be happy to share the results of this study with you. I am asking that you respond to this request at XXXXXXX so that I may document that I have received your permission to collect data.

Sincerely yours,

Betty King, Ed, D Doctoral Candidate

Appendix D

Letter of Cooperation

███████████████████████████

███████████████████████

_____████___

███████████████████████████

March 13, 2015

Dear Mrs. King,

Based on my review of your research proposal, I give permission for you to conduct the study entitled "Elementary Coteachers Understanding about Successful Differentiated Instructional Practices" in the ███████████████████. As part of this study, I authorize you to collect data through surveys, interviews and lesson plan documentation. Individuals' participation will be voluntary and at their own discretion. We reserve the right to withdraw from the study at any time if our circumstances changes.

I confirm that I am authorized to approve research in this setting. I understand that the data collected will remain entirely confidential and may not be provided to anyone outside the research team without permission from the Walden University IRB.

Sincerely,

████████████

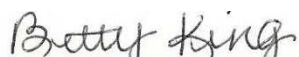Assistant Superintendent for Personnel & Middle/High Education

Appendix E

Letter to Principal

Date: March 18, 2015

Dear Principal,

I am currently working towards my Ed.D at Walden University under the supervision of Dr. Anju Jolly. I am writing to request permission to conduct research regarding elementary coteachers' understanding about implementing differentiated instruction within the inclusion classroom environment. I believe this study will be beneficial to the district, and I hope that you will allow me to conduct this research project. The data instruments that I will use include an open-ended survey, semi-structured interviews with coteachers, and lesson plan documentation regarding differentiated instruction. Walden University's approval number for this study is 04-28-15-0261853 and it expires April 27, 2016. I will respect the confidentiality of all participants and keep and all information under secure conditions. I will not reveal the participants' identity in any way.

Thank you for your consideration. I will be happy to share the results of this study with you. Sincerely yours,

*Betty King*

Betty King, Ed, D Doctoral Candidate

_____         _____
              Principal's Signature                                Date

Appendix F

Differentiated Instruction Open-Ended Survey

The purpose of this survey will allow me to gather information related to my dissertation topic about differentiated instruction within inclusion classrooms. The survey will take approximately 15 minutes to complete. The finding of this research will provide meaningful information about differentiated instruction for students with disabilities at the elementary level. Thank you in advance for your willingness to participate in this project study.

Participant # _____:

**1. Please mark the grade level class(es) that you coteach.**

- ❑ K
- ❑ 1
- ❑ 2
- ❑ 3
- ❑ 4
- ❑ 5

**2. Please mark the area of certification in which you are currently employed**.

- ❑ Special Education
- ❑ General Education

**3. Check the *highest* level of education you have achieved.**

- ❑ Bachelors
- ❑ Masters
- ❑ Educational Specialist
- ❑ Doctorate

**4. How many years have you been teaching**? _____

**5. Have you participated in differentiated instruction professional development sessions for educating students with disabilities?**

**6. What are your views towards differentiated instruction for students with disabilities?  Positive__ Negative__ Both__**

Appendix G

Differentiated Instruction Teacher Interview Protocol

Date: _____ Time:_____ Location:_____

Interviewer: <u>Betty King</u>

Participant #_____

The purpose of the interview is to gather information about successful differentiated instructional practices for students with disabilities. I appreciate your participation in this study and your willingness to be interviewed. This interview will last approximately 30-45 minutes. Thank you.

**Interview Guide**

| Question | Participants' Response | Notes |
|---|---|---|
| 1. How do you define differentiated instruction? | | |
| 2. What is the process of planning a differentiated lesson? | | |
| 3. In what way do you think differentiated instruction is constructive for students with disabilities in an elementary inclusion classroom? | | |
| 4. What factors, if any, do you feel inhibit your ability to implement differentiated instructional practices for students with disabilities? | | |
| 5. Do you believe differentiated instruction can be successful in an elementary inclusion classroom for students with | | |

| | | |
|---|---|---|
| disabilities? Why or why not? | | |
| 6. Have you participated in differentiated instruction professional development for students with disabilities? If so, what do you feel are some of the best practices you attained? | | |
| 7. What types of support do you feel are needed to improve your teaching and learning practices in the differentiated classroom? | | |
| 8. How do you describe your experiences with dividing students into small groups for instruction? | | |
| 9. From your perspective, describe how you implement flexible grouping to meet the needs of your students. | | |
| 10. Is there anything else you would like to add? | | |

**Thank you for your time!**

Appendix H

Differentiated Instruction Weekly Lesson Plan Checklist

**General Education Coteacher (GECT) :**
GECT 1 ___ GECT 2 ___ GECT 3 ___ GECT 4 ___ GECT 5 ___ GECT 6___

**Special Education Coteacher (SECT) :**
SECT 7___ SECT 8___ SECT 9___ SECT 10___ SECT 11 ___ SECT 12___

**Does the lesson plan provide evidence of the curriculum standards? Yes__ No __**

Explanation:

_____

_____

Does the lesson plan provide evidence of small groups planned in the lessons?

**Yes__ No__**

Does the lesson plan provide evidence of flexible grouping? **Yes__ No__**

**If yes, how often?**

_____

_____

Does the lesson plan provide evidence of tiered assignments planned for small groups?

**Yes__ No__**

**Other Evidence:**

_____

_____

Appendix I

Peer Reviewer Confidentiality Agreement

**Name of Signer:**

  During the course of my activity in collecting data for this research: "Elementary Coteachers' Understanding about Successful Differentiated Instructional Practices", I will have access to information, which is confidential and should not be disclosed. I acknowledge that the information must remain confidential, and that improper disclosure of confidential information can be damaging to the participant.

  ***By signing this Confidentiality Agreement I acknowledge and agree that:***
1. I will not disclose or discuss any confidential information with others, including friends or family.
2. I will not in any way divulge, copy, release, sell, loan, alter or destroy any confidential information except as properly authorized.
3. I will not discuss confidential information where others can overhear the conversation. I understand that it is not acceptable to discuss confidential information even if the participant's name is not used.
4. I will not make any unauthorized transmissions, inquiries, modification or purging of confidential information.
5. I agree that my obligations under this agreement will continue after termination of the job that I will perform.
6. I understand that violation of this agreement will have legal implications.
7. I will only access or use systems or devices I'm officially authorized to access and I will not demonstrate the operation or function of systems or devices to unauthorized individuals.

***Signing this document, I acknowledge that I have read the agreement and I agree to comply with all the terms and conditions stated above.***

**Signature:**                **Date:**

_____    _____