


2016

Social Studies Teachers' Use of Differentiated Instruction to Help Struggling Learners

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Nicole Waid

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2016

Abstract

Social Studies Teachers' Use of Differentiated Instruction to Help Struggling Learners

by

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MSED, University of New England, 2004

BS, State University of New York at Oneonta, 2000

BA, State University of New York at Cortland, 1996

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

April 2016

Abstract

Students in a local rural northeastern high school have demonstrated decreasing academic performance in social studies courses for the past 5 years. The purpose of this bounded qualitative case study of the local social studies department was to investigate how social studies teachers and administrators for grades 7-12 describe differentiated instruction (DI) and professional development in DI. This study was grounded in the zone of proximal development, which stressed the importance of providing instruction at students' instructional levels, and DI, which emphasized tailoring instruction to address students' needs. Three research questions focused on how social studies teachers and administrators viewed teachers' use of DI and described the professional development training for DI. Open ended interviews of 3 administrators and 9 secondary social studies teachers in the local school who volunteered to participate , observations of the teacher interviewees' classroom lessons, and reviews of documents related to instructional materials or professional development provided the data for the bounded case. The data were analyzed in an explanation building technique which flowed from the research questions. The findings indicated that the participants had positive perceptions of DI, the social studies teachers used DI strategies with struggling students and wanted effective professional development training and resources for using DI, and instructors wanted more administrative support. The results of this study may impact social change in the local school by providing effective DI techniques to use with struggling students. Professional development training in effective DI techniques may promote collaboration among the faculty and improve student performance in social studies.

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Dedication

This doctoral study is dedicated to my father, Harry. My father died before I realized my dream of pursuing my EdD. My father always offered me his unwavering support and he inspired me to be someone who takes chances to make a difference.

This study is also dedicated to my husband, Rob, and my children, Bailey and Jackson. My family has supported me throughout my doctoral journey. We have faced life's challenges together and have become stronger as a result. I realize all of this would not have been possible without their love, support, and understanding. I thank you all and I will be eternally grateful for all you have done to help me achieve my dream.

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To my friends who were there for me from the start, I thank you. You helped me stay grounded to achieve my dream. To my students, current and former, you have all changed my life. You made me want to be a better teacher and strive to be worthy of your respect.

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Section 1: Introduction to the Study

Introduction

Title I of the No Child Left Behind Act of 2001 (NCLB; 2002) proposed that all children should have access to an education that is of high quality and should be capable of reaching proficiency on state assessments. NCLB established specific criteria to ensure that students were receiving a high quality education that would effectively prepare them to reach proficiency on state assessments such as: (a) measures that are created to assess accountability and programs that train prospective teachers must be aligned with state standards, (b) low achieving students' academic needs must be met, (c) the gap in student achievement between students at differing levels of achievement must be eliminated, and (d) teachers must be given the opportunity to engage in access for professional development opportunities. Standardized tests will be used as an accountability measure to determine whether a school is improving from year to year (NCLB, 2002). Fitchett, Heafner, and VanFossen (2014) stated that the drive for increased standardized test scores, prompted largely by NCLB, has resulted in teachers feeling the need to narrow the curriculum. In an effort to improve performance on standardized tests to meet adequate yearly progress (AYP), school districts have begun to focus instruction on the specific subject areas emphasized on standardized tests, specifically language arts and mathematics.

In 2009, President Barack Obama announced his education reform agenda, offering \$4.35 billion in Race to the Top (RTTT) competitive grants to states who

demonstrated a desire to innovate by implementing appropriate educational reforms (American Recovery and Reinvestment Act, 2009). The National Council for the Social Studies (NCSS) voiced their concerns regarding the marginalization of the social studies curriculum, instruction, and assessment in the past 2 decades (Bolick, Adams, & Wilcox, 2010; Maguth, 2012; Pace, 2011). Pace (2011) stated that the marginalization of the social studies curriculum has led to the reduction in funding for the subject. Schul (2011) made the contention that the negative impact of standardized testing on social studies prompted the NCSS to make an official position statement that declared that there was a decline in the amount of time dedicated to studying social studies due to the demands of NCLB (NCSS, 2008).

Winstead (2011) discussed four themes that emerged from a study that investigated teachers' perceptions and experiences about teaching social studies after NCLB mandates were passed into law:

- (a) Social studies strives to afford students with opportunities to make real-world connections to content;
- (b) subjects that will be assessed dominated instruction time;
- (c) focusing on assessed subjects diminished the time that students could engage in conversations of a social, civic, and critical nature; and
- (d) social studies instruction has not received adequate support. (p. 223-224)

As the standards for academic achievement rise, all students are pressured to perform well on standardized tests. Bulgren, Graner, and Deshler (2013) suggested that students with learning disabilities (LD) experience even greater pressures. When students enter

high school, the complexity and length of the texts are greater than they have encountered in previous years. As the complexity of texts rises and the volume of the texts expands, there is an expectation that students' higher level thinking and critical thinking skills will also continue to improve (Bulgren et al., 2013).

Problem Statement

The school district's academic performance in social studies has decreased over the last 5 years. Based on the Guidance department at a northeastern school with the pseudonym Valley High School, in the 2012–2013 school year, 25% of the students failed global history and geography. Administrators were concerned that teachers might not be meeting the needs of the students as indicated by the poor academic performance in the ninth grade. When students fail courses, they are required to repeat the courses, which can put them at risk for not graduating on time. Administrators have addressed the problem of a gap in practice, by creating social studies academic intervention courses where teachers in the high school offer academic support by making educational technology readily available in every classroom. According to a personal communication with a guidance counselor approximately 10% of students are typically sent to an alternative education setting when they are unable to pass courses in a regular classroom environment; in the alternative setting the objective is credit recovery so students can meet the required standards for graduation.

In addition to the alternative school, the academic intervention taught by social studies teachers includes curriculum labs in social studies. Curriculum labs are designed

to allow teachers to give additional support to struggling students. Students who are required to repeat social studies courses often find their education choices limited. For example, if students want to attend classes at the local vocational program, they may lack the credits to be admitted into the program. Students who have enough credits to attend the vocational program may receive credit for mathematics and English language arts (ELA) through their vocational programs, but they are unable to obtain social studies credits in this manner. Social studies courses are not available for the local school district students to take in the alternative education location. This means that even if the students have enough credits to attend vocational school, they could not attend because they would be unable to fulfill their social studies requirements for graduation.

Also, students who must retake social studies courses are unlikely to have room in their schedules to attend vocational programs because they have to repeat social studies programs in their senior year. Another challenge for students occurs when they are required to take multiple social studies courses simultaneously, because assessments are sometimes given in social studies on the same day, causing the students to feel overwhelmed. Teachers often give up their planning periods to try to help students pass, but the students tend to focus on doing well in one social studies course, while their performance in the other courses declines. When students meet with one social studies teacher during a plan period they are giving up their resource room time, which is used to take quizzes or tests in other social studies courses or other courses. Some students who lose their resource time often want to make up quizzes and tests in their social studies

curriculum lab, which limits the social studies teacher's ability to mediate exercises with the struggling students. This gap in practice may not be meeting the instructional needs of students.

On the [REDACTED] State Report Card in 2012, the high school's graduation rate was 83% and the state standard graduation rate was 80% (New York State Report Card, 2014). On the face of it, the graduation rate appears to be unaffected by this problem; however, the official graduation rate does not report students who have been placed in alternative education programs. Students enrolled in alternative education programs have a less rigorous curriculum. The students may graduate, but they may not be college or career ready.

According to the [REDACTED] State Report Card Accountability and Overview section (2014), one criterion to maintain good standing status is to have a graduation rate above the 80% state standard. While the school district has been above the state standard, the students who are at risk of graduating on time may drive the school district's graduation rate below that number. The students, who were able to attend vocational school while taking multiple social studies courses, could potentially impact the graduation rate negatively. A school can be labeled in need of improvement if it does not meet the state standard for 2 consecutive years [REDACTED] State State Report Card Accountability and Overview section (2014). Schools with this designation can potentially lose part of the district's state education funding ([REDACTED] State Report Card, 2014).

Social studies teachers feel pressured to make sure that struggling students are able to pass their courses. Teachers are often hesitant to try new strategies in their classes because they are unsure how effective the strategies will be. Teachers are offered professional development opportunities through the local Board of Cooperative Educational Services (BOCES), but they typically are held during the school day. Some teachers do not feel comfortable leaving the classroom because they do not want to lose valuable instructional time, but they are typically offered during the school day. If teachers want to attend professional development sessions, they lose instructional time. With accountability measures in place, many teachers feel compelled to solely cover information that will likely appear on summative standardized tests (Jones, 2007; Ravitch, 2010). Many teachers feel they cannot afford wasting instructional time because of the amount of content that needs to be covered for standardized tests.

Valley High School is in a small school district located in a northeastern state. According to the Student Information Repository System (SIRS; 2014), the enrollment in the school district for the 2012–2013 school year was 1,047 students. Eight percent of the student population is composed of students with disabilities such as ADHD, reading difficulties, and processing deficiencies, and 28% of the students are economically disadvantaged (SIRS; 2014). The demographic breakdown of the student population is 92% Caucasian, 4% multiracial, 3% percent Hispanic, 2% Asian, and 0% African American (New York State Report Card, 2014).

Decreasing academic performance affects students, classroom teachers, and administrators. Students are affected by not graduating from high school on time. The potential of failing to meet the 80% graduation rate state standard, low test performance, and growth affect the classroom teachers' and administrators' annual reviews. Educational reforms made April 1, 2015 stated that teachers could be brought up on charges of incompetence after being rated ineffective for 2 consecutive years ([REDACTED] Legislative and Political Department 2015-2016 Enacted State Budget Preliminary Budget, 2015). The new teacher evaluation system significantly increased the weight of standardized tests and increased use of state growth models in evaluations ([REDACTED] Legislative and Political Department 2015-2016 Enacted State Budget Preliminary Budget, 2015). In the new evaluation system, if a teacher receives an ineffective rating in student performance, the teacher will be unable to achieve an effective rating overall ([REDACTED] Legislative and Political Department 2015-2016 Enacted State Budget Preliminary Budget, 2015). Low student performance could lead to a teacher being considered ineffective. If teachers are rated as ineffective for 3 consecutive years, they will be terminated ([REDACTED] Legislative and Political Department 2015-2016 Enacted State Budget Preliminary Budget, 2015). If a school is unable to meet the state standard for 2 consecutive years, it will be labeled a school in need of improvement and will possibly lose part of the district's state education funding (Valley Central School District APPR Plan, 2013).

Teachers who fear losing their jobs often do not feel comfortable deviating from the prescribed curriculum or using student-centered instructional strategies. As a result, some teachers primarily use teacher-centered instruction. Students can be negatively impacted if their academic needs are not met in a teacher-centered classroom (DeMitchell, DeMitchell & Gagnon, 2012; Green, Baker, & Oluwole, 2012).

At faculty meetings, educators often say that they feel pressured to reach heightened levels of responsibility found in the teacher evaluation system, so they feel uncomfortable deviating from traditional teacher-centered teaching methods. All stakeholders in the educational process recognize that there is a problem with academic performance but have been unsuccessful in addressing the problem. The administrators of the local school district have invested money in educational tools, such as interactive whiteboards and iPads in social studies classrooms, to help teachers invigorate instruction. The interactive whiteboards were installed district-wide over the summer when school was not in session, and teachers had received only a half-day training session on how to use the whiteboards the day before classes started. Multiple teachers have declined to use technology in their instruction because they have not been trained how to use it effectively, and they had limited time to infuse the new technology into their curricula.

The administrators of the school district are required to evaluate all aspects of academic performance. The Board of Education at the local high school adopted a strategic action plan on March 11, 2008 to establish their core beliefs and set strategic

goals for improving academic performance throughout the district (Valley Central School, nd). The Board of Education at the local school has not adjusted the goals set forth in this strategic action plan to address the significant changes to the state standards.

Nature of the Study

This study used a qualitative approach and a case study design. Yin (2003) explained that qualitative studies allow the researcher to examine the differences that exist between several cases. Yin further stated that when selecting cases, the researcher must carefully select those that will be examined in the study so predictions could be made about similar results across multiple cases. Stake (2013) described a case study as a method of exploration of a phenomenon using multiple sources of data. According to Yin (2009), researchers use case studies to gain understanding of an issue, while searching for its meaning along the way. Using a case study method is useful in gaining a better understanding of human behavior (Stake, 2013). Yin (2003) and Stake (1995) both recommended adopting a constructivist approach to the case study. I examined social studies teachers' use of differentiated instruction (DI) as a means of helping struggling learners in social studies courses Grades 7–12. I also examined the professional development that social studies teachers have received for differentiating instruction. Administrators' views of differentiated instruction were also examined.

Creswell (2009) proposed carefully choosing a case to view the problem from different perspectives. Within my study, I examined the perspectives of nine social studies teachers who teach Grades 7–12 and three administrators. Merriam (2009)

proposed intentionally choosing a set sample size to maximize the amount of data gathered in the study. This study focused on two small local school districts, so the population was relatively small.

Case studies inherently include expansive data collection procedures because they use data that are collected from multiple sources, such as interviews and observations. The participants selected for my study were easily accessible and fully committed to providing information as determined by the research questions. Sampling concluded for the study when saturation occurred in the data collection process. I analyzed and identified themes that emerged from the data. I chose a qualitative design because the problem could be analyzed by interpreting data gleaned from the members in their natural setting (Creswell, 2007).

Research Questions

The research questions that guided this study are included in this section. The following questions are derived from the problem for the study and set within the purpose for the study presented in the next section:

Research Question 1: How do social studies teachers, who teach Grades 7–12, describe the ways they use DI to help struggling students?

Research Question 2: How do social studies teachers, who teach Grades 7–12, describe their professional development training for implementing DI?

Research Question 3: How do administrators view DI?

Purpose of the Study

The purpose of this qualitative case study was to examine a sample of nine social studies teachers who teach Grades 7–12 to determine how they differentiate instruction and describe the professional development they have had on differentiating instruction. Three administrators were also interviewed to examine their view of DI. Yin (2003) stated that when using multiple cases, the researcher is able to predict similar actions or outcomes in varied research settings.

Definition of Key Terms

According to Creswell (2009), in order to clarify the language used throughout the study, the researcher may provide tentative definitions of terms. The following terms were used throughout the study. Specific terms are discussed further in the methodology and as they surfaced during the research.

Annual professional performance review (APPR): This review plan is founded on the conceptual principles of Danielson (2002). The four “Domains of Professional Practice” are articulated with the eight criteria for evaluation as required in part 100.2 of the Regulations of the Commissioner of Education (New York State Department of Education, 2010).

Annual yearly progress (AYP): AYP form part of the NCLB of 2002. All students in the United States are required to take state exams to assess their annual academic performance. The accountability standards that measure a district’s accountability status

are ELA, mathematics, elementary/middle school level science, and graduation rate (State Department of Education, 2010).

Differentiated instruction (DI): DI is an educational strategy that recognizes the educational backgrounds, readiness, and learning preferences of each student to maximize student growth (Hall, Strangeman, & Meyer, 2003).

Flipped classroom: A student-centered pedagogical approach in which direct instruction is assigned as homework in the form of audio or video lectures and class time is used to apply the concepts with teacher support in the classroom (Flipped Learning Network, 2014).

Zone of proximal development (ZPD): A ZPD is defined as “distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Vygotsky, 1978, p. 86).

Significance of the Study

Addressing the problem in this study is significant for two reasons. The first reason is to provide a description of teachers' use of differentiating instruction in social studies to help struggling learners. The second reason is to examine the professional development that social studies teachers have engaged in for differentiating instruction.

Teachers' Perceptions of Using Differentiated Instruction

DI means different things to different teachers. Tomlinson (1995) summarized the different views that teachers have held about DI over the years. Many teachers dismiss DI

because they perceive it as a novelty and are apprehensive about creating a learning environment with multiple learning activities happening simultaneously due to classroom management concerns (Tomlinson, 2003). Tomlinson also reported that teachers feel a measure of apprehension about how to properly determine student readiness to engage in certain educational tasks. Finally, there is hesitance to implement DI when teachers are under pressure to perform well on standardized tests (Logan, 2011).

Logan (2011) also discussed a number of misconceptions that teachers possess that may hinder their willingness to attempt to implement DI into their curriculum. Logan felt that some teachers perceive DI as another way the government can control their teaching practice. Logan also felt that some teachers believe that DI requires teaching everything multiple ways.

Logan (2011) made the assertion that there is limited research on how effective DI is despite being recognized as a combination of many well-researched theories and practices. This study was important in observing how social studies teachers who teach Grades 7–12 use DI in social studies to help struggling students. It was also imperative to examine the professional development opportunities on DI that are available for social studies teachers.

Professional Development for Differentiating Instruction

Professional development is crucial to teachers' professional growth because it has the potential to increase teachers' practical knowledge (Ebert-May, Derting, Hodder, Momsen, Long & Jardeleza, 2011). Teachers often face multiple challenges when first

attempting to incorporate DI into their teaching repertoire. Teachers are apprehensive when they change their teaching practice and often revert back to their old approaches to planning and delivering their curriculum (Tomlinson, 2000). Many teachers are resistant to change and are cautious about teaching practices that they are unfamiliar with (Boykin & Noguera, 2011). Some teachers are not prepared to manage changes associated with the implementation of DI (Tomlinson, Brimijoin, & Narvaez, 2008), so they often require ongoing professional development and support.

Social Change

The study encourages social change by examining differentiated teaching strategies that successfully address the needs of all students. Tomlinson and Imbueau (2010) posited that teachers are largely responsible for making decisions on how to tailor learning opportunities so they can effectively address the educational needs of all students. When teachers make the decision to infuse DI in their classrooms, they are laying the foundation for the transformation from teacher-centered learning to student-centered learning. Santamaria (2009) felt that teachers are most effective when their lesson planning is informed by the diverse academic, cultural, and social needs of their students.

This study contributes to the body of research on DI and it specifically addressed how social studies teachers who teach Grades 7–12 differentiate instruction for struggling learners. The results of this study may impact social change in the school districts studied by providing information about successful professional development initiatives to address

effective DI techniques to use with struggling students. This would promote collaboration among the faculty and could improve student performance in social studies.

This study fills the existing gap in scholarly research by adding a specific study about differentiating instruction for social studies, which will give educators awareness of the impact that DI has in Grades 7-12 social studies classrooms. This study also provides support to teachers who want to develop strategies that are practical for differentiating instruction in Grades 7–12 social studies classrooms.

Theoretical Framework

The conceptual framework of this study consists of Vygotsky's (1978) zone of proximal development and Tomlinson's (1995) DI. These strategies are informed by constructivist theorists. Vygotsky (1978) theorized that with appropriate support provided by adults and more capable peers, students can perform beyond their comfort zone when working on complex tasks.

Zone of Proximal Development

ZPD stressed the importance of modeling and teaching at students' instructional levels rather than at their frustration levels (Vygotsky, 1978). Vygotsky (1978) defined ZPD as the "distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p. 86). Vygotsky felt that it was important to assess the development of the students' cognitive capabilities to ascertain the level of students'

cognitive growth. Modeling is a strategy used to assist students when they are completing the task (Lauzier & Haccoun, 2014). Modeling instruction allows students to process knowledge and apply that knowledge into actions, which heightens their level of development (Vygotsky, 1978).

The ZPD is a useful assessment tool because teachers are able to gauge and note students' abilities as they exhibit growth beyond where they were performing before the new academic tasks. Educators can use this information to construct effective learning opportunities that meet the students' academic needs. Blair (2009) contended that with effective scaffolding, students have the potential of working at higher cognitive levels than if they had worked without additional supports. Students functioning at higher cognitive levels leads to increased student confidence. Increased student confidence leads to an increased self-efficacy. Vygotsky's (1978) theories have become a crucial element of best practices in the modern classroom.

Differentiated Instruction

As the demographics of students have become more diverse, the notion of what constitutes effective teaching has been transformed. One change in education is how teachers address how the diverse needs of students are met. Several educational theorists have discussed DI. Santamaria (2009) reported that Tomlinson (2003) identified five guidelines for acting within a framework to make DI possible to implement. The first guideline that Tomlinson described focused on fundamental concepts. Tomlinson felt that teachers should examine the key concepts that students had to know in order to ensure

they had addressed the essential content. The second guideline Tomlinson discussed was using formative and summative assessments to inform instruction. The third guideline connected to DI is designing challenging tasks with teacher support. The fourth guideline stressed engaging all students with varied learning tasks. The final guideline attempted to find a balance between teachers' instruction and students' needs based on assessment data (Santamaria, 2009).

According to Tomlinson (2000), DI is only one element of effective instruction and that students would have difficulty processing information unless the curriculum was tailored to meet the diverse needs of all learners. During an interview with Wells and Shaughnessy (2010), Tomlinson made the assertion when planning to differentiate instruction that teachers need to establish appropriate learning objectives. Having a deeper understanding about where children are in regard to the learning objectives leads to clearer learning outcomes (Wells & Shaughnessy, 2010). Tomlinson also stated that restructuring the techniques used to deliver education does not make additional work for the teachers but that making adjustments to teaching techniques is part of being an effective teacher (as cited in Wells & Shaughnessy, 2010).

Assumptions

One assumption that I made in this qualitative study was that the participants would provide reliable data. Therefore, it was essential that all of the study participants responded accurately to the interview questions. I also assumed that the social studies teachers were familiar with DI techniques.

Limitations

Along with the assumptions that were made in this study, there were also a number of limitations. Limitations to this study were potential weaknesses that were identified through research (Creswell, 2007). Some of these limitations included the number of interviewees. The narrow demographic focus of this study's sample did not permit extrapolation to the entire population. This limitation was accentuated by the case study design. While a case study allowed me to examine the perspectives of social studies teachers and two administrators, the design involved only allowed a few participants due the small size of the districts being examined, and therefore, may not be representative of the general population.

Scope and Delimitations

The scope of this study includes educators who teach Grades 7–12 social studies at two school districts in a northeastern state and have taught a minimum of 3 years at the 7–12 grade level. The study was delimited to teachers who taught other subjects at different levels or in larger schools. As a case study design, the results are not generalizable.

Summary

Section 1 includes a discussion of the methods that were used to conduct interviews, along with a brief literature review and the definitions of key terms. Section 2 provides an in-depth analysis of current scholarly literature that served as the foundation for this study. In Section 3, I provide a detailed description of the methodology and

procedures used in this study. I also address data collection methods and study limitations in Section 3. Section 4 includes a review of the findings relating to the research questions that are informed by my analysis of the data collected. Section 5 includes a summary of the study; discussion of the findings, conclusions, implications for practice and social change; and recommendations for future research.

Section 2: Literature Review

Introduction

There is a vast collection of literature on using DI as a means of assisting struggling students. Additionally, the extensive research has addressed the positive impact of effective professional development. However, the existing literature on how to differentiate Grades 7–12 social studies using technology is very limited. The literature has also not addressed how social studies teachers, who teach Grades 7–12, describe their professional development for differentiating instruction. This literature review was based upon the theory that differentiating instruction with technology in Grades 7–12 social studies helps struggling students. This literature review also explores the impact effective professional development has in implementing DI.

I used online, scholarly search engines and the Walden University library to search for literature related to student performance, at risk students, and DI. Academic search engines included: Education Resources Information Center (ERIC), Thoreau, Education Research Complete, and Google Scholar. I used the following keywords in an effort to locate peer-reviewed scholarly literature: *educational technology*, *flipped classroom*, *zone of proximal development*, *professional development*, and *DI*.

In this literature review, I begin with an examination of the conceptual framework. I then examine the literature about the use of educational technology as a means of differentiation. Specific instructional practices that teachers use to students,

such as DI are then reviewed. This section concludes with a discussion of the implications of the reviewed literature for further research.

Conceptual Framework

This study is rooted two frameworks: Vygotsky's ZPD (1978) and Tomlinson's DI (1995, 1999, 2000, 2001, 2003, 2005a, 2005b, 2013, 2014). The educational trends of the 21st century reflect changes in the demographics of student populations from 20 to 30 years ago. Having students with diverse cultural backgrounds makes it necessary for educators to reevaluate their instructional practices. Many scholars view Vygotsky's social constructivist learning theory as crucial to improving education and educational reform (Armstrong, 2011). Central to Vygotsky's theory was defining the ZPD as the differences between the actual and potential levels of development (Subban, 2006). Tomlinson (2005a) defined DI as a teaching philosophy that acknowledges that students' learning experiences are enhanced when their teachers alter instruction based on differences in student readiness, background, and educational needs. Tomlinson's definition of DI carefully reflected Vygotsky's theory, which focused on the interactions between teachers and pupils. In DI, teachers attempt to support students in advancing beyond their current level of understanding (Danielson, 2002).

Vygotsky's (1978) theory served as a conceptual framework for this study. Vygotsky emphasized cognitive development in a social context. Current research that addresses social interaction, cognitive development, and scaffolding supports Vygotsky's theory of cognitive development. Vygotsky believed that cognitive development occurs

through social interactions, and that the use of new knowledge influences students' behaviors. Vygotsky stated that social consciousness becomes stronger when students engage in activities that are meaningful and relevant. Vygotsky also suggested that social interaction positively affects student motivation and performance. Gredler (2012) asserted that ZPD might assist teachers' efforts to support students' cognitive abilities and help students attain mastery levels. Ford (2012) made a similar contention about ZPD and suggested that ZPD promoted effective teaching strategies. The ZPD connects what students can achieve on their own with what they accomplish with the assistance of more capable students. White, Syncox, Heppleston, Isaac, and Alters (2012) believed that when teachers supported and assisted peer collaboration extends student learning.

Vygotsky (1978) noted that teacher-student interactions include a series of questions followed by supportive activities that involve the student in the learning process. The level of support needed decreases over time as the student develops additional skills(Vygotsky,1978). Vygotsky believed it was important to investigate the relationship between the developmental process to students' real learning capacity as a means of determining a student's developmental level. Lantolf and Poehner (2011) said that the ZPD is a means of accessing and promoting the cognitive development process rather than focusing on its final product.

When assessing students' cognitive development only the tasks that are performed by that person can be used to ascertain their cognitive capabilities. Modeling is a way to assisting students so they able to complete the task. This process increases the student's

level of development. The process of asking questions with support was named scaffolding by Bruner (1966). According to Zimmerman and Schunk (2011), the self-regulation of learning in a learning environment is a characteristic of autonomous and competent students. Poitras and Lajoie (2012) suggested that social studies students who do not set goals, monitor their progress, and fail to use adaptive strategies while studying historical events have difficulty regulating their own learning. Smit, vanErde, and Bakker (2013) said that scaffolding emerged from efforts to conceptualize the effect that support from teachers and other peers has on one-to-one problem-solving. Wood, Bruner, and Ross (1976) summarized scaffolding as the process of offering assistance to a student so they can complete tasks, solve problems, and achieve goals which would be beyond their reach without assistance. Many researchers use a scaffolding metaphor to explain the temporary assistance students receive when they perform complex tasks they have difficulty completing independently. Scaffolding is designed to elevate struggling students slowly to a level where the students can do complex tasks independently (Jadallah et al., 2010); Smit et al., 2013).

Van de Pol, Volman, and Beishuizen (2010) identified the characteristics of scaffolding: responsiveness, fading, and transfer of responsibility. Responsiveness refers to adults and peers who offer support try to assess the students' current educational needs (Van de Pol, Volman, and Beishuizen, 2010). When scaffolding instruction, the adult or peer draws on a number of strategies for providing support. According to Cuevas, Russell, and Irving (2012), customized learning creates powerful learning experiences.

One way to personalize learning through differentiation is to allow students input in their learning. Bray and McClasky (2013) suggested that if students have a say in the learning process, they are more likely to be actively participants in the educational process.

Lalley and Gentile (2009) conducted a study that examined whether instruction was more effective when lessons address the students' needs. The final recommendation of the study suggested that education should focus on individuals rather than on individual differences. The adult needs to assess the students' current level of understanding. Vygotsky (1978) argued that diagnostic assessments can be used to ascertain the student's potential level of learning in the ZPD. Burris (2011) stated that when teachers are mindful of the ZPD, teachers can effectively modify instruction to align with their students' needs. Wood et al. (1976) stated that effective instruction at this second stage is dependent on how the adult or peer used the knowledge about the task and the student in order to provide appropriate corrective feedback.

The second characteristic of scaffolding is fading. Fading is the gradual removal of student support (Van de Pol, Volman, and Beishuizen, 2010). Fading in the scaffolding process is similar to responsiveness in that each relies on the students' current levels of competency.

The third characteristic of scaffolding is the transfer of responsibility. The transfer of responsibility occurs when students' skills grow and needs less support (Van de Pol, Volman, and Beishuizen, 2010). When the support provided by the adult or other peers gradually diminishes, the responsibility for learning transfers more to the student. Wood

et al. (1976) believed that as the students' mastery of skills increased, the initial support system provided by the adult or peer is removed until the learner gains a greater degree of ownership over the learning process. Wood et al. also concluded that offering a student too much assistance hinders his or her ability to complete a task. In scholarly research, scholars have advocated scaffolding because it makes the learning process more student-centered (Walqui & Van Lier, 2010).

In contrast to the transmittal model example given by King (1993), which illustrated the traditional educational model as a note taking scenario, the constructivist model is student-centered, characterized by students participating in educational tasks while constructing meaning of the material. In the constructivist model, teachers assume the role of facilitator rather than delivering direct instruction (King, 1993). The teacher still has the responsibility of presenting the course material, but the method they employ to present the material allows the students to take an active role in the educational process (King, 1993).

Differentiated Instruction

Smart, Witt, and Scott (2012) made the contention that traditional teacher-centered instruction is often based on a passive lecture model. The educational process relies in an expert practitioner who delivers knowledge to students. Researchers have suggested that current learning theory believe that teachers should play the role of facilitators of education. This model fails to meet the needs of nontraditional students. Owens (2013) made the contention that high school teachers gravitate towards teaching

strategies that they were exposed to as students. Owens also said that the strategies they were exposed to as students were not differentiated. Morgan (2014) stated that students tend to lose focus when their teachers implement teaching strategies that do not coincide with their preferred learning preferences.

DI includes a host of different strategies. In the absence of a universally accepted definition for DI, teachers often construct their own notions of what DI is. Von Hover, Hicks, and Washington (2011) conducted a case study that revealed the teacher did not perceive herself as an expert in DI, even though observation of a lesson the teacher delivered revealed that her teaching methods were consistent with existing literature on DI.

There is a growing population of diverse learners in modern classrooms (Bender & Waller, 2011; Goodwin, Lefkowitz, Woempner, & Hubbell, 2011; Gregory & Chapman, 2013). One change that has occurred in education in the 21st century is the growing emphasis on addressing the diverse needs of student populations. Gavin, Casa, Firmender, and Carroll (2013) stated that DI focuses on learners' individual educational needs rather than focusing on the curriculum. Teachers need to use multiple teaching strategies and educational resources to assist students to reach reasonable goals (Brulles & Winebrenner, 2011; Moore & Hansen, 2012). Tomlinson (2001) coined the term DI, which suggested that educators should restructure their teaching practice to meet diverse student needs. Several scholars have examined DI. Levy (2008) presented the rationale for including DI and made the statement that DI is a collection of strategies that are

designed to assist teachers meet the academic needs of students and support their academic growth. DI is seen as the theory that assists teachers in constructing more personalized learning environments, informed by formative student assessment. The teacher can develop data-driven learning outcomes and procedures, like selective grouping, and incorporate real life experiences in instruction. DI provides ongoing feedback and leads to a summative assessment (Hall et al., 2003; Tomlinson, 1999).

In order to be successfully implemented, DI addresses various modalities (Brulles & Winebrenner, 2011; Reis et al., 2011; Snyder & Linnenbrink-Garcia, 2013; Sparapani, Walker, & Van Tiflin, 2013). The first step in creating a differentiated lesson is reflecting on how the students learn best (Santangelo & Tomlinson, 2009). Teachers consider the environment as well as the group dynamic in a way that addresses the varying needs of their students. Abell, Jung, and Taylor (2011) found that tailoring instruction based on student learning preferences helped create a positive classroom atmosphere and helped promote student engagement. Kanevsky (2011) contended that when teachers acknowledged student interest and focused on students' learning preferences, they attempt to understand how their students learn most effectively. Nevin, Falkenberg, Nullman, Salazar, and Silió (2013) stated DI helps teachers to meet the educational needs of students by planning instruction around the strengths of each student. As a result of feeling more supported, students exhibited higher levels of engagement. Adding extra support made it possible for students to engage in more complex tasks. Accommodating

learning styles leads to students feeling comfortable engaging in tasks that are slightly above their comfort zones.

Assessment is a key element to consider when planning DI. Formative assessment is viewed as the connection between curriculum and assessment (Crossouard & Pryor, 2012) De Jesus (2012) explained that ongoing formative assessment provides teachers information that informs their selection of differentiated work for students. Ongoing assessment monitors student progress and guides decisions about teaching and the activities that will be used in instruction. Peshnek (2012) said that even if formative assessments do not necessarily contribute to grades, the assessments provide valuable information about student progress for teachers. Clark (2012) made the assertion that formative assessment is an ongoing process with consistent support for the learning process. Berg and Wehby (2013) contended that assessments need to be administered in conjunction with the use of effective DI strategies. Doubet (2012) posited that by focusing on formative assessment, teachers realized that differentiation occurs naturally when teachers set goals and monitor students' progress in relation to the goals to adjust instruction.

The body of DI research which addresses the positive results of implementing DI in regular classrooms is growing (Rock, Gregg, Ellis, & Gable, 2008). In one 3-year study, scholars researched the implementation DI in K–12 classes in Canada and its effects. Watson (2011) and Welch (2011) emphasized that if DI strategies are used

effectively with gifted students, then the DI strategies they should also be effective with general education students as well.

Many educators and researchers maintain that education from kindergarten through graduate studies tends to use the learning approaches that the instructor prefers rather than ones that students are more comfortable with (Keengwe, Pearson, & Smart, 2009). In order to improve academic performance, teachers must adapt their instruction to address how students learn in classrooms (National Assessment of Educational Progress, 2011). According to Hernandez, Roberts, and Menchaca (2012), DI based on students' educational needs is a crucial element that is needed to improve academic performance. Buehl (2011) said Bloom's taxonomy acts as a blueprint for DI by providing teachers with guidance on how to develop organized learning processes that address increasing levels of difficulty. Lynch and Warner (2008) stated that DI emphasizes the learning differences of students in the classroom. Lynch and Warner (2008) stressed that when teachers use differentiated teaching strategies, it gives every student the opportunity to actively participate in the learning process. According to Tricarico and Yendol-Hoppey (2012) DI allows students of all ability levels to learn at their own level. Liftig (2010) explained that DI is characterized by using specific strategies and a host of learning activities that will promote student learning. These strategies must foster a respectful environment that engages and challenges every student (Tomlinson, 2003). Pham (2012) discussed the steps to differentiating instruction as outlined by Tomlinson (1999). Tomlinson (1999) broke the differentiation process down into three stages: modifying the

content, the process, and the product of instruction. Tomlinson (2014) stated that teachers can differentiate through content, process, product, and environment according to students' readiness levels, personal interests, and learning preferences. Sousa and Tomlinson (2011) made the assertion that if the content, process, product, and/or environment is weak, it will impact the overall classroom (Sousa & Tomlinson, 2011). Effective DI requires teachers to understand the fundamentals of effective teaching, student learning, and assessment by those implementing it (Fox & Hoffman, 2011). Gage, Lierheimer, and Goran (2012) stated the belief that content and processes used in the classroom need to be differentiated to some degree in order to provide support for students based on the students' educational needs.

Tomlinson's assertion about creating challenging, but manageable tasks mirrored Vygotsky's (1978) explanation of the ZPD. Pham (2012) contended that a teacher can modify the content by making sure it aligns with the developmental progress of the students in the classroom. Pham suggested considering the desired learning outcomes and key dimensions of instruction when modifying content.

According to Tomlinson (2009), the curriculum outlines what content teachers need to teach, and differentiation helps teachers identify strategies they need to use to improve student performance. Tomlinson identified four principles that support DI. In the first principle, teachers need to recognize the changing needs of pupils. In the second principle, it is critical for the teacher to provide effective instruction based on the student's strengths and limitations. In order to do that, teachers must assess the diverse

needs of their pupils. In the third principle, Tomlinson described the process of “teaching up,” which stated that most students can learn the necessary material if they work diligently with the teacher. Teaching up requires that teachers be aware of strategies that engage students with skills in the content area. Teaching up also requires teachers to support student learning, so they can make progress in understanding the issue. Finally, the fourth principle referred to teachers taking student readiness and interest into consideration when designing lessons in order to make the learning process more meaningful to the pupils (Tomlinson, 2009).

In an interview with Wells and Shaughnessy (2010), Tomlinson explained that DI emphasized clear learning outcomes and assessing students to have a better understanding of student readiness. Tomlinson also made the assertion that tailoring instruction to fit the needs of students is not about expanding the workload of teachers; it is about becoming an effective teacher. Teachers who are effective would be considering the needs of their students regardless of the extra time that process takes.

DI allows teachers to respond to students’ progress by observing what students already know and what they need to know in order to achieve the set goals of a lesson (Fox & Hoffman, 2011). Teachers must make conscious attempts to gain knowledge about students’ diverse academic needs (Manning, Stanford, & Reeves, 2010). When attempting to implement differentiated instruction, it is imperative to collect data on each student, including their personal interests, preferred learning style, and their strengths and weaknesses. This experience informs teachers’ decisions as to what strategies would

address diverse student needs. Teachers often view differentiating instruction as a cumbersome process. It takes time for teachers to assess the diverse learning needs of their students and adjust instruction to satisfy those needs. The extra time that is required to develop a differentiated curriculum often prevents teachers from attempting to use DI. While DI does require extra effort in the planning stage, its benefits will create a more engaging learning environment. In time, the differentiation process will become less cumbersome and will be more efficient (Levy, 2008; Manning, Stanford, & Reeves, 2010).

Reis, McCoach, Little, Muller, and Burcu (2011) demonstrated that DI resulted in increased academic performance. Their quantitative study included an intervention-involvement engagement and differentiation strategies and reduced the amount of the whole group instruction. The findings of the study uncovered significant differences in reading fluency and reading comprehension when teachers differentiate instruction. As these studies indicate, DI has elicited positive outcomes in the classroom by improving student engagement and academic performance.

Learning preference accommodations increase student motivation. Abell et al. (2011) found that tailoring instruction based on student learning preferences increased student participation and improved students' interest in learning. The middle school students were more willing to engage in more difficult tasks when they felt supported by the teacher.

The ZPD and DI are bound together by their emphasis on the process of learning. Vygotsky's social constructivist approach looked at the way children develop through the guidance of a more competent and knowledgeable person. Tomlinson (2001) maintained that DI consists of multiple methods comprised of three primary elements. The first component is to determine which content the students are learning. The second element is to identify how students comprehend the ideas and information presented. The third factor is how students are demonstrating the new knowledge they have gained. Tomlinson's approach contained elements of Vygotsky's (1978) ZPD. According to Vygotsky, learners must be in a zone of where they recognize what they can do alone and what they can do with assistance. Tomlinson also asserted that we cannot teach a child to learn if we cannot engage the student in the process of learning.

There are several DI strategies that teachers can use to invigorate their instruction. Teachers should incorporate various methods to provide multiple ways for students to demonstrate competency (Pierce, Cassady, Adams, Speirs Neumeister, Dixon, & Cross, 2011). Methods such as group work, jigsaw, various questioning techniques, and project-based learning are ways a teacher can differentiate their instruction. Tomlinson (2014) stated activities that have small groups are beneficial to all students. Using small groups can be used to preview skills or concepts for students who do not have prior knowledge on a topic, or to extend higher level learning activities. Jigsaw activities use small groups to find information using various resources (Tomlinson, 2014). Students work with the

materials and collaborate with their group to synthesize the information the students discovered about the topic.

Moore (2014) reported that the second most popular teaching strategy is lecture with questions. Moore stated that effective questioning strategies are an important part of the learning process. Questioning techniques allow teachers to determine what students know. Moore made the contention that lecture with question and answer can be an engaging strategy to use with students.

DeJesus (2012) said project-based learning is a DI strategy in which students engage in an inquiry into real-world problems and challenges. Project-based learning inspires students acquire a deeper knowledge of the content that is being investigated. Teachers assume the role as facilitator while students engage in inquiry-based lessons. Sadlier (2011) asserted that the focus on project-based learning usually involves current events and real-world problem-solving exercises, which makes the learning process more relevant to the students' lives.

Professional Development for Differentiating Instruction

Current educational policies have placed emphasis on differentiating instruction. Teacher preparation programs instruct preservice teachers in how to differentiate instruction for mixed abilities. Dixon, Yssel, McConnell, and Hardin (2014) contended that teacher training programs typically only provide an introduction to the theory, usually in a survey course that addresses various theories of curriculum and instruction. When professors discuss DI in a survey course, preservice teachers are not provided with

enough in-depth instruction to implement DI strategies effectively. For teachers who may have completed their teacher training prior to Tomlinson's discussion of DI, differentiation may be something they have heard about but have limited knowledge of what it looks like in practice. In an effort to address the increasing diversity of students, school districts sometimes offer professional development opportunities for their teachers. Facilitators trained in DI strategies run the professional development training sessions. Their goal is to facilitate the development of foundational understanding and instructional competencies for differentiating instruction.

According to Dixon et al. (2014), professional development that covers too much information in a single session may provide some understanding of the foundation of DI, but may not offer adequate details that would compel teachers to attempt to construct differentiated lessons when they return to their classrooms. Dixon et al. also concluded that professional development opportunities must enable teachers to experiment with various differentiated strategies in a workshop setting where the facilitator helps create and review differentiated lesson plans, to assure that the lessons would be created properly. Reeves (2009) also supported a deeper level of professional development in DI strategies. Reeves found that for many change initiatives, implementation that was occasional was no better than the implementation that was entirely absent. This finding led Reeves to the conclusion that deep implementation of DI had the desired effect on student learning. Archibald, Coggshall, Croft, and Goe (2011) suggested that assisting

teachers with the development of new strategies and providing them with the necessary resources to implement them makes a tremendous difference in a teacher's practice.

Tomlinson (2007) used the "fire and light" metaphor as a means of identifying strategies that ensure deep implementation of DI. The "light" in Tomlinson's metaphor symbolized the efforts to encourage teachers to change their instructional practice. The strategies to attract teachers to improve their instructional practice include professional development, modeling, and teacher leadership. Tomlinson recognized that not all teachers were responsive to the call to change their instructional practices. Tomlinson's metaphor described the need for "fire" strategies, which were necessary for teachers who resisted change even when presented with research-based data that supported the change. Borg (2011) also suggested that teachers have to change their beliefs about various teaching strategies before they are able to successfully change their teaching practice. Reeves (2009) recognized the notion that most people must engage in behavior before they can acknowledge its worth. Brady-Amoon and Fuertes (2011) suggested that it is crucial to build teachers' self-efficacy to differentiate instruction in order for teachers to effectively meet the various educational needs of students for teachers to address the numerous cognitive needs of their students with varied academic skills.

Gunn and Hollingsworth (2013) conducted a study which attempted to implement and monitor the effectiveness of a district-wide initiative to promote 21st century teaching strategies and teaching methods. The longitudinal study included educational technology upgrades and intensive professional development. The findings of the study

suggested that the systematic approach to professional development was successful. The researchers administered surveys each year and teachers reported having more positive attitudes and higher comfort levels with 21st century teaching strategies with systematic professional development. Burrige and Carpenter (2013) also conducted a longitudinal study examining professional development. The Non Government Organization (NGO) Evolve in Victoria, Australia, worked with disadvantaged secondary schools to develop updated curricula. The data collected over 3 years found that different educational settings exposed teachers' different teaching practices. The teachers collaborated with Evolve staff and expanded teachers' use of different pedagogies.

Weber, Johnson, and Tripp (2013)'s case study examined the process of implementing DI as a means of meeting the educational needs of all students. The school consulted with an expert to help inform the development of effective DI practices, and teachers collaborated with each other to maintain a dialogue about the differentiation process (Weber et al., 2013). To initiate the study, teachers filled out a survey on their knowledge of DI to determine what they knew and what misconceptions they may have had. Because it appeared many teachers were confused as to exactly what DI was, grade level meetings were set and literature on DI was provided for discussion. Teachers also attended larger group workshops to continue discussing various aspects of DI and 21 finally had classroom visits where suggestions were offered as to how to meet the students of all learning levels (Weber et al., 2013).

Wallace (2014) made the recommendation of establishing professional development planning committees in school districts to actively involve teachers in planning their professional development experiences. Wallace also that schools should create professional development opportunities that are differentiated to address specific things each teacher needs rather than taking a “one size fits all” approach. Wallace stressed the context of specific learning environments when planning professional development opportunities.

Hewitt and Weckstein (2012) discussed that many districts have adopted Danielson’s framework of teaching as the basis for teacher evaluations. Evaluators are trained to look for the implementation of differentiation techniques in teachers’ instruction. While the evaluation process creates resistance from some teachers, the evaluation process that is differentiated to meet their needs has a transformative effect on some teachers. The evaluation process requires teachers to craft professional goals that are meaningful to their teaching practice. According to Van Tassel-Baska (2012), there is still a hesitancy among teachers to open their classrooms to observation by trained evaluators. Teachers need to be willing to show what they are doing in the classroom and learn from the experience. The evaluation process gives teachers the opportunity to meet with the evaluator before and after a lesson. These pre- and post-conferences allow teachers to assess their instructional practices and make the experience more beneficial for improving their implementation of differentiation strategies.

Using Technology to Differentiate Instruction

Technology developments are largely responsible for changing 21st century learning methods (Farisi, 2016). The shift from teacher-centered instruction to student-centered instruction has been perpetuated by the emergence and availability of educational technology. Chen and Herron (2014) suggested that effective teaching is dependent on teachers' content and pedagogical knowledge as well as their knowledge of appropriate technology integration strategies. The changes and technological developments in the world require teachers to update their knowledge and skills in order to meet students' needs in the changing environment. Hodges and Conner (2011) made the contention that teachers often have difficulty making decisions about what type of technology can be used effectively for a specific topics. Chelsey and Jordan (2012) reported that several teachers reported receiving inadequate training on how to integrate technology into their lesson plans. Vatanartiran and Karadeniz (2015) posited that inadequate technology integration plans are obstacles for implementing educational technology appropriately in the classroom. Eristi, Kurt, and Dindar (2012) and Lai, Pratt, and Trewern (2011) identified reasons why teachers do not make effective use of educational technology such as the lack of instructional tools and materials and teachers lack the practical knowledge needed to design or use educational technology. Hsu (2012, 2013) reported that most teachers limit their educational technology use to basic tasks such as drill and practice activities or as a free-time activity.

Teachers are redefining their teaching strategies through the integration of technology. Bester and Brand (2013) stated that while educational technology cannot replace the teacher in the classroom, it can be successfully integrated to enhance the learning experience. According to Athans and Devine (2013), the use of educational technology such as computers, Smart Boards, electronic presentations, and document cameras motivate many students. Athans and Devine recommended allotting resources to support the use of technology in rural schools to ensure teachers have sufficient training on implementing educational technology in the classroom

According to Spector, Johnson, and Young (2014) “technology involves the application of knowledge to achieve a practical purpose valued by a group or a society; technologies may involve tangible devices as well as the systematic knowledge involved in the creation of a variety of benefits to groups and society” (p. 2). This definition suggests technology acts as a facilitator of education, and should not be the focus of instruction. There is sufficient evidence that suggests educational technology results in increased levels of student performance when used effectively. Walker Beeson, Journell, and Ayers (2014) compared the instruction of two high school government teachers during the 2012 presidential election. Both teachers benefitted from one-to-one laptop initiatives in their schools. Each student had access to their own device. Both teachers integrated technology into their curriculum on a regular basis. The teachers exhibited difference levels of complexity in their instruction. Walker Beeson et al. attributed the

differences to the teachers' technological knowledge as it relates to their teaching practices.

Friedman and Garcia (2013) suggested that electronic devices such as iPads are being used in more social studies classrooms. There is a gap in the scholarly research on the effectiveness of using mobile devices in instruction. The authors' study examined the use of iPads to explore how a specific application (Explore 9/11) impacted social studies instruction. The application included primary source narratives relating the War on Terror in an United States History course. The study found that United States History students who used iPads had positive experiences interpreting primary source documents.

Bergmann and Sams (2012) suggested flipping the classroom by assigning video or audio lectures as homework prior to the regular meeting time. Sweet (2014) identified micro lectures as being an integral piece of the flipped classroom. Sweet indicated that assigning micro lectures supported student-centered learning. The role of the teacher in the flipped classroom is to offer support to students who are applying knowledge that appeared in the micro lectures before class. Tucker (2012) also explained that flipping the classroom allows students to use the content that they learned in the video or audio lectures that may require additional support from the teacher. Brame (2013) explained the flipped classroom in relation to Bloom's Revised Taxonomy. Students are expected to do lower-level thinking on their own and attempt higher level skills like application with support of the teacher and competent peers. Blair (2012) made the contention that when

the lectures are de-emphasized in the classroom, it opens up opportunities for in-class enrichment activities.

Fulton (2012) outlined the advantages of flipped classrooms. Fulton stated that the use of technology when flipping the classroom is flexible and appropriate for 21st century learning. Flipping the instruction in the classroom allows for more efficient use of class time. Fulton stated that teachers have more opportunities to perform formative assessments to check for understanding when the students are applying knowledge in the classroom. Fulton reported that teachers who flip their classroom see increased levels of student achievement, and engagement.

Literature Related to the Methods

According to Yin (2009), the research design is the intended plan for the study. Researchers must be mindful when choosing the research questions, collecting data, and analyzing data when they are selecting a research design. Creswell (2007) explained that researchers prefer qualitative research designs to study problems when quantitative statistical analysis cannot answer the selected research questions. Qualitative research allows the researcher to examine the actions and perceptions of the participants in the local study rather than relying on the literature. Utilizing a case study research design is appropriate to this research study because a case study allows the researcher to examine cases in depth (Hatch, 2002). In this research study, the cases consist of the Grades 7–12 social studies teachers with more than 3 years of experience at two different school

districts. The social studies teachers in these schools have a knowledge of differentiation techniques that they use to address the factors that impact academic performance.

Yin (2009) recommended using the case study approach to help describe real life situations that cannot be explained using quantitative methods such as interviews or observation. In addition, Yin suggested using a case study research design when dealing with real life contexts in which the researcher has little control over the situation. Using a case study design is not necessarily to generalize information to all situations; case studies are meant to help with particular issues as they relate to individual cases (Stake, 1995). Understanding how DI strategies are used to improve academic performance in Grades 7–12 social studies courses will help the researcher correct the problem at the local school district.

Literature Related to the Use of Differing Methodologies

Differing methodologies may be used to research the topic of how social studies teachers differentiate instruction to improve academic performance. In this study, a case study is appropriate for understanding why the small local school district has experienced a decline in academic performance in social studies courses. The other research types would be less effective than the case study approach. Narrative research only focuses on the experiences of a few participants to tell a story that is not pertinent to developing a list of differentiated teaching strategies in multiple school districts. Phenomenological research is used to discover a shared phenomenon. Ethnographic research relies on a particular cultural group, and programs for teachers need to be appropriate for teachers of

all cultural groups. Grounded theory asserts that a theory does not exist for this research. There are theories that exist about DI. As a result, I ascertained that case study research was the most appropriate approach to the research study.

Summary and Implications

The preceding literature review illustrated multiple views and research that addressed DI and the factors that contribute to declining academic performance. There is a gap in the scholarly literature because the research does not explicitly examine the impact of using DI in a Grades 7–12 social studies classroom. More research is required to discover the effectiveness of implementing DI in Grades 7–12 social studies instruction, and the literature review will help me draw conclusions based on my research with social studies teachers who teach Grades 7–12. The following section will describe the methods and approach I will use to conduct the research, as well as provide an overview of the setting, sample, instrumentation, and data analysis.

Strengths

A wealth of research exists on DI and the factors that lead to declining academic performance. However, when focusing on DI in Grades 7–12 social studies classrooms, the research is very limited. The existing research on DI is not without its strengths. Reviewing the literature on DI and factors that contribute to declining academic performance revealed many themes about the benefits of differentiating instruction. Many of the reasons for declining academic performance in Grades 7–12 social studies are similar to those in other subject areas, such as ELA, science, and mathematics.

Limitations

One limitation derived from researching DI was that there is no official definition of what DI entails. There is a plethora of instructional strategies that fit the overarching title of DI, but there is not a single prescribed way to differentiate instruction. Most of the research studies conducted on DI noted a lack of existing research and recommended more research be done focusing on the effects of DI. Given the limitations of the existing literature, investigating how social studies teachers who teach Grades 7–12 use DI to improve academic is necessary to add to the body of research related to DI.

Implications

There is a need for more research on how social studies teachers who teach Grades 7–12 use DI to improve academic performance. Without further study into ways social studies teachers who teach Grades 7–12 use DI in social studies, academic performance could continue to decline. Teachers need to use DI to address the needs of the students in their classroom to improve academic performance.

The purpose of this qualitative case study was to examine a sample of nine social studies teachers who teach Grades 7–12 to determine how they use DI strategies and describe the professional development they have had on using DI strategies. I also examined how administrators view DI. Examining how social studies who teach Grades 7–12 use DI strategies in this local setting provided insight into how teachers can improve student performance in Grades 7–12 social studies classes. This study could potentially add to the existing literature on the factors that contribute to declining

academic performance and differentiating instruction in Grades 7–12 social studies courses.

Section 3: Research Method

Introduction

The purpose of this qualitative case study was to examine a sample of nine social studies teachers who teach Grades 7–12 to determine how they differentiate instruction and describe the professional development they have had on differentiating instruction. Three administrators were also interviewed to examine their views of DI. The study investigated instructional strategies that teachers use in the classroom to promote the academic success of all pupils. In addition, the solutions that teachers recommended to improve students' performance in their courses were analyzed.

A description of the methodology that was used to conduct this qualitative case study is included in this section. A description of the research design and the rationale is provided and the research questions are restated. In the section, I discuss the setting, the members, and the sampling technique; the role of the researcher; and a discussion of the data collection instruments that were used to conduct the study. The section ends with a description of the data collection procedures, the data analysis plan, and the strategies that I used to ensure the trustworthiness of this study.

This study was a bounded qualitative case study in approach and design. Yin (2009) defined a case study as an empirical examination. According to Hammonds, Matherson, Wilson, and Wright (2013), case studies investigate a phenomenon in a particular context. A case study is especially useful when the boundaries are not clear between the real-life context and the phenomenon. Stake (1999) posited that case studies

are used to understand something and allow researchers to examine the data for meaning throughout the research process. I studied social studies teachers who teach Grades 7–12 at two small local school districts in order to gain a deeper understanding of how teachers use educational technology to differentiate instruction with varying levels of social studies classes. Yin suggested that case studies examine small group behavior. For this reason, I interviewed a small group of social studies teachers who teach Grades 7–12 from two small school districts to learn more about how they differentiate instruction in their classrooms and learn more about the professional development they have had on differentiating instruction.

The situation that I considered in this case study is the strategies teachers use to implement DI in social studies classrooms and the professional development they have had on differentiating instruction. Creswell (2007) suggested selecting a case that would offer multiple perspectives when conducting a case study. Within this study, I attempted to understand the experience through the multiple perspectives of social studies teachers who teach social studies at every level of social studies Grades 7–12, as well as the perspective of two administrators.

Another method considered for this study was ethnography. Ethnography varies from case study in that its primary focus is understanding group behavior and that observation is the main data source. Mangal and Mangal (2013) contended that ethnography is a recommended qualitative method when researchers want to describe rich narratives and/or conditions from a cultural perspective.

Another qualitative research method commonly used in educational research is grounded theory. Johnson (2014) explained that grounding research in larger bodies of research strengthen the contextual nature of a research study. What distinguishes the grounded theory from other qualitative research methods is that it sets out to find a theory and to understand the research in the present context. Although grounded theory methods are used to gain understanding and explain some issues, the case study was deemed more appropriate to meet the objectives for this study. I did not study a group in a cultural context, and I did not attempt to construct a theory. This qualitative case study was designed to expand my understanding of how social studies teachers who teach Grades 7–12 differentiate instruction to help struggling students.

Research Questions

The diverse academic needs of students within certain contexts inform decisions pertaining to how to most effectively implement best DI (Watts-Taffe et al., 2012). Based on this idea, I have designed the research questions for this study to provide deeper understanding of how social studies teachers differentiate instruction at varying levels of social studies. The research questions are as follows:

Research Question 1: How do social studies teachers, who teach Grades 7–12, describe the ways they differentiate instruction to help struggling students?

Research Question 2: How do social studies teachers, who teach grades 7–12, describe their professional development for implementing DI?

Research Question 3: How do administrators view DI?

Context for the Study

The study was conducted in a northeastern state of the United States in two small school districts that I was not employed at during the course of the study. Each of the school districts has been given pseudonyms. One of the districts, Valley Central School District, had seen a decrease in academic performance in social studies and had attempted to address the issue by creating multiple academic intervention service classes for struggling social studies students. The other school district, Spring Lake Central School District, had seen improvement in academic performance in social studies. Spring Lake Central School District has on-going professional development to assist the faculty improve their instructional techniques.

Role of the Researcher

Stake (1995) described the multitude of roles that the researcher takes on, such as teacher, evaluator, and interpreter. I am a former social studies teacher in one of the school districts where the study took place. For this study, I was responsible for data collection and analysis, as a single researcher typically conducts most qualitative studies. I interviewed the participants and evaluated their responses to the interview questions. According to Rubin and Rubin (2005), the researcher puts participants' experiences into words. I interviewed nine social studies teachers who teach Grades 7–12 and three administrators and created a written description of their multiple perspectives on how to differentiate instruction to improve academic performance.

Selection of Participants

Hatch (2002) stated that selecting members to participate in a study and inviting them to participate in a study are integral steps in designing a research study. Hatch believed that selecting the appropriate participants and formulating good working relationships with them is crucial to the success of a qualitative study. According to Merriam (2009), a sample is intentionally selected to yield the most information possible. Teachers in the study school districts who had familiarity with DI and used it in their social studies classrooms were invited to participate in the study. Observations were conducted on selected members of the sample to collect additional data on their differentiation strategies. I asked the participants if I may observe their classroom so additional data could be collected. I asked for copies of any documents used during the lesson and a copy of the lesson plan.

Hatch (2002) made the assertion that the sample size is dependent on the type of study is planned, its purpose, and the questions that the study is trying to answer. Hatch contended that researchers need to balance breadth and depth when selecting the number of participants. Hatch also posited that researchers could spend more time getting in-depth with a smaller group of participants. Hatch cited Kvale's advice to interview as many people as needed to answer the questions you need know. Specifying the projected number of proposed participants and estimating the amount of time spent with them is a fundamental element of qualitative design (Hatch, 2002).

The criteria for participants in this study were teachers who taught social studies at the 7–12 grade levels in two small school districts in a northeastern state or were an administrator at one of the districts. There was a population of nine potential participants who fit the criteria for this study. Each of the members of the social studies departments within each school district met the inclusion criteria for the study. The school districts that I investigated in my study have small social studies departments, so the potential participants were limited. One of the school districts has six social studies teachers for Grades 7–12 and the other has three social studies teachers who teach Grades 7–12. The background of each teacher participant can be found in Table 1. Each of the school districts has been assigned pseudonyms and the teachers were assigned letters to protect their identities. I verified that each of the participants had been teaching for at least 3 years with an administrator. By interviewing nine social studies teachers who teach Grades 7–12 and three administrators, I hoped to gain a breadth of information on how social studies teachers use DI to improve academic performance in social studies. Additionally, I observed the classroom lessons of all the participants who differentiate instruction for struggling learners. I selected the teachers who felt comfortable demonstrating how they differentiate instruction for struggling learners. I retrieved the e-mails from the school websites of each school. I e-mailed all of the potential participants through my private e-mail and informed the potential participants of the nature of the study, described the data collection process, and invited them to participate in this study. I presented each of the participants with a consent form to sign if they agreed to

participate. By signing the form, the participants agreed to take part in one 30–45-minute interview. The consent form also stated that the social studies teacher may be observed teaching a lesson in the classroom if they were willing to be observed (Appendix A).

Table 1

Background of the Teacher Participants

Teacher	Years of Teaching Experience	School District
A	9	Spring Lake Central School
B	4	Valley Central School
C	14	Valley Central School
D	3	Valley Central School
E	11	Valley Central School
F	14	Spring Lake Central School
G	9	Valley Central School
H	7	Valley Central School
I	17	Spring Lake Central School

Methods for Ethical Protection of Participants

In this study, I made sure to address the ethical protection of its participants. Yin (2009) and Stake (1995) recommended devising a plan to illustrate the protection of human subjects in a study. Protecting human subjects can be achieved by gaining informed consent from the participants, protecting participants from harm, providing confidentiality, and taking precautions for vulnerable groups (Stake, 1995). I informed

the participants that participation in this case study was voluntary. The consent also informed the participants of their right to withdraw from the case study at any time. Measures were taken to protect the confidentiality of the participants. Creswell (2007) suggested using pseudonyms in qualitative research to protect the confidentiality of individuals and places. In order to protect the participants' privacy, the school administrators at each of the three schools were not aware of who agreed to participate in the study. The interviews occurred in secure locations that were convenient for the participants. In the event that the participant was unable to schedule a time for a face-to-face interview before the end of the school year, I offered the option of conducting the interview via a secure phone connection. Each interview was audio taped and transcribed. Assigning each participant and school a pseudonym ensured their confidentiality. Storing the audio tapes and transcriptions in a secured location at my home also preserved confidentiality. The content of the audio tapes and transcriptions are not available to anyone other than me and will be discarded after 5 years, as suggested by Creswell (2009).

Data Collection

Data collection commenced following Institutional Review Board (IRB) approval. I contacted each participant via private email to set up a time to conduct the 30-45 minute semistructured interview. Signed consent forms from the participants were obtained at the beginning of the interview. I obtained the contact information for each participant on each school's district website. The purpose of this qualitative case study was to examine

a sample of nine social studies teachers who teach Grades 7–12 to determine how they DI and described the professional development they have had on differentiating instruction. In addition, two administrators were interviewed to examine how they view DI.

Before collecting data, I obtained permission to conduct the study in two different school districts. Letters granting permission to conduct the study were obtained from each school district's superintendent. I gained approval to conduct the research study from Walden University's Institution Review Board (IRB) on September 10, 2015. The IRB approval number is 09-09-15-0082772. The two categories of participants for this case study include (a) teachers who teach social studies Grades 7–12 with at least three years of teaching experience and (b) administrators of a school district.

Interviews

During the data collection process, I conducted semistructured teacher interviews and administrator interviews. To begin the semistructured interviews, I used the interview guide for teachers (Appendix C) and interview guide for administrators (Appendix C). I used the interview guides to enable me to ask the participants the same group of questions. A convenient time to conduct the interview for each participant was arranged via e-mail. The teacher interviews consisted of 13 open-ended questions and additional follow-up questions where appropriate, as described by Hatch (2002), to learn about the experience of the participants. The administrator interviews consisted of five open-ended questions with follow up questions where appropriate. Each face-to-face interview lasted

approximately 20 minutes. The interviews were conducted in a secure location to minimize distractions. I used two different recording devices to record the interviews. The data were stored along with my field notes and transcripts on a USB drive and stored in a secure location in my home. I interviewed nine social studies teachers who teach Grades 7–12 about how they differentiate instruction for struggling students. The participants' explanations led to a rich pool of data that informed my findings on the DI strategies social studies teachers who teach Grades 7–12 used to help struggling students. Also, I interviewed three administrators to find their views on DI. I assigned each teacher a letter and each administrator a number to protect their identities in this research study. After the interviews, the data were transcribed as soon as possible after recording and analyzed the findings. The transcriptions were shared with participants to check for accuracy.

Observations

In this study, I observed classroom lessons of nine social studies teachers who teach Grades 7–12. The observations were conducted for triangulation purposes. I created a form to collect data from observations loosely based on Merriam's (2009) six criteria for conducting observations (Appendix D). Merriam suggested including the following criteria when performing observations: setting of the observation, participants in the study, activities in the classroom, conversation and interactions, subtle factors, and the actions of the researcher. I incorporated the criteria outlined by Merriam to suit the needs of my study.

Merriam (2009) described the first criterion, physical setting, as the overall atmosphere in the classroom that is being observed. I observed how the teacher used the classroom for instructional purposes, used resources in their instruction including, but not limited to, educational technology. The second criterion involved the participants in the study. Merriam suggested that the research should document how many people are in the classroom, and the roles that each member played in the classroom. Merriam suggested that activities and interactions in the third criterion should describe the interactions that transpire among the subjects, including the procedures that have been established and the time allotted for the activities. For this study, I provided descriptions of the objectives outlined in the lesson, as well as the methods that the teachers used to meet the prescribed objectives. I also described the types of assessments that were used to evaluate student learning.

In the fourth criterion, Merriam (2009) suggested monitoring the conversations that take place during the observation and noting who is speaking and/or listening. I observed the conversations that occurred between the students and the teacher during the observed lesson. Merriam stated that there are subtle factors that are often unplanned or informal activities in the fifth criterion. For the purposes of my study, I looked for evidence of any unplanned or informal activities during the observed lesson.

Merriam (2009) noted that the researcher takes on a role in the observation just as the participants being observed. The final criterion was researcher behavior. Merriam thought it was imperative that the researcher realizes that their role is to act as an

observer. Researchers need to be mindful of what they are thinking about and what they are observing because that will be included in the field notes. In my study, I was the observer as participant and my role was to collect data. I also included reflections on my behavior in the classroom during the lesson.

The nine social studies teachers who were observed were the same group of teachers who were interviewed. The social studies teachers signed a consent form (Appendix A), and I scheduled specific times and dates for the observations. Each observation included one complete social studies lesson which lasted approximately 38 to 42 minutes. I served as a nonparticipant observer and used the observation form (Appendix E) to document the teachers' use of DI strategies. I noted several factors about the lesson I observed such as the physical setting, the role of the participants, the objectives of the lesson, activities, assessments, and nonverbal communication. The data collection process spanned 2 weeks. After the observation was over, I thanked the participant again for his or her cooperation.

Documents

The data collection involved collecting various documents from the teachers. I visited the classrooms and reviewed documents such as assignments, note packets, and completed projects on display. Also, I reviewed a schedule of the professional development for Spring Lake Central School and a copy of the curriculum planning materials from Administrator 1. The documents are stored in a secure location in my home, and the digital files have been stored in a password protected file on my computer.

The documents have been kept locked in a file cabinet and on a password-protected computer file on my personal computer that I stored in my home and will retain the data for 5 years.

Data Analysis

A digital recording device was used to record the interviews, and I used a smartphone as a backup. Upon completion of the interviews, I transcribed the data from the digital recording device into Microsoft Word documents. To protect the identity of the participants, I assigned a letter to each participant. After the data collection process had ended I stored the digital recording device, and the transcribed documents were stored in a secure location at my home. In the second stage of analysis, I examined the categories encompassing all of the data from the interviews, observations, and documents using the constant comparative method recommended by Merriam (2009). Using a constant comparative method assisted me in the identification of emerging themes. According to Stake (1995), a case study includes a thematic analysis of the data. I made an attempt to identify relevant themes, and the data were reviewed for general ideas that may address the research questions. As the general ideas emerged, I color-coded the data to aid in its sorting.

After reading the transcripts, I summarized each participant's responses to each interview question in separate files, looking for themes and ideas that addressed the research questions. Based on the existing literature, many topics were expected such as professional development, educational technology, and various differentiated teaching

strategies. Some of the participants from one school district had strong opinions on the lack of substantial professional development in both integrating educational technology and DI.

I forwarded the coded data to my doctoral chair to identify any themes and patterns that I did not identify. I adjusted the themes, as deemed necessary. I used the coded data to address each research question. Study results were released to the participants within 1 month of completion and final approval of my doctoral study.

Methods to Address Validity and Trustworthiness

Creswell (2009) described validity as a method used to check for accuracy of the findings. I ensured the validity of this study by triangulating the data gleaned from the interviews, observations, and data collected from the selected documents such as lesson plans and documents used during observed lessons. Data triangulation is the process of using multiple data sources to substantiate findings in a study (Creswell, 2007; Hatch, 2002; Yin, 2009). Yin (2009) made the assertion that the results of case study research are perceived as more credible if multiple sources of data inform the findings. Stake (1995) recommended that researchers check the accuracy and authenticity of the research by using triangulation. By interviewing nine social studies teachers who teach Grades 7–12 and three administrators and observing nine social studies teachers, I attempted to compile a list of differentiated strategies that have been successful in Grades

7–12 social studies classrooms. According to Creswell (2007), triangulating multiple sources of data to identify emerging themes is considered a valid method to address validity and trustworthiness in a study.

According to Creswell (2007), establishing a procedure for discrepant cases strengthens the credibility of the study by determining any discrepancies in the data. I asked the social studies teachers to share their perceptions of their experiences during the interview process. I shared the transcripts of the interviews with the participants to verify the accuracy of the transcriptions in order to clarify statements that were unclear. In the event of discrepant cases, I asked participants follow up questions during the data collection process. Creswell explained that paradoxical evidence provides a rationale for emergent data. I took the experience of the participants and the context of their perceptions into consideration while analyzing the data. A one to two page summary of the results from the study was created and was shared with the participants from the two school districts who participated in the study.

Summary

Section 3 included a description of the qualitative case study methodology that I used in this study. I also described the context of the study, as well as its participants. I summarized the sampling technique that was used in this study, my role as the researcher, and the data collection instruments, including the teacher interviews. In addition, I also presented the data collection plan, the data analysis plan, and the strategies I used to enhance the trustworthiness of this qualitative study.

Section 4: Results

Introduction

In this study, I explored social studies teachers' perceptions of their differentiation practices and the professional development they have received. I examined various DI strategies and inquired about the types of professional development each teacher has received. I also investigated administrators' views of differentiation and what professional development was available in their school districts.

The Findings

Section 4 includes first the process by which data were generated, gathered, and recorded and the systems used for keeping track of data and emerging understandings. Second, the findings are presented, including discrepant cases and nonconforming data, patterns, relationships, themes, and salient data. Third, and finally, the evidence of quality concludes the section. In this study, I explored social studies teachers' perceptions about their differentiated practices and ways that they promoted continuous learning for struggling students. I also investigated instructional strategies and practical methods participants used to differentiate instruction for struggling students, including the obstacles and barriers that participants faced as they implemented DI for struggling students.

Interviews

The participants in this qualitative case study appeared relaxed during the interview process. I included probing questions, when appropriate, during the interview process to gather additional information about how social studies teachers who teach

Grades 7–12 DI for struggling learners. Each teacher participant shared their insights on DI and exhibited transparency by describing how they DI in their classroom. Participants also discussed their professional development experiences. The participants discussed what types of professional development they felt they needed to improve instructional strategies.

The data suggested that the participants from Valley Central School felt a need for additional professional training opportunities in DI for struggling learners. Participants from both schools indicated that they would like to have more opportunities for collaboration with other social studies teachers. The participants felt that they would benefit from an increase in planning time to organize and plan differentiated lessons for struggling learners. I organized the findings of this qualitative case study around the research questions and emergent themes. The next section includes an in-depth discussion of the emergent themes.

Results from Interviews

DI Practices

The social studies teachers in this case study shared their perceptions about how they DI for struggling learners. During the interview process, participants shared similar perceptions related to their DI practices. The participants' responses helped me to understand how to answer the first research question, which addressed how social studies teachers describe the ways they use DI to help struggling students.

The findings from the teacher interviews showed that social studies teachers that teach Grades 7–12 described how they DI in various ways. Teachers DI by using educational technology, modifying instruction to accommodate for various learning styles, promoting student collaboration, giving students choice and opportunities for independent work, using various formative assessments as a way to review and monitor student learning, and helping students find text-based evidence for improving reading skills. The findings showed that the teachers used multiple DI strategies in a single lesson.

I asked each of the participants which strategies they used to address students' various learning levels in their social studies classes. The responses to Interview Question 2 addressed various learning levels in different ways. The participants' responses identified strategies teachers used to assess students' interest level, prior knowledge, or learning style to meet struggling students' educational needs. The social studies teachers perceived DI as a valid method to increase students' academic performance. Some of the teachers focused more on actual strategies than others. The strategies included collaborative learning activities, various reading strategies that included indentifying text-based evidence, questioning techniques, using technology such as Google Classroom and presentations, and modifying instruction to address various learning styles and educational needs of the students.

Teacher A used a number of different activities. The teacher described a typical lesson:

We might start with a 5-minute activity, move on to a 20-minute activity, and maybe end with a 10-15 minute activity. Try to address the different learning modalities and styles of the students and a lot of times, it's different types of assessments. It's not all just one form of assessment. There might be verbal questioning. There might be group work. There might be group discussions where the students are the ones giving the information. In the classroom, there are independent as well as collaborative activities going on.

Teacher B described his reading and writing strategies to support struggling learners. Teacher B works mostly with struggling learners and always chooses reading and writing strategies that are at each student's level basic reading and writing skills. Teacher B gives students close readings aligned with their reading level.

Teacher C described using the SQ3R method, which is a reading comprehension strategy that asks students to survey, question, read, recite, and review the material. Teacher C explained that using this method gets the students thinking about what is going on and when the students read it independently at home they already have a general idea about the material. The teacher uses a survey method in various projects. For example, the teacher used a map of different Native American tribes, and the students were going to choose one to do independent research on and design a web page.

Teacher F listed multiple strategies that he uses to differentiate for various learning needs. Teacher F talked about recently using more strategies that integrated educational technology, especially with accommodating for different reading levels. The

teacher used different websites that change the Lexile levels of readings that have been helpful for addressing various learning needs. Teacher F said that he got some students in 9th grade that are at third–fifth grade reading levels. Having students at below grade level reading levels is problematic when high school social studies students are required to analyze primary historical sources, and that is when the websites that have readings with different Lexile levels become an extremely crucial resource.

Teacher F said that Spring Lake Central School District has a very close relationship with the special education department. Teacher F discussed the transition to a coteaching model in recent years at Spring Lake Central School District that services weaker students who need more support. In addition to having a cotaught social studies class, the students also get an extra resource period with a special education teacher. Teacher F thought this coteaching model coupled with resource class to reinforce the material by learning with different strategies. Teacher F said students do better on assessments with the extra support that is provided by the co-teaching model.

Teacher G uses questioning techniques to activate students' thinking skills. To accommodate the extra support some struggling students need, the teacher tries to meet with students during a planning period to build up the students' confidence levels. Teacher G felt that having completed notes allowed the students to be more interested in class discussions rather than struggling to keep up with the notetaking process. The teacher asks the students to bring highlighters to class and the key information is underlined or italicized in the notes before to the lesson. Teacher G likes to emphasize

vocabulary, so students get exposure to the key vocabulary terms more than a week in advance and have some experience with receiving previous exposure to that material. Previewing vocabulary helps to promote discussion of the content, rather than to teach the vocabulary in class notes. Exposing the students to vocabulary in advance allows the students to gain prior knowledge relating to the topics that are going to be discussed in class.

Teacher I said it takes the time to determine the learning styles of the students in the classroom. The students could be auditory learners or students who are kinesthetic or prefer learning with technology. The teacher acknowledged that some struggling learners have Individualized Educational Plans (IEPs), but that only gives the teacher a limited picture of how the students learn best. Teacher I explained:

[IEPs] only tell you what the requirements are; whether it's using guided notes or whether it's using different instructions, and separate location and things like that. So, it comes down to knowing the needs of your students because you have ...to use strategies that you don't gear everything one way because then you lose these group of students.

Teacher I's approach to addressing various learning styles is to use a variety of instructional strategies. The teacher recognized that some students benefit from collaborating with their peers on projects. Sometimes a student needs a little more explanation so the teacher will pair them with somebody who is of higher level who can explain to them or help them through the levels at a group or a partner project. Some

students are primarily auditory learners, so they need interaction with the teacher and lecture or discussion to be more successful.

The social studies teachers acknowledged the different learning styles such as visual and auditory learners and gave examples of things they do in their classes to address these different learning styles. Teacher C uses pictures to help visual learners and uses the Socratic method to aid auditory learners. Teacher C assigns readings and then previews the reading looking at pictures because some the students are visual learners. Teacher D also addressed visual learners by using maps during instruction uses group activities to get the students “up and to move,” which would help kinesthetic learners. The teacher said some of her students seem to prefer book work and using maps. Teachers D, E, and H discussed using technology and graphic organizers to meet the educational needs of the different learners in the classroom.

In Interview Question 3, I asked each of the participants to briefly describe their process of planning a differentiated lesson. The responses described the methods in which the social studies teachers addressed the content, the factors they considered in the process of planning a differentiated lesson, and the intended product of the lessons.

Teachers had different processes for planning differentiated lessons.

For Teacher A, the planning process is guided by the makeup of the students in the class. Some students need additional support, and that requires different strategies. Teacher A said differentiation could simply be modifying the number of questions students have to do. Teacher A described one approach to modifying instruction:

With digital documents, sometimes what I will do is come around individually to students and maybe just subtract a little bit of information that they have to find. For example, right now the 7th graders are doing a research organizer for Native Americans. Six things they have to find. Some of the struggling learners, I'll eliminate two or the lesser questions and get them down to four things, so they are focusing on less information but doing a good job in that.

Teacher A also DI by allowing students an element of choice in certain activities.

Teacher A described a project that presented some Native American tribes, and the students were able to choose the tribe that appealed to them most for their project.

Teacher B's planning depended on what was going on in the regular social studies classes. Teacher B teaches a resource lab that focuses on social studies content. If there is a vocabulary quiz coming up in social studies, the teacher will plan activities that use vocabulary review strategies. The teacher will help students with essay planning strategies if students are assigned an essay in the regular social studies class. Teacher B plans ahead whenever possible to select appropriate resources and activities. For example, Teacher B said the Global History 9 class will be studying Egypt soon, so they will find appropriate readings on Egypt that reinforce the content. Teacher B supplements the social studies content in the class and offers students support when he is coteaching Global History 9.

Teacher C gives the students choices during certain activities. If the goal of the project is to conduct research on a specific Native American tribe, the teacher allows the

students to choose the tribe they will research. Teacher C determines where the students' interests lie, and then tailor the instruction to consider the students' interests. Teacher C added, "students buy into it more because they feel they have a stake in it, and it's just more interesting to them." Teacher C believed allowing the students to have "buy-in" is very important.

Teacher D gets to know her students and that allows them to plan effectively. According to Teacher D, getting to know the students allows her to know whether a specific objective is going to be achievable. Teacher D modifies instruction by asking students questions throughout the lesson. If the students do not seem to comprehend the social studies content the teacher modifies her instruction to meet the needs of the students. Teacher D also takes inventory in the materials at her disposal then plans from what is available for her to use. The teacher also plans for the unexpected, as well. For example, the Eno board might not be working properly one day, so it is necessary always to have a backup plan.

Teacher E reflects on students and the difficulties students have when choosing assessments. Teacher E plans assessments that are reflective of the summative state examination. Teacher E plans instruction with the summative assessment in mind. The teacher modifies instruction when students are struggling with the content.

Teacher F said his planning process has changed because Spring Lake Central School has adopted cotaught courses in social studies. Teacher F has common planning time with the special education teacher, and they brainstorm about differentiated

strategies they could use in their instruction. When there is a coteacher in the classroom breaking students up into different groups is an effective strategy.

Teacher F indicated that they gave students choices with certain assessments like projects, presentations, or portfolios. The teacher gives the students different options because various assessments can show that the students understand the material. The problem is that with the state test, there are multiple choice questions, and two essays so the teacher feels compelled to incorporate those assessments as much as possible.

Teacher G consults with the dual certified special education/social studies teacher when planning instruction. The special education teacher offers to help plan instruction because they get to know the students for a couple of years in a resource setting rather than meeting the students for the first time at the beginning of the school year. Teacher G has a standard method of planning a lesson and then modifies the plan depending on the specific classes' needs.

Teacher H said he has “differentiation baked into the course, because if it’s going to help some people, then it’s probably going to help everybody.” The teacher uses technology regularly, and they use graphic organizers for the younger classes. In the past, Teacher H had students draw a profile of a person out of a fishbowl that included their occupation, their age, and if they had any family and then the student assumed the role that person. Once the student assumed his or her role, they selected out of the fishbowl, and the student had to fill out the taxes for that person. Teacher H proclaimed “Not that

you wouldn't want to have every day be interesting and fun, but sometimes you have a topic where a certain activity...could work if I did something with it.”

Teacher I found it difficult to write lesson plans to differentiate instruction. Teacher I explained that he has been teaching for 17 years, and does not always write down how they differentiate instruction; they just do what they feel students need inherently. The teacher said that when they cover material that is more complex they try to describe it in at least three different ways. Teacher I explained, “I'll do it the way it's presented then I will say it again using different words then I'll say it the third time using different words and each time I try to relate it closer to their experience.”

All of the participants seem to have a good sense of what the social studies content is in their classes, and the teachers knew what they wanted the end product of their instruction to be. For example, Teacher C wanted the students to make a website for a Native American tribe, and Teacher H wanted to do an activity that dealt with taxes, having a student assuming the role of another person. Teachers C and H focused mostly on content and product. The interview with these two teachers did not include a discussion of the process for differentiating instruction. Teachers A, F, D, G, and I talked about how they modified instruction. Teachers A, F, and I talked about the product or the assessment when discussing how they planned lessons. Teachers G and D talked about how they modified instruction, but they did not talk about the product or the assessment. Teacher B differentiated according to the content of the course he co-teaches, with but

did not elaborate on the actual process of planning a lesson. Teacher E talked about content and assessment but did not mention product or process.

Interview Question 4 addressed the types of educational technology the teacher thought would help them better meet the needs of students the classroom. Most of the teachers used some type of educational technology in their lessons. The responses included the use of technology such as web 2.0 tools like Google Classroom, Castle Learning, Quizlet, Eno boards, iPads, laptops, Chromebooks, and educational software.

Teacher A said the district had been given the gift in the one-to-one laptops for the students. The teacher uses Google Classroom to send instructional materials to students before a lesson. Students are also able to type responses on their laptops and email responses to the teacher if the student has deficits in writing. Sometimes students dictate assignments using Dragon dictation or create podcasts. Teacher A thinks that having as much technology as possible will help struggling students.

Teacher A discussed that they used a flipped classroom model in their classes. Teacher A explained that many students were struggling with writing abilities and could not complete larger tasks. Teacher A explained to address this issue:

I decided that the ability to define vocabulary words and completing simple questions based on readings were skills that did not necessarily have to occur in the classroom...They come in with the work done, and we were able to, instead of doing notes every day, get it down to (taking notes) 2 days a week at most. It was nice having the students know the content when they came into class. They

already knew some of it; they might not be perfect in it, but it gave me more time to devote those other three days a week to harder tasks, maybe research-based stuff, essays, document-based questions, and discussions, so it has worked fairly well for that.

Teacher B did not use a lot of educational technologies. The teacher uses Quizlet with some students when there is an upcoming vocabulary quiz in the regular social studies class. Teacher B would like the students to use I-Movie because it is user-friendly. Teacher B explained that students like movies and could make movie trailers that have a beginning, middle, and end, that is about 2 minutes long. Teacher B likes the idea of having struggling students make movie trailers because they are familiar with movie trailers. For example, Teacher B explained, “the students could make a movie trailer on the Punic Wars, and then an essay comes on the Punic Wars...students are going to know that stuff.”

Teacher C said they would like to have a working document camera. The document camera in his classroom is broken so by not having it makes it difficult actually to write or show examples projected on the Eno interactive whiteboard. The teacher said they would prefer to have a Smartboard instead of an Eno board. The Eno board is all centered on a stylus “that tends to go out of focus a lot, and it is something that has gotten to the point where I don’t even use the Eno board as an Eno board, it’s just a marker board at this point.”

Teacher D felt Chromebooks would work very well in her instruction. The teacher found that the iPads were not as user-friendly for the students. Teacher D said the students seem to respond well to activities that use Chromebooks. Teacher D said a document camera would work for the visual learners, and that she likes the Eno board because she can zoom in and out, and that helps them a lot.

Teacher E said the main educational technology that they would like is “a Smartboard that consistently works.” Teacher E has an Eno board in her room, and her stylus doesn’t work. Teacher E uses Chromebooks to access the online database Castle Learning as a tool for review. Teacher E has been utilizing Google Classroom for students to submit assignments.

Teacher F mentioned the one- to- one laptop program. Spring Lake Central School also has a cart of iPads that helped with differentiating instruction. Teacher F said using technology opens the lines of communication between students and the teacher. When students are using their laptops, they can submit their work at any time. Students can inquire about assignments when they are absent, and the teacher can send the assignment electronically. Having access to the laptops gives the students more opportunity to access things like notes posted on Google Classroom. Teacher F said he posts the class notes before class time, and it gives students more time to process this information. Teacher F said access to technology has helped struggling students improve their academic performance.

Teacher G has a class set of iPads and attempts to use them as often as possible. Some students who struggle with writing use software such as the Dragon Dictation to respond to learning tasks. Teacher G stated:

I'm sure there's a laundry list of things I could go through that would be fantastic, but being realistic, as often as we can get a piece of technology in their hands that can be beneficial and I'd let them study using their phones... There are some great apps that have significantly helped the students. I'm big on using Quizlet.com... because that's part of the built-in vocabulary that I use.

Teacher G was getting more involved in using Google Classroom. The teacher felt that students were responding positively to that. Teacher G explained, "There's something new, and there's a little level of discomfort now that something is different, but things like that are going to be very beneficial in the long run for the kids."

Teacher H stated, "I guess, in like a dream world, it would be great if everybody had a laptop. I know that schools have done that and schools have been doing that for a while." Teacher H has a set of iPads in his classroom and uses a computer lab for student research. The teacher said they have an Eno board, but they do not use it. Teacher H explained:

The Eno board would take a long time to calibrate and then it just didn't work out as well. It's like the best thing ever and then it's like, 'this isn't working, why not?' So you got to have all your ducks in a row and something that's not as reliable, I tend to shy away from I guess.

Teacher I also mentioned the laptop program and access to iPads. All of the students at Spring Valley Central School have access to Google Drive, and the teacher sends the notes to students electronically in some of his classes. Teacher I perceived technology can be wonderful but is sometimes a trap for teachers. Teacher I explained that instead of being a social studies teacher, they end up being a technology support person. Teacher I felt instead of teaching the students social studies, they are stuck teaching about technology.

All of the participants found incorporating educational technology into instruction useful. I sensed an underlying frustration with the Eno boards among the Valley Central School participants, as evidenced by the fact that none of the teachers used that technology during the observations. Teachers B, C, D, E, and H commented that the interactive Eno boards do not work consistently. Teacher C had a broken Elmo projector in his classroom. Five of the participants use Google Classroom, so Chromebooks and MacBooks were something that the participants felt would be effective in differentiating instruction.

Teachers C, D, E, and H believed that Chromebooks would help teachers better meet the needs of students. Teachers A, D, F, H, and I have access iPads, but they feel that they are not as user-friendly as the Chromebooks or the MacBooks. Teachers A, F, and I discussed the impact Spring Valley Central School's one-to-one laptop program has had on their ability to help struggling students. Teachers A, F, and I all use Google

Classroom and Google Drive to send students instructional materials to students before class time.

The next question that dealt with Research Question 1 was Interview Question 9. Interview Question 9 asked participants to describe a differentiated lesson that used educational technology that they felt went well in their classroom. The responses included various student-centered projects. The projects relied on Internet sources and the findings from the research were presented using educational technology.

Teacher A described a lesson on Native American tribes for her 7th grade class. Teacher A explained that the activity required students to research a certain Native American tribe. The students chose the tribe they wanted to research. The teacher differentiated the lesson by eliminating questions. The teacher would eliminate least important questions, or combine questions for students when they are looking at the databases. The teacher directed students to a certain area of a document to hone in on that information instead of them looking at several different screens at once.

Teacher B said the cotaught Global 9 class created a Greek city-state storybook. The students chose a Greek city-state and researched their culture, religion, food, and significant historical people and events. The students then had to collaborate with other students, conduct Internet research and use books to create their storybooks in PowerPoint. Teacher B stated, “I think research is a skill we kind of take for granted being teachers ...maybe ninth graders don’t know how to do yet...but we can provide those opportunities for them to learn on their own”.

Teacher C assigned a project that required students to create a “farcebook” on the Internet. A “farcebook” is like a Facebook template, and they would create a profile of a historical figure that we discussed in the class. The students created their “farcebook” in Microsoft Word, and it looks just like a Facebook page. The teacher said that students seemed to like really that project because they are all familiar with social media.

Teacher E had her AP European History create infographics for various dictators in European history. Each student was assigned a certain piece of material they were responsible for researching. The teacher shared documents with the students, and so they were able to work collaboratively on creating the infographics. Teacher E felt that the students working together on the project helped the students get more out of the assignment because they could see where other people were going, and it guided them in creating their infographic.

Teacher F described a project from his Global 9 class. The project required the students to research the five major religions. The students had to make a product based on these religions using educational technology. The students made a three-dimensional cube on their laptops and students would write information about the religion on each side of the cube. The cube would rotate and change sides when the students clicked on it. The students would present their cubes to the class using their laptop. The teacher reported that students responded well to the project.

Teacher G did a music evaluation project in their 1950s, 60s, 70s class to address social issues. The music evaluation project allows students to choose songs from a

particular decade, then conduct research on the song. The students use the iPads to access YouTube and listen to the song using headphones they brought to class. Teacher G shared that some students got excited to hear that songs they know were actually about civil rights, women's rights, or the Vietnam War. Teacher G said that the students say things like "Wow, this is not just pop music, but there are a lot of meanings." However, Teacher G's student-centered technology use in courses with a state examination focuses mainly on test preparation like practice multiple choice and Quizlet.

Teacher I described a country portfolio project for his economics class. Students were given a choice of countries to research. Students had to create a portfolio that highlighted the political, social, economic, historical, and cultural elements of the nation. The students researched their countries on their laptops. Each section of the project had to include current events that went along with the section that they were addressing. The project allowed students to plan a trip to that country. The students had to make travel plans based on the cultural research they had conducted using the actual prices of airfare, lodging, food and admission prices to tourist attractions. The students had to make a budget based on their travel plans.

Each participant described a student-centered project that they felt was effective. However, Teacher F was the only participant who described a differentiated student-centered project that was used in a class with a summative state examinations. The AP European History class did a project, and they take a state examination, but they are strong students. The Global History 10 and US History 11 teachers are the only teachers

who have a standardized test at the end of their course. Teacher E and G both said in the course of the teacher interviews that they choose more multiple-choice test preparation with the technology in their classroom. Teacher F also uses technology based multiple-choice test preparation, but he also incorporates other tasks that are not centered around test preparation.

Interview Question 5 was the last interview question that addressed Research Question 1. The question asked how the participants determined if a differentiated lesson was effective. The responses included various formative assessments like asking informal questions, tickets out the door that ask a question to assess whether they met the objectives of the lesson, and quizzes and summative assessments like benchmark exams and tests.

Teacher A will start each lesson with a review of previous content. The teacher uses a “hot seat” approach, which calls on students randomly, to make sure the same kids are not consistently answering all of the questions. Teacher A stated that if she sees a pattern of students not being able to answer a question, they will go back and cover the content to clarify the information. The teacher also uses the same strategy when passing back quizzes.

Teacher B uses formative and summative assessments to check if the students understood the content or concepts in a lesson. Teacher C checks for understanding by asking the students questions and giving quizzes and tests. Teacher C also gives a cumulative benchmark exam every five weeks. After the students take the benchmark

exam, Teacher C does an item analysis to determine what topics are problematic for students. Teacher D used formative assessments to determine if a differentiated lesson was effective. Teacher D stated:

I like to make sure that before they leave the 40 minutes if the lesson was effective or not. So, by I constantly ask questions. I do some formative assessments; sometimes not real lengthy and sometimes where the kids aren't even aware that they are taking it.

Teacher E uses tickets out the door to assess if the students understood the content at the end of the class period. The teacher also examines the data after unit tests. If Teacher E finds a problem area through data analysis, she will modify instruction and address the students' deficits.

Teacher F stated that knowing if a differentiated lesson was effective varies by assessment. Teacher F uses written and verbal tickets out the door. Teacher F will look at the students' responses to the ticket out the door question to determine if the students needed to review the material at the beginning of the next class.

Teacher G said that assessing student learning is a constant process. Teacher G said:

Sometimes the realization that the lesson didn't work for them until there's some assessment. So I tried to keep assessments semi-regular even if had some things as quick as a vocabulary quiz or I will give them a list of items, things that we have covered and then they're expected to write five sentence identifications.

Teacher H uses a lot of assessments. Teacher H elaborated:

I don't think that it's a bad thing to give a quiz to see if things worked out or not... I give a quiz every single week to make sure people are keeping up with their vocabulary and kind of know what's going on. We have unit tests, cumulative tests, I guess they are called benchmarks. You got your pre-assessments, your post-assessments. I assess them a lot... I'm not sympathetic like, oh no another quiz. It is like, you can deal with it.

Teacher I focuses on students' grades to determine if a lesson was effective.

Teacher I described a class that took a quiz and the students did not do well. The teacher explained, "I had a coteacher in one class, and we went through teaching about the Electoral College, and we gave them a quiz, and they bombed it completely, they didn't get it. The teacher had to go back and reteach the lesson another way".

The participants make good use of formative assessments. Some of the formative assessments are informal questioning techniques. Teachers A, B, F, and I give benchmark exams to assess student learning. Teachers A, F, and I received extensive professional development on assessment techniques, so the teachers have many types of assessments they use to determine if a lesson was successful.

The responses from the participants to address Research Question 1 seem to be varied. The social studies teachers described various strategies they use to meet the needs of struggling students. Teacher B discussed the issue of struggling students being below grade level in reading and the role of coteaching in assisting struggling students. I asked

Teacher G a follow-up question about how many cotaught social studies classes there are at Valley Central School. Teacher G responded that there was only one co-taught Global History 9 class. There is one social studies curriculum class to assist struggling learners. Teachers D and G said they assessed the needs of the students and modified instruction based on the students need.

Professional Development

The findings indicated that Teachers B, C, D, E, G, and H feel they need more effective, on-going professional development on DI. The teachers who teach Grades 7–12 at Valley Central School would like notification about upcoming professional development opportunities, including curriculum development to create inquiry lessons that coincide with the K-12 Social Studies Framework. All of the teacher participants said they needed additional funding dedicated to ongoing professional development. Teachers A, F, and I indicated that Spring Lake Central School had extensive in-house professional development and have seen increases in student performance.

The participants were asked a series of interview questions that addressed Research Question 2, focusing on the teachers' professional development experiences. Interview Question 6 asked what professional development training the participants had for providing DI to their students. Teachers A,F, and I discussed the extensive professional development they had received while Teachers B, C, D, E, G, and H felt they had not received enough effective professional development. The differences in responses were split according to the school district the participants belonged to.

Teacher A felt it was nice to share the best practices that were already being used in the building because it allowed the teachers to see new things used by other faculty members and it revealed that teachers already use similar strategies. Teacher B said he had not received a lot of professional development. The teacher went to a professional development workshop on how to make the resource room more skills-based and not just a homework period. Teacher C had attended various workshops, especially as a new teacher 14 years ago. The professional development he had included having students design jeopardy boards using PowerPoint, and literacy strategies like jigsawing the text, and having expert sections where students read a section of a text and report what they read. Teacher C has a Masters' degree in literacy, so his training occurred in conjunction with his graduate literacy courses. Teacher D said beyond the 2 days a year that the district provides professional development at the Superintendent's Day Conferences, her professional development experiences consisted of her graduate literacy courses. I asked Teacher D if she knew how to find professional development opportunities because she has only been teaching for 3 years at Valley Central School. Teacher D received e-mails occasionally about professional development administered regionally. Teacher D stated, "We are not aware of the training; we are just expected to know about it on our own."

Teacher E talked about the professional development offered by the district.

Teacher E stated:

Speakers come in and talk to us at the beginning of the year, and halfway through the year and that's not what teachers need. Instead of wasting money on speaker I

would like them to give us time to work. You know that's really what teachers need because even you know they say 'you can work after school or before school.' We always have kids after school, always... I think that the one of the biggest things that they can do to support teachers just give us the time needed to work, not shuffle us off into meetings all the time.

Teacher F discussed the summer professional development on DI. The teacher added that co-teachers attended the professional development together. Teacher F said the faculty read books written by former teachers that the administrators have read and promoted but recognized that different strategies in the books worked and other strategies do not work. Teacher F feels the need to experiment to find what works with the students from Spring Lake Central School. Teacher I's response mirrored what Teacher A and F said. Teacher I added that professional development opportunities on DI are available regionally with different school districts.

When I asked Teacher G about the professional development he received he stated "If I'm going to be honest, I don't think nearly enough." Teacher G said his teacher education program prepared him enough to help all the different types of learners. Teacher H stated there tends to be one big push for something and then the teacher can examine it further on their own if they choose to. Then there will be another big push for some educational strategy, and it is like a cycle. Teacher H felt that teachers leave the training they attend and just go back to doing their job the way they did before the training.

Teachers B, C, D, E, G, and H have received limited professional development. Teacher C mentioned having extensive professional development when he was a new teacher 14 years ago. Teacher D has been co-teaching Global History 9 for 2 years, and she has not received professional development on effective co-teaching strategies that use DI. The participants said they got 2 days of professional development a year for the Superintendent's Day Conferences. The professional development usually included a speaker who talks to four local school districts and then the teachers go back to school and do not have substantial follow up on the training they attended. One size fits all professional development mandated by school districts might not be the most effective way to use resources allocated for professional development.

In contrast, Teachers A, F, and I seemed to respond well to the systematic approach to delivering professional development to the faculty. The professional development opportunities stressed collaboration among the faculty members to share best practices. The teaching strategies Teachers A, F, and I used reflected the extensive professional development they have had and have a great deal of the same elements of DI in their lessons.

Interview Question 7 asked what professional development the participants felt would help them provide more effective DI. The responses included more professional development on coteaching, DI, the changes to the K-12 Framework, and implementing educational technology, more support and resources from the administrators, and more time to plan effectively.

Teacher A requested coteaching professional development for new teachers. The new teachers need to be brought up to speed on what the other co-taught classes are doing. Teacher A also said that they would like to be able to see what other teachers are doing in their classes. The teacher said they do not get the opportunity to visit their colleagues' classrooms as often as they would like, if at all.

Teacher B said he had not been to a lot of professional development workshops, but he felt a lot of professional development is too broad. Teacher B stated:

Here is a ton of stuff you can use' and then you end up using none of it because it is thrown at you. If they focused on one thing like, here's how to do a podcast, there are several examples where you can do a podcast throughout your curriculum. I think teachers would grab onto that more and just focus on one little thing you can do for each professional development.

Teacher C would like additional training on Google Classroom. The faculty at Valley Central School received a brief, basic training on how to post threads and links, but they would like follow-up training on how to post assessments so the students could do them online. Teacher D would like the administrators to announce professional development opportunities. Teacher D offered their insight on the issue of not knowing about professional development: "We don't have to provide the students with every piece of information, but we need to provide them with instruction on how to find the information on their own." Teacher D felt she needed training on the K-12 Social Studies Framework. The teacher felt the K-12 Social Studies Framework training would be

effective and would like to have training on it. Teacher D said that the social studies teachers at Valley Central School did not receive training on the new K-12 Social Studies Framework.

Teacher E said that instead of receiving professional development on things that are not relevant to their students, teachers should have time to plan and work on developing new ideas for activities. Teacher E said it takes time to plan effectively, and she feels that rather than having professional development trainings that are not relevant to her teaching practice teachers should have time to prepare for their classes.

Teacher F would like professional development that presents new strategies that he is not using in his classroom. Teacher G believes teachers need training that would help them get more become more responsive to the needs of the students. Teacher G made the contention that professional development needs to occur more regularly. Teacher H also felt that training on the K-12 Social Studies Framework would be helpful.

Teachers B, D,E, and H said they would like professional development on the K-12 Social Studies Framework. The social studies curriculum has been the same since 2001, and now the state wants social studies teachers to make instructional shifts. The K-12 Social Studies Framework promotes inquiry-based learning that stresses student-centered instruction. Training has been offered statewide, but Teacher G, who is the social studies department chair at Valley High School, was the only social studies teacher who received training on the K-12 Social Studies Framework. The teachers believed they

needed more consistent professional development to adjust to the changes in the social studies curriculum.

I asked the participants what type of professional development they have had for incorporating educational technology into their curriculum. Teacher A stated, “There’s a ton of professional development for the technology. Our technology department is very good. They have live seminars they’ll do. They also have web seminars that you can go into on your own, with videos to watch too.”

Teacher B said the faculty received basic training on Google Classroom and Google Drive. The teacher stated the training was not effective because it was an overview that lasted a half-hour to an hour. Teacher B felt everything did not focus on the different features that were available through Google Classroom. Teacher C also mentioned the Google Classroom training. Teacher C also characterized the Google Classroom training as a basic training on how to register students, how to set up message boards, and how to communicate with students. Teacher D described the Google Classroom and Google Drive training as being a few 40-minute blocks. Teacher D likes Google Classroom but does not use it because if students do not have access to computers, they would not be able to use it. Teacher E discussed the Google Classroom training as well and stated, “I think that most of the time when there is training you are just expected to land it and then it’s just dropped on teachers to do it on their own.”

Teacher G mentioned the Google Classroom training and he also had iPad training. Teacher G offered their insight on the training saying:

Sometimes the technology training is a little bit below the skill level; I think that for teachers that have been in the profession far longer, some of them are up-to-date on technology. However, there are a lot of people that have been in the profession for longer that didn't bother to update themselves as new technology emerged. So they need the training far more than someone younger who just finished a graduate school program. Being taught how to use PowerPoint is a little insulting.

Teacher G offered his assessment of the professional development opportunities that have been offered by the district. The teacher stated:

I could sit here and tell you about times in this district where they've introduced a new piece of technology or a new piece of software; this was going to be the new thing that was going to save us, and it was going to be fantastic. We had one day to work with the software for three hours and then there has been no follow-up whatsoever after that. So, if you picked it up in that 1 day, that's great. But if you didn't pick it up in that 1 day, there's nobody making sure they know what they are doing. I think there are people that get frustrated with that and then just continue to use some certain piece of technology...The technology coordinator's responsibilities are split, so he cannot dedicate as much time to making sure teachers know what they are doing with certain technologies.

Teacher H also talked about the basic Google Classroom training. He said the basic training does not help the teachers who are more tech-savvy.

The consensus on the professional development training on Google Classroom and Google Drive was that it was a lot of basic information thrown at the teachers all at once. Teachers felt there was not sufficient training on Google Classroom features beyond how to register students and post documents. Even though all the social studies teachers received the same training, only half of them are using Google Classroom. Professional development needs to be more focused on practical uses of educational technology.

Teacher F discussed the technology integration specialists at Spring Lake Central School. The teacher said it was the technology integration specialists' jobs to assist teachers strictly on ways to incorporate our technology in the classroom with instruction. Teacher F also said one of the technology integration specialists makes videos every day that the staff has access to through a website. The technology integration specialist is available for one-on-one consultations so teachers can tell the specialist an idea for an activity, and the specialist will present some options for integrating the appropriate technology for that idea. Teacher I also mentioned the technology integration specialist offering ongoing support with integrating technology into differentiated lessons.

Teachers B, C, D, E, G, and H wanted more professional development on how to incorporate educational technology into instruction. Teacher B said they would like professional development on new technology that is available, and how to integrate it into the curriculum. Teacher C stated they would like follow-up training on Google Classroom that would show them how to integrate online testing into his teaching

practice. Teacher D wanted more training on how to integrate Chromebooks into their curriculum. Teachers G and H both stated that they were tech-savvy and did not feel they needed additional training because the professional development relating to educational technology tends to be very basic. Both teachers showed interest in advanced training for integrating educational technology into their curriculum.

Teachers A, F, and I had consistent responses to the question about professional development experiences they have had from integrating educational technology into DI. The professional development they receive on educational technology is extensive and on-going. The teachers appeared to be thankful for this invaluable resource.

I asked the participants whether their school district gave incentives for professional development or not. Teacher A, F, and H said that they have paid professional development over the summer. Teacher A has a professional certification, and they have to turn in a certain number of hours for professional development. Teacher F said they have a permanent certificate, so they do not need to turn in professional development for certification. Teacher F said the real incentive for professional development was improving their practice in the classroom. Teacher I has permanent certification, so they do not need to get extra professional development hours. Teachers B, D, and H said they were not sure if there were any incentives for professional development offered by the district.

Teachers B, D, E, G, and H have a professional certification so they have to complete 100 hours of professional development every 3 years, so that would be an

incentive to do professional development. Teacher C has permanent certification, so he does not have to submit 100 hours of professional development. Teacher C and D discussed that teachers receive an increase in pay for each block of 5 credit hours they submit to human resources. Teachers get a pay increase of \$63 per credit hour added to their base salary. Teacher G talked about incentives other than financial incentives.

Teacher G explained:

I feel that there's no incentive to go to professional development workshops because all I'm doing is using up my personal days. I want to be better at my profession. I just don't want to penalize kids and then take out my time in the classroom to do that. So I'd love to see more after school hours or if you wanted to go in somewhere, a resort, going to go on weekends to things that are worthwhile.

Teachers B, C, D, E, G, and H seemed unsure about if they are able to get compensated for professional development. Teachers A, F, and I have paid professional development over the summer. Teachers A, B, D, E, G, and H are required to complete 100 hours of professional development over the course of 3 years to retain their teacher certification. Teacher G stated he did not want to leave his students to get professional development. Teachers E and G teach Advanced Placement courses, Dual Credit Courses, and teach courses that have a state examination at the end of the course. Neither teacher wants to take away from the students to go to professional development that may or may not be effective.

Administrators Interviews

I interviewed three administrators in this qualitative case study. Administrators 1 and 2 are principals at Spring Lake Central School. Administrator 3 is a principal from Valley Central School. I used the Interview Guide for Administrators (Appendix C) to frame the interview questions. The interviews consisted of five interview questions and additional probing questions where appropriate. The administrators' interviews addressed each of the three research questions that guided this research study. To address Research Question 1, the administrators were asked what types of DI strategies social studies teachers use in their school to the best of their knowledge. To address Research Question 2, the administrators indicated if there were any incentives offered for professional development in their districts. To address Research Question 3, the administrators explained how they viewed DI and what they look for when they are observing teachers. I asked additional probing questions as appropriate.

Research Question 1

To address Research Question 1, the administrators discussed what types of DI strategies do social studies teachers use in their school to the best of their knowledge. This interview question asked about teachers perceptions about DI. The theme was that administrators perceived DI as an effective set of instructional strategies that allow teachers to make accommodations for the differing learning styles and needs of their students and to empower all students to improve academic performance.

Administrator 1 said that based on annual observations the teachers in the social studies department excel at offering students choices. The social studies teachers set learning outcomes and come up with three or four different ways to achieve that learning outcome. The administrator felt that the social studies teachers at Spring Lake Central School did a good job using various formative assessments to differentiate instruction. Administrator 1 stated that the social studies teachers at Spring Lake Central School used a lot of educational technology tools to differentiate instruction. For example, the administrator reported, “Teacher A does some great stuff where every kid has to write down information on their iPads and some teachers require the students to send screenshots of what they have been working on to check to how each student is doing.” Administrator 1 explained that Spring Lake Central School has a 1:1 laptop program. The administrator explained that Spring Lake Central School integrates extensive educational technology, including electronic textbooks, and online platforms such as Canvas. The administrator felt that educational technology opens the doors to effective DI.

Administrator 2 said that social studies teachers are addressing the K-12 Social Studies Framework in social studies by including an emphasis on literacy. According to Administrator 2 “I see a lot more of taking the literacy piece and putting it in there and breaking down the content and working in triads, communicating, breaking down what the learning target is.” The administrator added that information is broken down to clarify the expectations for each student and feels that has been beneficial to all students. The administrator also said that teachers are integrating educational technology with project-

based learning. The students have received instruction on research skills and done research in the classroom using iPads.

Administrator 3 stated that several social studies teachers at Valley High School used guided note sheets, where students fill in the blanks with essential information from the lecture. Administrator 3 said the social studies teachers also use small group activities such as pair-share, which is a strategy where students read together and then discuss the reading. The administrator also mentioned that there is a section of Global History 9 that is an integrated co-teaching class. Administrator 3 offered the following description of the integrated cotaught Global History 9 class:

We specifically have a special education expert in there to help modify instruction... It's not just for the special education population; you could have a general education student that doesn't understand a topic and they are there to modify that and hopefully come up with a creative way of presenting that to the student on the fly.

I asked the administrator if there were any cotaught classes or teacher aides to assist IEP students that he knew of in the middle school building. Administrator 3 said to the best of his knowledge the middle school had classes that had twelve IEP students, one teacher aide and one special education teacher, which are referred to as 12-1-1 classrooms and resource room. The administrator stated some 12-1-1 students struggle when they enter the high school because of the major adjustment in how social studies classes are structured.

Administrator 3 stated that some teachers use web-based educational technology like Castle Learning, Quizlet, and Google Classroom. The administrator felt that all students using Quizlet or Castle Learning at the same time made the activities less differentiated. The administrator said that they would like to see the classes divided up working on different activities. For example, Administrator 3 stated, “what I want to see is five students working on Quizlet, five students doing review questions on Castle Learning, and five students taking notes.” The administrator believed that half of the social studies teachers at Valley Central School used Google Classroom consistently.

The administrators discussed multiple ways that the social studies teachers Spring Lake Central School and Valley Central School differentiate instruction. All of the administrators stated that the social studies teachers use educational technology to differentiate instruction. The social studies teachers who teach Grades 7–12 social studies at Spring Lake Central School all use student-centered educational technology. According to Administrator Three, only half of the social studies teachers at Valley Central School use student-centered educational technology. This finding suggested that some teachers are using educational technology to enhance the learning experience. There are numerous digital tools that can be used to differentiate instruction for the students’ needs. Integrating educational technology and incorporating new teaching strategies into the curriculum enhances learning for all students.

The administrators mentioned specific DI strategies that social studies teachers used in their classrooms. Some of the specific strategies include using student

collaboration, guided note sheets, and breaking down instruction into manageable chunks of information. Coteaching is also a way that Valley High School differentiates instruction.

Research Question 2

To address Research Question 2, I asked the administrators one interview question about incentives for professional development offered by the school district. I asked probing questions when appropriate. The themes of the responses varied by the school district. Spring Lake Central School had ongoing professional development in-house with literacy and technology integration specialists and compensated teachers over the summer to participate in professional development. Valley Central School said that budgetary constraints limit incentives for professional development, but teachers do receive limited educational technology training.

Administrator 1 explained that Spring Lake Central Schools provides on-going professional development in-house. However, the administrator said Spring Lake Central School strongly encourages social studies teachers to attend other professional development opportunities. Administrator 1 encourages faculty members to go to workshops and then report back at to their colleagues at faculty meetings. The administrator said they liked to empower the talent that they have within the district. Administrator 1 reported that two of the faculty at Spring Lake Central School developed a DI workshop and presented over the summer to their colleagues. The workshop was a whole day and presented practical strategies, not just a philosophical overview of what

differentiation is. The administrator felt that the faculty was much more receptive to listening from the teachers from Spring Lake Central School.

Administrator 1 also discussed the support that teachers receive implementing educational technology on a regular basis. Spring Lake Central School has two full-time technology integration specialists who are certified teachers. The technology integration specialists do a lot of the preparation for teachers ahead of time if there is an upcoming project. The technology integration specialists will also help brainstorm ways to differentiate instruction using educational technology. Administrator 2 also discussed the importance of having the two technology integration specialists on staff. The administrator stated that Spring Lake Central School is trying a different model this year, where the technology integration specialist goes into the classroom and observes teachers' lessons. The technology integration specialist then offers suggestions about possible ways to integrate educational technology into instruction. The administrator said the faculty had been taking advantage of the technology integration specialist.

Administrator 2 also described the available professional development at Spring Lake Central School. The administrator stated that Spring Lake Central School hired a literacy coach that is available two times a week. Administrator 2 wants the faculty to be on the same page. Administrator 2 said Spring Lake Central School provides one-half day a month so teachers can work with the literacy coach. The literacy coach conducts walk-throughs and observations, and that drives what the professional development will focus on the next month. Administrator 2 explained that Spring Lake Central School received

a school improvement grant to pay for the substitute teachers, and for some of the specialists for professional development opportunities. Administrator 2 said teachers are receiving extensive professional development, and they have embraced it with open arms.

Administrator 2 described why Spring Lake Central School has offered their teachers extensive professional development. The administrator explained:

I think we hit rock bottom when we became a focus school. I finally said to the teachers, 'what we are doing is not working, if we keep on doing what we are doing, it's not going to change.' They listened, they said we are going to go with modules, and we are going to start from scratch. We started with curriculum mapping. We started using the same lesson plan district-wide. Planning needs to be intentional, and it has to have a learning target. This is what we are doing today, and they go through the action words and the kids need to know what's going on. I think that the teachers just bought into that. We looked at ELA and math, and now we are adding the science and social studies. We are building on the work we have already done. I think perseverance and being persistent is a lot of it. Teachers recognized that they needed to change, and they did it.

Administrator 3 said that as the administrator he would allow as much time for professional development as needed at Valley Central School. However, the administrators at Valley High School are "extremely stingy with in-service money or things of that nature. Some great conferences are unavailable to staff due to budgetary constraints." The administrator said free professional development workshops are offered

regionally, but he felt the workshops are not very effective. Administrator 3 voiced his concern about the effectiveness of sending skilled teachers to attend professional development workshops on DI facilitated by mediocre instructors. The administrator felt that the social studies teachers who teach Grades 7–12 at Valley Central School would not get much out of DI professional development that was too general.

As a probing question, I asked Administrator 3 if the social studies teachers received any professional development on the new K-12 Social Studies Framework. The administrator said that the teachers had multiple pieces of training on the K-12 Social Studies Framework, and he recently sent out another flyer to the social studies department about another training that week. I then asked if there was any follow-up on the district professional development. Administrator 3 answered:

I'm just going to be blunt, as a whole, and I can't speak to any other building, there isn't a lot of follow through on any professional development. It is one of those things that comes back to budgetary concerns and time constraints. You can do a whole list of things to rationalize not doing something. But, at the end of the day, there isn't a lot of follow-through. That happens because there are new things that come up what we have been doing has been forgotten.

Administrator 3 stated that the faculty got educational technology classes being offered either through our trainers in house or done through BOCES. The administrator felt that the pieces of training were not effective unless the teachers are willing to experiment.

Administrator 3 added:

I have faculty that still cannot attach a file to an email and, unfortunately, when we have this training, and it presupposes a certain skill level, and they don't have it. It is almost as if it is over their heads. What do you mean, you mean there's a calendar in Google, I can't even attach something to my e-mail, let alone get into Google calendar.

The administrators from Spring Lake Central School and Valley Central School had different perspectives when discussing professional development. The administrators from Spring Lake Central School discussed the effectiveness of the professional development opportunities available for their faculty. Most of the professional development opportunities at Spring Lake Central School are conducted internally. The administrators identified the best practices of faculty members and had the teachers share their experiences with their colleagues. The administrator from Valley Central School questioned the effectiveness of the professional development opportunities available to Valley Central School faculty. The Valley Central School administrator also discussed how the lack of funding for professional development limits the access to quality professional development opportunities.

The administrators at Spring Lake Central School talked at length about the extensive professional development opportunities at their school and reported that they have been effective. Spring Lake Central School was recognized by *US News and World Report* as a Bronze school that makes it among the best high schools in the country. Over the past two years, graduation rates have increased by 20% and now beat the statewide

average by 17 %. Spring Lake Central School also increased the mastery level on every state exam (Retrieved from on October 17, 2015, from [REDACTED]). The administrators from Spring Lake Central School seemed to view their professional development as a systematic process. Administrator 3 from Valley Central School viewed professional development differently. Administrator 3's view of professional development is consistent with Coleman, Gallagher, and Jobs (2012), who contended that there is a lack of professional development opportunities for teachers to improve their instruction and their DI strategies.

Research Question 3

To address Research Question 3, I conducted a total of three interviews with administrators from Spring Lake Central School and Valley Central School. I asked the administrators two questions that addressed Research Question 3. I asked the administrators how they viewed DI and what they look for when they are observing teachers. I asked additional probing questions as appropriate. This interview question asked what types of DI strategies do social studies teachers who teach Grades 7–12 use in their schools. The theme of the responses was that teachers used various instructional strategies to address struggling learners in the classroom. The strategies include activities that involve student collaboration, and accommodate various learning styles and integrate educational technology.

Administrator 3 said, "From a practical standpoint, I like to see the standards met, but the tasks and the activities used to meet those standards are different and perhaps

unique to each student.” The administrator made it clear that he did not mean that each student needed an individualized educational plan (IEP), but they wanted teachers to be aware of the various learning styles of students in the classroom. Administrator 3 realized that sometimes it is difficult to differentiate within a lesson, but said that a teacher should incorporate activities that address all the different types of learning styles somewhere in a larger unit of study.

Administrator 3 also stated that he would like to see students receiving choices and opportunity for independent work. To illustrate this point, Administrator 3 said the following:

I’d love to see a choice. I’d love to see an independent activity. But, and I also think one of the things where we fall in education is we never really have, at least in my opinion, ...conversations with students about how do they learn?... I’d like us to move to that true differentiation and having students be aware of how they best learn and being able to choose activities that, matches their learning style.

Administrator 1 stated that Spring Lake Central School’s priority is working on DI. The administrator said that the district is focusing on five major areas to improve, and one of them is differentiation. Administrator 1 reflected on the faculty’s knowledge of DI and said, “What I observed in my first 2 years here was a lot of teachers know what differentiation is, but applying it in the classroom is not necessarily where it needs to be.” Administrator 1 stated the most typical way social studies teachers use DI is using various grouping strategies. Administrator 1 elaborated by saying “they group a high

ability student with a low ability student, and it's the unwritten rule that the upper kid's going to help the lower kids. What that is doing is not building capacity for that upper student.”

Administrator 1 felt grouping weaker learners with stronger students holds the stronger students back because they focus on teaching the weaker students rather than extending their learning. These stronger students provide a scaffold and make gains in social-emotional areas, and can reinforce their knowledge by “teaching” it to others. Administrator 1 feels a teacher planning for DI should specify what specific strategies are evident in a lesson, not just grouping. Administrator 1 explained further that grouping “might be a part of it, but we want how you are differentiating your instruction, your assignments, your teaching modifications, what are you doing differently in the classrooms.”

Administrator 2 felt the DI was for all students, not just students labeled as special education students who have an IEP. The administrator suggested that “Every student can use some form of DI, because all students learn differently, and at a different rate.” The administrator felt that teachers need to get to know their students to identify what their learning styles are, even if that process takes a while.

Each of the administrators felt that there should be evidence of adapting instruction, whether by ability or learning style. Administrators 2 and 3 mentioned that differentiation should be reflective of the learning styles of the students in the classroom. Administrators 1 and 2 work at Spring Lake Central School. Spring Lake Central School

has identified the DI as a priority of the district this year. The administrators at Spring Lake Central School said that their school was a focus school by the state and have had to reevaluate the teaching strategies that may be effective in increasing students' academic performance. The district has consulted with differentiation experts to address their deficiencies and their perceptions of what DI is may have been informed by that experience.

The second question that addressed Research Question 3 asked what administrators look for when they are observing teachers. The theme of the responses was that administrators wanted to see the content, product, and process in a lesson, as described by Tomlinson & Imbreau (2010). The administrators wanted to see evidence of different strategies used meet the various learning styles and needs.

Administrator 3 said that they looked for purposeful differentiation. The administrator stated, "I'm looking that they differentiate with a purpose. That they put some thought into it. That they have put some planning into it". Administrator 3 stated that they liked to discuss differentiation strategies during the preobservation conference to determine if used differentiated strategies or activities consciously or was this just coincidental. Administrator 3 suggested that some teachers searched for lesson ideas online and decided to use the idea rather than using DI because it would improve student learning and student performance.

Administrator 1 felt that it is difficult to determine how the teacher modified things until they have a postobservation conference with the teacher. Administrator 1 explained:

It's hard actually to see it when you do an observation. It's usually (clarified) in a conversation after the fact. Because, I don't know how you modified. I see a kid working in the back, but I don't know that his, his note packet is different, or the worksheet is different or if it's a reading assignment that, is differentiated down to that reading level that's more appropriate.

Administrator 1 stated that when he is observing teachers what he looks for depends on the specific class. For example, if the students were doing a close read activity the administrator would like to see evidence that the reading has different Lexile scores based on the students' reading levels.

Administrator 2 said they look for evidence of tiered learning when she observes teachers. The administrator also wanted to ensure "it's meeting their needs, if it's breaking things down for the different learner." The administrator felt that learning should be broken down into smaller chunks of information, whether it is content, activities, or directions. Administrator 2 also stressed positive student-teacher relationships. They stated that she had observed the faculty at Spring Lake Central School making a conscious effort to get to know their students at the beginning of the school year. The administrator explained:

It's a process, getting to know students. Maybe if they are just learning the students then, absolutely they need that time to get to know what the students' needs are.

Administrator 2 felt that the process of getting to know the students helped the teachers tailor their instruction to the needs of the students.

Results from Observations

To address Research Question 1, I conducted one classroom observation that lasted approximately 38-42 minutes with each of the nine teacher participants. The teacher observations provided insight into how teachers DI for struggling learners. The Observation Form (Appendix D) focused on several elements. I focused on use of classroom space and physical setting, instructional resources used, educational technology used, the role of the participants, objectives, instructional strategies, assessments, and subtle factors such as unplanned activities and nonverbal communication.

The differentiated practices implemented by each participant revealed how they address the need of struggling students. Through the observation process, I identified thirteen different elements that are common when differentiating instruction. The theme that I recognized during the observations is that teachers differentiate instruction by using the various elements: (a) flexible group instruction; (b) instruction modified for various learning needs; (c) differentiated practices, including critical thinking questions and activities; (d) independent learning time and students given choice of activities, (e) using

real-world examples; (f) using educational technology, including Chromebooks, laptops, and Google Classroom; (g) collaboration among students in small groups, (h) positive student-teacher relationships and student feedback. The frequency of the other elements I observed is addressed in Table 2.

Table 2

Elements Observed in Participants' Lessons

	A	B	C	D	E	F	G	H	I
student technology used	X				X				X
teacher technology used	X		X	X		X	X	X	
notes distributed before class	X		X		X	X	X		X
student collaboration	X		X	X	X	X			
students given choices	X	X	X		X	X			X
students do independent work	X	X	X		X	X			X
real-world examples used	X	X	X	X	X	X	X	X	X
students given feedback	X	X	X	X	X	X	X		X
positive interactions	X	X	X	X	X				
formative assessments	X	X	X	X	X	X	X	X	X
teacher prompted students	X	X		X			X		
review of material	X	X		X	X	X	X	X	
text-based evidence used	X	X	X	X	X	X	X	X	X

Each observed lesson included real word examples. Teacher A projected a photo of a prescribed burn and explained what a prescribed burn was. The teacher asked students if they thought the prescribed burn was a positive or negative example of a prescribed burn. The teacher then asked the students to come up with examples of

negative human-environment interactions not mentioned in the notes on Google Classroom. Students responded using real word examples like the creation of landfills or cutting down trees. The students were also instructed to find a current event during their independent work time for their weekly current event reporting day.

Teacher B used a reading about the current Syrian refugee crisis. They students read about the situation with the refugees and they were asked to write a summary of the events that were occurring. Teacher C discussed Native American tribes and presented real-world examples of Native American culture. One of the students mentioned the local casino. The teacher gave examples of Native American culture such as college football teams named after Native American tribes and lacrosse. One student raised their hand and said his family member played lacrosse. Teacher C briefly discussed the Republican debate that occurred the night before the lesson and asked the students who they thought won the debate.

Teacher D discussed geography during the lesson. When discussing erosion, the teacher gave an example of the cross country trail at Valley High School. The teacher also explained archeology in her lesson and offered the real world example of the movie Jurassic Park. Teacher E had many students ask the same question about the phrase “consent of the governed” she explained the concept of “consent of the governed” to the whole class. Teacher E offered an example of “consent of the governed” by using a real world example of voting for president. Students could relate to the model because of the current campaign for president.

Teacher F was studying the reign of Napoleon. The teacher was focusing on Napoleon's leadership and said that a leader was like a coach. Teacher F then asked the students to reflect on the qualities that effective coaches possessed. The students were able to come up with real-world examples from coaches that they have or know about from watching sports.

Teacher G used real-world examples to discuss the frustration that the colonists felt about not being represented in parliament. The teacher explained how some students are frustrated that they have no say in the school's code of conduct. The teacher also discussed real-world examples of things that have government seals on them, such as wills to illustrate the things that were taxed under the Stamp Act.

Teacher H attempted to make real-world connections by asking the students if they could think of any products that cost more because of labels. There was one student who responded to the question. Then the teacher tried to make another real world connection by making a reference to video games in the 1990s. Many students did not understand the relationship, and the teacher attempted to explain. His point did not seem to connect to the objectives of the lesson. One student made a real world connection by saying that centrally planned economies were like the movie, *The Interview*.

Teacher I assigned three projects that used real-world examples. The teacher allowed students to pick a country and to create a portfolio that outlined the political, social, historical, cultural, and economic features of their selected country. There were several elements to this project that used real-world examples and current events as

evidence to support the facts they included in their portfolios. The second project required the students made an itinerary for a trip to their countries they selected. The students had to research airfare, activities, lodging, and food for their country. This project allowed students to apply real-world budgeting skills that are needed when planning trips. The third project was a budget movie project. The task was to create a budget for a classic movie adjusted for inflation taking the factors of production into account.

Each of the observations also revealed that all of the teacher participants used formative assessments. Teacher A taught the lesson using a flipped classroom model. Teacher A sent students a reading to complete before class on Google Classroom. The students were asked to complete checkpoint questions to identify the three key ideas of the section. The students were also asked to define key vocabulary in the chapter in their words. Teacher A used a “hot seat” method when asking questions. The teacher called on students randomly. If the student did not have the answer right away, they did not move on to the next student. The teacher allowed the student time to think about the response before offering assistance. In most cases giving the student adequate time to process the question, they were able to answer the questions.

Teacher B had two students who were summarizing a current event article. The teacher used the five W’s: who, what, when, where and why to help scaffold instruction. The students read the article and had to identify each of the five W’s as a formative assessment. The teacher would ask the students to identify what each of the five W’s

were in the article. The students read sections of the report, and the teacher would ask verbal questions to check for the level of student comprehension.

Teacher C used many formative assessments. The teacher assigned outline notes the previous night, and he asked questions about the reading. Teacher C shared the guided note outline with students in Google Classroom. Teacher C projected the notes and typed the responses students provided from their outlines. The teacher explained the answers to the questions on the guided notes sheets and then he asked additional questions to ensure that students understood what the question was asking. The students opened their textbooks to a colored map of Native American tribes in North America. The teacher asked the students to locate the Aztec, Seminole, and Iroquois tribes on the map with their fingers. Teacher C gave a short multiple choice quiz after completing the activities on Native American tribes to check for understanding.

Teacher D called on students randomly using “rapid fire” questions as a formative assessment to check for understanding. The students needed to follow along and fill in their guided notes sheets as the teacher explained the notes. The teacher asked complex questions when students were locating things on the map such as locating an archipelago situated in the Mediterranean Sea identifying it by name. When a student was having difficulty the teacher gave clues using relative location such as “it is next to Ethiopia.”

Teacher E gave the students a choice of completing their chapter outline using their guided notes or working on practice multiple choice on their Chromebooks using Castle Learning during their independent work time. Students completed the set of

questions that had been selected by the teacher as a formative assessment. If students got their first attempt at answering the question wrong, there would be a hint and students could choose again.

Teacher F used questioning techniques as a formative assessment, and the students offered their correct responses no difficulty. The teacher asked probing questions when students' answers were too general. Teacher F asked several questions to extend the discussion of the content in the lecture notes distributed before the lesson. Teacher F asked questions like "what types of things are written in a constitution?" The class started to answer and then they discussed how the French went through stages in the revolution working towards the constitution.

Teacher G gave lecture notes on the American Revolution. The teacher primarily used direct instruction, but kept the students actively involved by asking a lot of questions. The teacher called on students who raised their hands to answer questions. The formative assessment questions indicated that the students understood the material, and the teacher had multiple questions incorporated into the lecture.

Teacher H posted a bell ringer as a formative assessment to be completed at the beginning of class. The students were instructed to answer the questions. The teacher asked for responses to the questions and only three students responded. The teacher ended up answering all of the questions for the students. Throughout the whole lesson Teacher H would ask questions and the same three students would attempt to respond to

questions. Some questions were left unanswered by the students, so the teacher answered the questions for the students.

Teacher I started the class by giving a vocabulary quiz as a formative assessment. The students had to write the definitions of the words. The teacher circulated the room as the students completed the quiz. After the quiz was over the student began working on their projects. Teacher I circulated the room and answered individual questions. The questions seemed to focus on the budget movie project. The teacher used examples such as *The Empire Strikes Back* and *Rocky* and *Halloween* to explain multiple aspects of a movie budget. The teacher explained movie distribution and explained why it is such an expensive process. The project included elements of budgeting and inflation, which the students figured out using calculators. The teacher circulated the room and answered the questions as needed. The teacher reminded the class he would be away from the classroom for 2 days and if they had any questions for it would be best to ask them before the end of class.

Each teacher participant asked students to find text-based evidence in the lessons I observed. Teacher A assigned a reading that was posted on Google Classroom and were requested to answer checkpoint questions for homework. As the students answered the questions, the teacher instructed the students to highlight evidence from the reading where the evidence for their question. Teacher A reviewed lines of latitude and longitude and students emphasized the vocabulary in the notes as the teacher projected a map illustrating the map on the screen. Teacher B asked students to find evidence of each of

the 5 W's in the current event article they were reading. Teacher C asked students to read a passage about the Aztecs aloud and then answer questions using evidence from the textbook reading. Teacher D paired students up for a review activity, and they had to respond to questions based on the previous day's notes. Teacher E instructed the students to finish their outlines from the Enlightenment. The outlines required the students to read the lecture notes and readings and formulate responses based on the texts. Teachers G and H had students find evidence in the lecture notes and then highlight or underline certain lines that answered questions for the lesson. Teacher I assigned a project that required the students to find a current event in the country they were highlighting in their country portfolio to find evidence of political, social, economic, and cultural life in that country.

Teachers A, C, D, F, G, and H used technology in their lessons. All of the teachers listed used an LCD projector and a presentation that guided their lectures. Teachers A, E, and I used student-centered technology in their lessons. Teacher A had students annotate their readings from the night before during the checkpoint question activity. The students were asked to highlight sections of the text where they found their answers. The students were also asked to revise their checkpoint answers using their MacBook laptops. Teacher I also assigned projects that required student-centered technology use. The students in Teacher I's class used their MacBooks to research countries by searching for real-world travel prices so they could create a travel itinerary for their country. The students were creating a budget using real-world examples. The

teacher used student-centered technology for a budgeting project for classic movies. The students had to pick a classic movie and research what the movie's budget was. Then the students had to adjust the movie's budget to 2015 dollar amounts. Teacher E assigned practice multiple choice problems through Castle Learning. Castle Learning is an online platform that has a database of multiple choice questions from previous state assessments. The students were able to use the Chromebooks that were available in the classroom to complete the task. The teacher set up the questions to allow for a hint if students missed the question the first time.

Teachers A, C, E, F, G, and I distributed lecture notes to their classes electronically before class. Each of these teachers uses Google Classroom and post their presentations and assignments, so they have access to them to the lesson. Teacher A had the students annotate their notes electronically during the lesson with their MacBooks. When the teacher would lecture, she would ask the students to highlight the evidence as they discussed it. Teacher C assigned reading the notes before class and to have the text annotated before the lesson. As the students shared the responses, the teacher would type in the answers of the students into a master copy and then shared it on Google Classroom for the students to review. Teacher F shared his notes, and the students reviewed them before class. The lectured flowed like a discussion rather than a presentation of new material on the stages of the French Revolution. Pupils in the classroom answered questions without difficulty. At the end of the lesson Teacher F previewed the notes for the next lesson by showing a painting of Napoleon's coronation. Teacher G shared his

notes on Google Classroom and handed students a paper as well so they could annotate the lecture notes during the lesson. The teacher would put most of the key vocabulary in bold type, and instructed students to highlight the words in the notes. Teacher G also did a map labeling activity and students labeled the map as the teacher pointed out key elements of the map such as treaty lines and the Northwest Ordinance territory. Teachers E and I did not lecture during the lesson, but the students used their notes when completing their activities. Teacher E gave students the option of completing guided notes outlines using materials that were posted on Google Classroom. Teacher I's students used the notes that were posted to help complete the budget project he assigned. The students were seniors and did not ask many questions because they had their notes to refer to. The teacher facilitated student learning rather than offering direct instruction.

Teachers A, B, C, E, F, and I all gave students choices of tasks to complete during independent work time. Teacher A allotted a portion of her lesson for independent work. The students were given three choices of activities. The students could review the 50 states for an upcoming map quiz, research a current event for their assignment due Friday or correct the quizzes that the teacher handed back to the students. Teacher B was teaching a resource room class that focused on social studies tasks. The students were working independently on various tasks. Two students were working on summarizing current event articles on the Syrian refugee crisis and Malaysia. Teacher B used different techniques to assist the students. Teacher B used the five W's: who, what, when, where and why to help scaffold instruction. The students read the article to identify each of the

five W's. The two other pupils in the class were reviewing vocabulary for a quiz in their social studies class. The students were reviewing their vocabulary lists on Quizlet that Teacher G created for them. When the students felt that they were ready for the practice quiz, the teacher allowed students to take a practice quiz when a student requested it.

Teacher C also gave students choices during independent work time. The students could either work on completing their pretest or begin working on the guided notes outline and reading for the next class. Teacher E allowed her students to choose to complete practice multiple choice on Castle Learning or to complete their guided notes outlines. Students were able to move to a location in the room where they felt comfortable working. Teacher E allowed students to listen to music if they had earphones as they worked. Teacher F had the students working in pairs answering questions in a note packet. The groups who completed the questions in the packet were given the option of writing a eulogy for Napoleon as an extension activity. Teacher I's class worked independently after they completed a vocabulary quiz. The students had the choice of three different projects to work on. The students were extremely self-directed and remained on task the whole period. The students were allowed to move to a location in the room that they wanted to work in. The students seemed to be used to the routine and procedures that Teacher I had established for his class. The students had access to the notes, so they answered most of their questions, but the teacher circulated to make sure the student's needs were attended to when they needed assistance.

Teachers A, C, D, E, and F created opportunities for student collaboration in their lessons. Teacher A has her desks in groups of two and three in her classroom. The students discussed the answers to the checkpoint questions from the flipped lesson with their seat partners. Teacher C allowed students to work collaboratively during independent work time on the guided note outlines that were assigned for homework. Students would discuss the questions and then find the answers from the reading. Teacher D put the students in pairs to review geographic locations on a map. The students coached each other during the activity. After the review activity had ended, the teacher would call students up to the map that was projected on the whiteboard and the pupils in the class would assist their classmate by offering help to locate certain elements on the map. Teacher E allowed students to discuss the multiple choice problems they were assigned on Castle Learning. Students engaged in some useful discussions during this activity. The students' understanding of the material on the Enlightenment was evident by the way they explained their reasoning for choosing a particular answer to a question. Teacher F put his students in groups to respond to questions from a packet that were related to the French Revolution. One student would handle reading the question, and another student managed to write the responses down on paper. A student in the group that was seated closest to me explained how she was able to figure out the number of French citizens in each estate by figuring out percentages to her group members.

Teachers A, B, D, E, F, G and H all used review activities in their lessons. Teachers A, B, and E allowed their students to review the material independently.

Teacher enabled students to study the states for a map quiz later in the week. Teacher B allowed two students to study their vocabulary lists from www.quizlet.com that Teacher G constructed for his U.S. History class. Students would review the words and then Teacher B would give them a practice quiz to show them how well they knew the material. Teacher E's lesson was centered on the independent review. The students would log on to Castle Learning and complete review multiple choice on the Enlightenment. Teacher D's review was more structured. The students were paired up, and one student had a list of countries and geographic features that were assigned letters. One student would call out a letter, and the other student had to identify the name and the location of the place or geographic feature or place. Teachers G and H reviewed topics as part of their lectures. Teacher H discussed content by projecting a bell-ringer of the content the students learned in the previous class. Teacher H answered the bell-ringer questions for the pupils. Teacher G asked questions during his lessons including questions about geography and Native Americans.

I paid close attention to elements of teacher-student interactions. I noted that Teacher A, B, D, and G prompted student responses. Some of the students in Teacher A's class did not have the answers to her questions right away. She asked probing questions and gave appropriate wait time to lead students to the correct answers on their own. Teacher B used a similar approach. Teacher B only had four students in his class, so he was able to work with each student one-on-one to answer questions. When a student did not understand a concept, the teacher would ask him a series of questions to help him

understand a concept. Teacher B also drew a picture to help prompt a student to answer a question. Teacher D and G asked probing questions during their lectures. Teachers A, B, D, and G did not move to different students when students were unable to answer questions. The teachers used effective questioning techniques to scaffold their instruction. Teacher H asked questions, but when students could not answer questions, Teacher H would answer the question for the students.

All of the teachers with the exception of Teacher H gave students feedback during class. Teacher A and C returned quizzes and reminded students to answer in complete sentences and use “good sentences.” Teacher B allowed students to take review quizzes before they took their actual vocabulary quiz in the resource room. Teacher B told the students how they did on the practice quizzes. Teachers D and G gave verbal feedback during their lectures after students answered their questions. Teacher F spent the first segment of the class going over a quiz. The teacher pointed out common mistakes and explained why students often make that mistake. Teacher F gave his students test-taking tips for completing multiple choice exams. The teacher explained that the state assessment often asks the same questions using different wording and then offered examples. In Teacher I’s class a student had a question about their grade. Teacher I asked the student to log into School Tool, a grade management system, and the teacher explained the student’s grade to them. The teacher then showed the student the rubric that he used for a previous project to show the student how they were graded on the project.

Teachers A, B, C, D, E, F, and I had student-centered instruction and there were plenty of opportunities for positive student-teacher interactions. I observed the teachers in the second and third weeks of school. It was evident that the teachers were attempting to create a good rapport with their students. Teacher A made a concerted effort to maintain a positive atmosphere. As students were working, Teacher A circulated to make sure students were on the right track during independent work time. The teacher gave the students the last two minutes to talk about their sports teams they were on. It was clear that the teacher was trying to get to know her students. Teachers C, and D also tried to connect with students with a talk about their sports at the end of their lessons. Teachers B, F, and I teach multiple grade levels, so they were familiar with the students in their classes. It was evident that the teachers had established positive relationships with their students. For example, Teacher B gave students verbal praise for doing well on their quizzes, and the teacher told them if they took their time and studied they would do well. Teacher B had a good rapport with every student and offered support so they could complete their assigned tasks with varying degrees of teacher support. By the end of the period, all of the students were completing their assigned tasks independently. Teacher F's students seemed to feel very comfortable participating in class. The class I observed Teacher F teaching was a class for sophomores who struggled in Global History 9. The teacher gave a lot of support, and the students seemed willing to answer questions because the teacher helped them reach the correct answer rather than allowing another student to answer. Teacher G had a more teacher-centered lesson, but the teacher seemed

to engage students who raised their hands. Teacher G made his students laugh on some occasions. Teacher G used humor to help with the comfort level in his class. Teacher E allowed students to move to a spot in the room and listen to music when they were working. Teacher E talked to a student who won free tickets and airfare to see the New England Patriots and the student wanted to share his news of winning the contest with the teacher. Teacher E talked about being jealous, and the boy smiled. It was evident that Teacher E has used independent work time in her classroom to get to know her students as they worked. When students asked questions, Teacher E kneeled down to the students' level and maintained eye contact. Teacher E offered verbal praise throughout the lesson.

Documents

The documents I collected included items such as activities, class notes, projects, quizzes, and other instructional materials. For content and process, most of documents I reviewed included the following: (a) various reading materials; (b) visuals such as maps, graphic organizers; paintings; (c) clear instructions that explained tiered instruction; (d) ongoing assessments; and (e) text-based evidence used.

The data collection led to further insights about the way that teachers implement differentiated learning strategies for struggling learners. I analyzed some of the presentations that teachers shared with students before class. Teacher A presented students with reading and lecture notes that highlighted the key points of the lesson they were teaching the day. The key vocabulary was listed, and the students were expected to define the terms in their words. Teacher C presented students with a guided reading

outline before the lesson. The students surveyed the textbook and filled in blanks for some questions and answered more complex questions that required critical thinking. Teacher C also used a map and a reading passage from the textbook that I reviewed. Teacher C used multiple resources to differentiate his lesson. Students were asked to interpret maps, and they were required to read and answer critical thinking questions using text-based evidence. Teacher F and G distributed notes to the students before class. The students were able to review the notes before class. Both Teachers F and G had evidence of scaffolding in their notes. Teacher G put important phrases in bold and left spaces in the notes for students to answer essential questions as they emerged in the classroom discussion. Teacher G's notes included maps of the United States. The teacher had students to draw and label lines created by treaties in the American Revolution.

Teacher I provided an assignment sheet for each of the projects the students could work on during independent work time. The project assignment sheets revealed activities to support students' zone of development through differentiated learning practices of the content, process, and products. For content Teacher I instructed the students to refer to the class notes on Google Classroom. The project assignment sheet outlined the process for completing the project. The steps of the project built on each other to lead up to the culminating task. The project assignment sheet clearly articulated the elements of the projects and gave students a choice in selecting the topics. Students were offered independent work time to create their products aligned with the state standards.

This data analysis of the instructional materials increased my knowledge and understanding about the how social studies teachers who teach Grades 7–12 plan activities designed to meet the needs of struggling students in social studies classrooms. The instructional materials were effectively selected to supplement the content that was being delivered in class. I have a familiarity with the social studies curriculum and all of the documents I reviewed aligned with the state social studies standards.

Administrator 1 provided me with a curriculum guide that was created to inform the teachers at Spring Lake Central School of the changes to the K-12 social studies curriculum. The curriculum guide compiled resources about the Common Core State Standards, the K-12 Social Studies Framework and a field guide for implementing the new K-12 Social Studies Framework. The curriculum guide is a valuable resource because it collected resources from multiple sources and compiled them in one physical place. Documents were kept locked in a file cabinet that I will store in my home for 5 years.

Discrepant Cases

In this qualitative case study, I collected data from multiple sources including teacher and administrator interviews, observations, and documents such as instructional materials to examine perceptions of teachers and administrators about DI. I also investigated the professional development experiences of social studies teachers who teach Grades 7–12. During the interview process, participants shared similarities on how they used instructional strategies to differentiate instruction for struggling learners. A

participant shared the need for a teacher aide to assist with DI in the classroom. This was a discrepant case because this was an isolated response, which could provide valuable insight on how to promote differentiation in the classroom for struggling students.

Evidence of Quality

To increase the quality of the research findings, collegial review, and triangulation were the strategies used. Collegial review allows peer reviewers to read the findings of the research study and provide feedback to improve readability and clarity. Triangulation uses data from multiple sources to compare and corroborate the findings with the broader literature.

Collegial Review

After I had completed reporting the findings of the research study, I allowed a peer reviewer to review my findings for the collegial review process. I e-mailed the draft of my research study and the findings to the chair of my doctoral committee. The doctoral committee offered feedback about the strengths and weaknesses of the findings and offered suggestion for revisions.

Triangulation

Multiple data sources were used to triangulate the findings. Data triangulation is employed by using multiple sources of data to corroborate research findings (Creswell, 2007; Hatch, 2002; Yin, 2009). Yin (2009) made the assertion that the results of case study research are more significant if the findings are based on multiple sources of data. Stake (1995) posited that by using triangulation, researchers check the accuracy and the

authenticity of the research. By interviewing teachers and administrators, I explored how social studies teachers who teach Grades 7–12 and how teachers and administrators view DI. I interviewed twelve participants for this research study. Using different groups in the interview process satisfied Stake’s (1995) method of searching for multiple interpretations rather than confirming of a single interpretation. Themes emerged from the data such as the various DI strategies used in the classroom and the perceptions of professional development experiences. Each participant offered a unique perspective of how to differentiate instruction. Each participant also had unique professional development experiences. If I interviewed fewer participants, the findings from the study may have affected the richness of the data.

Using the documents added another source for analysis. The documents provided evidence of assessments and activities that teachers used in their differentiated lessons. The curriculum planning guide that Administrator 1 provided gave evidence of the Spring Lake Central School’s commitment to providing support to social studies teachers who teach Grades 7–12. The copy of the professional development schedule from Spring Lake Central School provided evidence of specific professional development opportunities offered to social studies teachers who teach Grades 7–12.

Observing nine social studies teachers who teach Grades 7–12 from two different school districts provided me with evidence of two different approaches to DI. Each classroom observation revealed how each social studies teacher who teaches Grades 7–12 attempted to differentiate instruction for struggling students. There were multiple

strategies that were evident in the nine teacher interviews. Triangulating different sources of data and using it to find themes was a valid method to address validity and trustworthiness (Creswell, 2007).

Summary

There were three sources of data (interviews, observations, and document reviews) collected to formulate answers to the research questions in this qualitative research study. The triangulation of data included findings from semi-structured interviews, observations, and a review of documents, including instructional materials from social studies teachers who teach Grades 7–12, from two different schools in two different school districts.

Research Question 1

Research Question 1 asked, how do social studies teachers who teach Grades 7–12 describe the ways they differentiate instruction to help struggling students? Based on the data collected from multiple sources, the findings showed that social studies teachers that teach Grades 7–12 described how they DI by: utilizing educational technology, modifying instruction to accommodate for various learning styles, promoting student collaboration; giving students choice and opportunities for independent work, using various formative assessments as a way to review and monitor student learning, and having students use reading skills to find text-based evidence. The participants expressed a need for access to more resources within the school district; funds for instructional resources; technology such laptops, Chromebooks, and smart boards; and additional

opportunities to collaborate with colleagues to share ideas on how to effectively differentiate instruction.

Research Question 2

Research Question 2 asked, how do social studies teachers who teach Grades 7–12 describe their professional development for implementing DI? Based on data retrieved from interviews with social studies teachers who teach Grades 7–12 and administrators from two districts, the findings showed that the social studies teachers who teach Grades 7–12 at Valley Central School need more effective, on-going professional development on DI. The social studies teachers who teach Grades 7–12 need a notification about upcoming professional development opportunities, including curriculum development to create inquiry lessons that are being used in conjunction with the K-12 Social Studies Framework. The social studies teachers who teach grades 7–12 at Valley Central School need additional funding dedicated to ongoing professional development. The findings also suggested that Spring Lake Central School’s systematic approach to professional development lead to increased academic performance for students.

Research Question 3

Research Question 3 asked, how do administrators view DI? Based on interviews with administrators from two school districts, the findings showed that administrators perceived DI as including modifications to address various learning abilities in the classroom; tailoring instruction to address the various learning styles; using varied types of learning activities, including activities that are tiered or use educational technology;

and flexible grouping strategies. The administrators also wanted teachers to get to know students to learn more about their students' learning needs.

Section 5: Conclusions

Introduction

Students in a rural northeastern high school have had decreasing academic performance in social studies courses for the past 5 years was the educational problem that anchored this investigation. The purpose of this qualitative case study was to examine a sample of nine social studies teachers who teach Grades 7–12 to determine how they differentiate instruction and describe the professional development they have had on differentiating instruction. Three administrators were also interviewed to examine their view of DI. There is a lack of scholarly research on the subject of DI strategies often used in social studies, Grades 7–12. Exploring social studies teachers' DI strategies and their professional development experiences may help to increase struggling students' academic performance in the local school district as well as in other schools with similar challenges. The research questions guiding this qualitative study are anchored in the purpose statement and address the problem statement:

Research Question 1: How do social studies teachers, who teach Grades 7–12, describe the ways they differentiate instruction to help struggling students?

Research Question 2: How do social studies teachers, who teach Grades 7–12, describe their professional development for implementing DI?

Research Question 3: How do administrators view DI?

This study used case study research for the inquiry into the problem of decreasing academic performance in social studies for the past 5 years. Data were collected from

teacher and administrator interviews, teacher observations, and documents that various teachers provided. Semistructured interviews were conducted with nine social studies teachers who teach Grades 7–12 and three administrators. The interviews were conducted over a 2-week period. Based on data collected from interviews, observations, and a review of documents, two themes emerged about how social studies teachers who teach seventh-12th grades use DI for struggling learners and how they describe their professional development. The findings discuss the strategies that social studies teachers who teach Grades 7–12 use to differentiate for struggling learners and how they describe their professional development in DI. Differentiated teaching strategies that social studies teachers who teach Grades 7–12 use to differentiate instruction, educational technology, professional development, and administrators' views of DI were all discussed in the findings.

Interpretation of the Findings

The purpose of this qualitative case study was to investigate how social studies teachers differentiate instruction and describe their professional development in DI. Drawing from the findings and the insights gained from the literature, the following conclusions are presented.

Conclusion 1

- The participants in the study used a variety of different activities and strategies to differentiate instruction for struggling students. The social studies teachers use strategies such as: integrating educational technology, student

collaboration, offering students choices, allowing students time for independent work, teachers using real-world examples, promoting positive student-teacher relationships, teacher scaffolded instruction to add support to students until they could complete tasks independently, using review to reinforce content, and using strategies that require students to find text-based evidence.

- The findings of this study showed that social studies teachers perceived DI as an effective instructional tool to use with struggling students to increase their academic performance.
- The findings of the study identified a need for additional support within the school district in order to implement DI in the classroom. There is also a need for additional resources and updated technology such as projectors, laptops, and Chromebooks.
- The findings of the study suggested that social studies teachers who teach Grades 7–12 who receive extensive professional development on DI and integration of educational technology tended to focus more on process than products when differentiating instruction.

The findings of this qualitative research study are consistent with the scholarly literature about DI. Liftig (2010) explained that DI is characterized by using specific strategies and a host of learning activities that will promote student learning. These strategies must foster a respectful environment that engages and challenges every student

(Tomlinson, 2003). Marzano (2003) gathered research on effective teaching strategies. Marzano compiled a list of strategies that affect student achievement like comparing and contrasting information, summarizing information, homework, cooperative learning, nonverbal representations, setting objectives and providing feedback, and generating and testing hypotheses and questions. Most of the participants in this study used different instructional strategies. Teacher B and Teacher C asked students to summarize information. Teachers A, D, and F gave students the opportunity to work collaboratively on some tasks. The participants in this study who took a student-centered approach to teaching tended to offer more feedback to students because of the formative assessments that they used in their instruction.

There are six guiding principles found throughout the literature and authors emphasized these common themes for teachers to follow (Hamdan & Mattarima, 2012; Manning et al., 2010; Reeves & Stanford, 2009; Reis et al., 2011;): (a) know and understand the students, (b) create a comfortable learning environment, (c) provide proactive not reactive curriculum, (d) maintain high student expectations, (e) vary assessment, and (f) share responsibilities. Tomlinson (2013) offered similar ideas about the effects of differentiated curriculum. Tomlinson explained that teachers plan student engagement throughout the lesson; provide opportunities for pretest assessments; use effective methods for students to know, understand, and do lesson content; promote high student expectations; and prepare students for posttests. The findings of this doctoral study are consistent with the literature. All of the participants in this study maintained a

safe learning environment and most maintained high expectations. The teachers who engaged in teacher-centered instructions did most of the work in the classroom. In the teacher-centered classrooms, students were able to take on a more passive role and were not held accountable to achieving high expectations. All of the teachers indicated in their interviews that they felt that it was important to use a variety of activities and some of the teachers seemed to use teacher-centered strategies when I observed them, so there is a potential gap in practice. Some of the teachers had fostered a positive relationship with the students. The observations occurred in the first 3 weeks of school, so the teachers were still getting to know the students. Teachers C and H indicated that they gave students a pretest, although I suspect that most of the teachers will administer pretests due to the new teacher evaluation system that has been implemented by the state. Each participant will also be required to prepare students for a posttest, as required for the new teacher evaluation system required by the state.

The students' products typically reflect what the students learned which made careful planning crucial for student success. It is imperative for teachers to provide clear expectations. Each teacher participant in the study had clear learning targets displayed on the board to let the students know what the desired outcome of the lesson was.

The administrators who were interviewed all alluded to the new state standards that were released by the state. Administrators 1 and 2 talked about school-wide initiatives to address the new curriculum with differentiated strategies. The district was a focus school, so they received funding under a school improvement grant to implement

the new curriculum. The administrators said the teachers in their districts used multiple technology-based strategies to differentiate instruction. They wanted their faculty to modify instruction to address the various learning levels in their classrooms.

Administrator 3 wanted to see teachers take a purposeful approach to DI. Administrator 3 said that having two different worksheets was not true differentiation.

Conclusion 2

- The findings in this study found that effective professional development opportunities provided social studies teachers the training that is needed to implement DI strategies in the classroom.
- The findings in this study demonstrated that social studies teachers feel that they need ongoing professional development on DI to improve the academic performance of struggling students.
- The findings in this study suggested that social studies instructors would like additional planning time so they can collaborate with peers to create more effective uses of differentiation in the curriculum.

The findings of this qualitative research study are consistent with the scholarly literature about professional development. According to Tobin and Tippett (2014), many teachers do not incorporate differentiated strategies into their instruction because they feel that they do not have professional development resources and support from administrators. This finding is consistent with the findings of this research study. This sentiment was echoed in many of the teacher interviews with Valley Central School

District teacher participants. Many of the participants from Valley Central School District mirrored the belief stated by David and Bwisa (2013) and Dixon (2014). David and Bwisa and Dixon et al. stated that most professional development opportunities often consist of *one shot* workshops that attempt to improve teaching skills and practical knowledge. Mansour, Alshamrani, Aldahmash, and Alqudah (2012) offered an alternative approach to professional development. Mansour et al. suggested that effective professional development should be an ongoing process. The ongoing process should be collaborative, connected to professional practice and theory, and focused on improving student performance (Mansour et al., 2012). Weber, Johnson, and Tripp (2013) provided a multi-step process for supporting teachers' implementation of differentiation. The support included an instructional group workshop presented by a facilitator who was well-versed in DI as well as classroom visits for the purpose of observing the teacher, conducting individual meetings with teachers, and providing resources for planning a differentiated lesson (Weber, Johnson, and Tripp, 2013). Spelman and Rohlwing (2013) also viewed professional development as a systematic process. They suggested that teachers should be offered support in the following areas: theory, demonstration, practice, feedback, and coaching. This recommendation was consistent with the findings of this research study. The teacher participants from Spring Lake Central School District seemed to view their professional development as a systematic process.

Dixon et al. (2014) concluded that professional development opportunities must enable teachers to experiment with various differentiated strategies in a workshop setting.

The professional development facilitator helps create and review differentiated lesson plans, to assure that the lessons are created properly. Tomlinson (2007) used the fire and light metaphor as a means of identifying strategies that ensure deep implementation of DI. The “light” in Tomlinson’s metaphor symbolized the efforts to encourage teachers to change their instructional practice. The strategies to attract teachers to improve their instructional practice include professional development, modeling, and teacher leadership. Tomlinson recognized that not all teachers were responsive to the call to change their instructional practices. Tomlinson’s metaphor described the need for “fire” strategies, which were necessary for teachers who resisted change even when presented with research-based data that supported the change. The findings of this study are consistent with the research on this topic. Tomlinson’s fire and light metaphor applies more to Spring Lake Central School District than Valley Central School District, based on the teachers’ responses to interview questions relating to professional development. One of the administrators from Spring Lake Central School District suggested that they embraced the type of “light” strategies that Tomlinson alluded to when they became a focus school. According to Administrator 2, “Because we kind of hit rock bottom, we’re a focus school, we have got to change and what we are doing is not doing it... Teachers recognized that they needed to change, and they did it.”

Professional development needs to be an ongoing process. According to Guskey and Yoon (2009), simply allotting time for professional development without purposeful planning and implementation does not benefit teachers. Guskey and Yoon (2009) posited

that professional development must include following up after the main professional development session. VanTassel-Baska (2012) stated that disconnected, isolated professional development will not support teachers' implementation of DI. This evidence from the literature supports the frustration that many of the teacher participants felt about their professional development experiences at Valley Central School.

According to Cifuentes, Maxwell, and Bulu (2011) many teachers find integrating technology appropriately in curriculum difficult. Professional development sessions should be designed to assist teachers in making connections between content and technology use. Johnson, Adams Becker, Cummins, Estrada, Freeman, and Ludgate (2013) discussed a longitudinal research study that identified the most significant challenges K-12 schools face when implementing the technology. According to their findings, the two highest ranked challenges to implementing technology are the lack of ongoing professional development as part of the school culture, and resistance to change in practice. The findings of this longitudinal study are consistent with the beliefs of the teacher participants from Valley Central School.

The participants of this study used DI and provided support to students during the learning process. This is consistent with Vygotsky's (1978) theory that served as a conceptual framework for this study. Vygotsky's ZPD impacts how a teacher determines a student's instructional level. For DI to be successful, teachers must be able to assess students' levels. Levy (2008) suggested that students possess various abilities and prior experiences and teachers need to pre-assess to understand the abilities of all the students.

By assessing students, teachers get a better sense of student needs and are able to differentiate instruction appropriately to address the students' ability levels. Many of the participants in the study said it was critical to be aware of the students' ability levels prior to planning a differentiated lesson.

Levy (2008) defined 3 types of assessment that were essential for implementing DI effectively. First is the pre-assessment, an informal way to help a teacher establish a baseline for students' ability levels. Heritage Heritage, Kim, Vendlinski, and Herman (2009) viewed formative assessment as a means of gathering evidence of students' learning and providing feedback about learning in real time. Participants in the study used multiple methods of collecting formative assessment data such as observations of processes and questioning techniques. The results from formative assessments assist teacher in identifying instructional gaps between where students are to where you want students to be by the end of the lesson. A majority of the participants used multiple formative assessments throughout their lessons and discussed their use of formative assessments in their interviews.

Vygotsky (1978) emphasized cognitive development in a social context. Vygotsky stated that social consciousness becomes stronger when students engage in activities that are meaningful and relevant. Vygotsky also suggested that social interaction positively affects student academic performance. All of the teacher participants in the study applied real-world knowledge in their lessons in an attempt to make the learning relevant to the students. Vygotsky noted that teacher-student

interactions included a series of questions followed by supportive activities that involve the student in the learning process. The level of support needed decreases over time as the student develops additional skills. Many of the teacher participants in the study attempted to maintain a positive student-teacher relationship that offered support to the students during the learning process. Vygotsky (1978) believed it was important to investigate the relationship between the developmental processes to students' real learning capacity as a means of determining a student's developmental level.

The process of asking questions with support was named scaffolding by Bruner (1976). Activities are modified and might include fewer tasks, lower Lexile level, and more structured directions. Many of the teacher participants indicated that they modified their lessons by including fewer steps or using texts that were suitable for the students' learning ability. Many researchers use a scaffolding metaphor to explain the temporary assistance students receive when they perform complex tasks they have difficulty completing independently. Scaffolding is designed to elevate struggling students slowly to a level where the students can do complex tasks independently (Jadallah et al., 2010). Tomlinson (2005b) also suggested that a task that is aligned with the student readiness level expands the student's understanding and skills slightly beyond the student's current educational level. When a teacher selects a task that is slightly beyond the student's comfort zone, then provides additional support to the student, it bridges the gap between the student's current performance level and the desired learning outcome. An effective learning task allows students to engage prior knowledge and apply what they can do. The

learning task also extends student understanding and skill and engages the student in both critical and creative thinking.

Implications for Social Change

Investigating the DI strategies of social studies teachers is important for multiple reasons. The findings of this doctoral study could promote social change in the local school district by improving teachers' instructional practices used when educating struggling students. Struggling students could potentially enhance their academic performance as a result. By increasing struggling students' academic performance levels, struggling students could pass social studies courses and graduate from high school. The data gleaned from this study revealed a need for ongoing professional development opportunities for DI, specifically for instructors of struggling students. The data also suggested that social studies teachers need more resources and additional time for collaboration with their peers to share their practical knowledge about DI strategies. The findings from this doctoral study can help administrators provide more support for educators to find opportunities to stimulate discourse about effective DI strategies.

Recommendations

The priority of meeting the educational needs of all students is important for school districts. Also, improving academic performance and providing adequate professional development opportunities for DI is necessary in the study school districts. Social studies teachers provided students with meaningful learning tasks by utilizing DI strategies. School administrators, the board of education, and social studies teachers must

work together to address approaches to increase academic performance among struggling students. Meaningful learning opportunities can help struggling students improve their academic performance and meet the requirements for high school graduation. For struggling students to meet the requirement for graduation, it is crucial for social studies teachers to have access to additional resources, and ongoing professional development opportunities for differentiated strategies used to teach struggling students. School administrators can support social studies teachers with additional resources and useful professional development opportunities for differentiating instruction.

After conducting an analysis of the research findings in this doctoral study, I recommend that the school districts attempt to develop a school community that stresses the ongoing professional development needs of the social studies faculty. School administrators and the board of education should allocate resources for additional teacher support for additional professional development training and time for peers to collaborate with each other to share their practical knowledge with each other. More professional development opportunities could promote an active discourse among the faculty including collaboration when planning differentiated lesson plans. Social studies teachers should use effective strategies to create positive classroom environments and cultures in which to promote meaningful learning experiences.

My final recommendation is for the district to update and repair technology that is currently in the classroom. I also recommend offering technology training for social studies teachers who are interested and who need additional training. None of the

teachers I observed used the interactive boards for anything but a projection screen. When I asked the participants about using the Eno boards in their classrooms, multiple participants said that their Eno boards were not working. Some of the newer staff members were not given substantial training with the Eno board and are unsure how to use them effectively.

The findings of this doctoral study also suggested that there is a need for professional development opportunities related to the academic needs of struggling students. Some training could take place in-house, at department meetings, or at faculty meetings. Another recommendation is to allow social studies teachers to visit other social studies classrooms that use DI practices. I believe these actions would inform social studies teachers' teaching practices and promote much-needed collaboration among social studies teachers. Upon final approval of this doctoral study, I will share a one-two page concluding report to the participants and school administrators via e-mail. I will blind carbon copy the participants of the study to respect the privacy of the participants in this doctoral study.

Recommendations for Future Research

The following examples of future research would extend the inquiry begun in this case study. I recommend additional research on schools that have developed in-house professional development programs to improve instruction. This research would include investigating the role that collaboration plays in effectively differentiating instruction for

struggling students. This research would be beneficial for school districts who want to make an effort to improve their professional development practices.

Another piece of additional research I would suggest is to look into how to effectively differentiate instruction by using educational technology. Six of the participants in this study said they wanted more training on Google Classroom because they were not sure how they could use the platform effectively. Three participants in the study flip their classrooms using the Google platform. The state curriculum has been modified to make the curriculum more student-centered and inquiry based. Veteran teachers are relatively new to inquiry models of instruction, and I believe research is needed to inform practitioners' use of educational technology in the classroom.

Reflection

This research process afforded me the opportunity to focus on differentiation strategies in the social studies classroom. Conducting research for this doctoral study provided me the opportunity to gain a better understanding of how nine teachers perceived DI and integrated it into their teaching practice. The teacher participants' willingness to participate in the study signaled a desire to improve their instructional practices. I came to the realization that social studies teachers need the support of their schools administrators and peers to differentiate instruction effectively. I learned that the social studies teachers I studied wanted to learn different strategies from professional development opportunities that would help meet the needs of struggling learners. The data collection process uncovered the need for additional planning time, including time

for collaboration with peers. I also had the opportunity to talk to other teachers to better understand their practical knowledge and teaching practice. The insights of the participants made me realize what supports social studies teachers need to be successful practitioners. Most importantly, social studies teachers need support as they seek appropriate professional development opportunities designed to address the needs of their struggling learners. Without support, social studies teachers often feel a level of frustration because they know there are more strategies that they could be using to help struggling students, and they do not have the time and resources to improve. Social studies teachers would like to garner the help and support of their local school district because they believe in the success of their struggling learners.

As a doctoral student and a researcher, I discovered significant knowledge and increased awareness of my goal to become a teacher leader at the college level who trains preservice social studies teachers. My former colleagues supported me during the research process, and their honesty helped to inform the findings of this study. The development of practical approaches to meet the instructional needs of struggling students in social studies is crucial for increasing academic performance. In this doctoral study, I made a concerted effort to remove any personal bias in an attempt to allow participants to become reflective, and transparently discuss their teaching practice. As a consequence, the teacher and administrator participants shared their experiences honestly, which added meaningful insights to meet the objectives of this doctoral study. My next steps as an educator will continue researching effective strategies geared to struggling

students so I can incorporate new strategies for preservice teachers to use. I have also come to the realization that I would like to collaborate with other scholars in social studies education to combine our collective knowledge into a new understanding of a differentiated classroom. I would like to disseminate the findings of this doctoral study to both social studies teachers and school administrators with the intent to create an awareness of the need for additional resources and support so teachers can differentiate instruction for struggling students.

In conclusion, I plan to use the information gleaned from this doctoral study to promote discussions that will assist educators to find effective strategies to develop meaningful learning opportunities for struggling students and increase academic performance for their struggling learners. The concluding section of this doctoral study provided me with an opportunity to refine my thought process as both a scholar and an educator. In this doctoral study, I evaluated the findings, identified the benefits of this study, and measured my growth as an agent of social change. I reaffirmed the implications of social change in this doctoral study. I also considered approaches I could use to improve teachers' awareness of effective strategies to differentiate instruction to improve struggling students' levels of academic performance. The doctoral study provided me with the opportunity to reflect on my role as a practitioner and had helped me to realize the importance is opening possible avenues for collaboration, and conducting ongoing research on effective research-based instructional strategies to share with other social studies teachers and preservice teachers. The consistent efforts of

educators to promote meaningful learning experiences that use DI strategies may inspire more consistent effort on the part of struggling learners to take a more active role in their education and exhibit greater academic performance.

Summary

The conclusions from this doctoral study indicated that teachers use similar differentiated strategies to address improving struggling students' academic performance. The findings of this doctoral study also indicated a need for additional resources to provide meaningful professional development opportunities. The findings in this doctoral study are consistent with scholarly research on DI and professional development.

Schools are increasingly moving towards student-centered instruction, and teachers need to adjust their teaching strategies to meet the educational needs and learning styles of their students in inquiry-based lessons. Professional development is a way of bridging the gap in practice that teachers experience when adopting new student-centered strategies. Teachers need the support of school administrators and fellow social studies in order to incorporate DI strategies into their lessons in a meaningful way.

References

- Abell, M., Jung, E., & Taylor, M. (2011). Students' perceptions of classroom instructional environments in the context of 'Universal Design for Learning.' *Learning Environments Research*, 14(2), 171-185. doi:10.1007/s10984-011-9090-2.
- American Recovery and Reinvestment Act, 111-5 §14005-6, 2009.
- Archibald, S., Coggshall, J. G., Croft, A., & Goe, L. (2011). *High-quality professional development for all teachers: Effectively allocating resources*. Washington, DC: ETS.
- Armstrong, C. M. (2011). Implementing education for sustainable development: The potential use of time-honored pedagogical practice from the progressive era of education. *Journal of Sustainability Education*, 2 (March).
- Athans, S., & Devine, D. (2013). *Motivating every student in literacy: Including the highly unmotivated*. New York, NY: Routledge
- Bender, W., & Waller, L. (2011). *The teaching revolution: RTI, technology, and differentiation transform teaching for the 21st century*. Thousand Oaks, CA: Corwin Press.
- Berg, J., & Wehby, J. (2013). Pre-teaching strategies to improve student learning in content area classes. *Intervention in School and Clinic*, 49(1), 14-20.
doi:10.1177/1053451213480029
- Bergmann, J., & Sams, A. (2012). *Flip your classroom: Reach every student in every class every day*. Eugene, OR: International Society for Technology in Education.

- Bester, G., & Brand, L. (2013). The effect of technology on learner attention and achievement in the classroom. *South African Journal Of Education, 33*(2), 1-15.
- Blair, N. (2012). Technology integration for the new 21st century learner. *Principal, January/February*) 8-13.
- Bolick, C. M., Adams, R., & Willox, L. (2010). The marginalization of elementary social studies in teacher education. *Social Studies Research & Practice, 5*(2), 1-22.
- Borg, S. (2011). The impact of in-service teacher education on language teachers' beliefs. *System, 39*(3), 370-380.
- Boulos, H. (2012, April 23). Understanding the stakes in teacher evaluation debate. Retrieved from <http://www.buffalorising.com>.
- Boykin, A., & Noguera, P. (2011). *Creating the opportunity to learn: Moving from research to practice to close the achievement gap*. Alexandria, VA: Association for Supervision & Curriculum Development.
- Brady-Amoon, P., & Fuertes, J. N. (2011). Self-efficacy, self-rated abilities, and academic performance. *Journal of Counseling and Development, 89*(4), 431-438.
- Brame, C., (2013). Flipping the classroom. Vanderbilt University Center for Teaching. Retrieved Tuesday, December 30, 2014 from <http://cft.vanderbilt.edu/guides-subpages/flipping-the-classroom/>.
- Bray, B., & McClaskey, K. (2013). A step-by-step guide to personalize learning. *Learning & Leading With Technology, 40*(7), 12-19.

- Brulles, D., & Winebrenner, S. (2011). The school wide cluster grouping model: Restructuring gifted education services for the 21st century. *Gifted Child Today*, 34(4), 35-46. doi:10.1177/1076217511415381
- Bruner, J. (1966). *Toward a theory of instruction*. Cambridge, MA: Harvard University Press.
- Buehl, D. (2011). *Developing readers in the academic disciplines*. Newark, DE: International Reading Association.
- Bulgren, J. A., Graner, P. S., & Deshler, D. D. (2013). Literacy challenges and opportunities for students with learning disabilities in social studies and history. *Learning Disabilities Research & Practice*, 28(1), 17-27.
- Burridge, P., & Carpenter, C. (2013). Expanding pedagogical horizons: A case study of teacher professional development. *Australian Journal of Teacher Education*, 38(9). <http://dx.doi.org/10.14221/ajte.2013v38n9.3>
- Burris, L. A. (2011). A case study of differentiated instruction in upper elementary mathematics and reading classrooms (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (3469057).
- Chelsey, G. M., and J. Jordan. (2012). What's missing from teacher prep? *Educational Leadership*, 69(8), 41-45.
- Chen, S., & Herron, S.S. (2014). Going against the grain: Should differentiated instruction be a normal component of professional development. *International Journal of Technology in Teaching and Learning*, 10(1), 14-34.

- Cifuentes, L., Maxwell, G., & Bulu, S. (2011). Technology integration through professional learning community. *Journal of Educational Computing Research, 44*(1), 59-82.
- Clark, I. (2012). Formative assessment: Assessment is for self-regulated learning. *Education Psychology Review, 24*, 205-249. doi:10.1007/s10648-011-9191-6
- College, Career, and Civic Life (C3) Framework for Social Studies State Standards. (2013). Retrieved on October 17, 2015 from <http://www.socialstudies.org/c3>
- Coleman, M. R., Gallagher, J. J., & Job, J. (2012). Developing and sustaining professionalism within gifted education. *Gifted Child Today, 35*(1), 27-36.
- Creswell, J.W. (2007). *Qualitative inquiry & research design. Choosing among the five approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Creswell, J.W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Crossouard, B., & Pryor, J. (2012). How theory matters: Formative assessment theory and practices and their different relations to education. *Studies in Philosophy and Education, 31*(3), 251-263.
- Cuevas, J., Russell, R., & Irving, M. (2012). An examination of the effect of customized reading modules on diverse secondary students' reading comprehension and motivation. *Educational Technology Research & Development, 60*(3), 445-467.

- Danielson, C. (2002). *Enhancing student achievement: A framework for school improvement*. Alexandria, VA: Association for Supervision and Curriculum Development.
- David, M., & Bwisa, H. M. (2013). Factors influencing teachers' active involvement in continuous professional development: A survey in Trans Nzoia West District, Kenya. *International Journal Of Academic Research In Business & Social Sciences*, 3(5), 224-235.
- De Jesus, O. (2012). Differentiated instruction: Can differentiated instruction provide success for all learners? *National Teacher Education Journal*, 5(3), 5-11.
- DeMitchell, T. A., DeMitchell, T. A., & Gagnon, D. (2012). Teacher effectiveness and value-added modeling: Building a pathway to educational malpractice? *Brigham Young University Education & Law Journal*, (2), 257-301.
- Dixon, F. A., Yssel, N., McConnell, J. M., & Hardin, T. (2014). Differentiated instruction, professional development, and teacher efficacy. *Journal For The Education Of The Gifted*, 37(2), 111-127.
- Doubet, K. (2012). Formative assessment jump starts a middle grades differentiating initiative. *Middle School Journal*, 43(3), 32-38.
- Ebert-May, D., Derting, T. L., Hodder, J., Momsen, J. L., Long, T. M., & Jardeleza, S. E. (2011). What we say is not what we do: Effective evaluation of faculty professional development programs. *Bioscience*, 61(7), 550-558. Retrieved from <http://www.aibs.org/bioscience>.

- Eristi, S., Kurt, A., & Dindar, M. (2012). Teachers' views about effective use of technology in classrooms. *Turkish Online Journal of Qualitative Inquiry*, 3(2), 30-41.
- Farisi, M. I. (2016). Developing the 21st-Century social studies skills through technology integration. *Turkish Online Journal of Distance Education*, 17(1), 16-30.
- Fisher, D., Frey, N., & Lapp, D. (2012). *Teaching students to read like detectives: Comprehending, analyzing, and discussing texts*. Bloomington, IN: Solution Tree Press.
- Fitchett, P. G., Heafner, T. L., & VanFossen, P. (2014). An analysis of time prioritization for social studies in elementary school classrooms. *Journal Of Curriculum & Instruction*, 8(2), 7-35. doi:10.3776/joci.2014.v8n2p7-35.
- Flipped Learning Network. (2014). The four pillars of F-L-I-P. Retrieved from <http://www.flippedlearning.org/definition>
- Ford, D. Y. (2012). Ensuring equity in gifted education: Suggestions for change again. *Gifted Child Today*, 35(1), 74-75. doi:10.1177/1076217511429672
- Fox, J., & Hoffman, W. (2011). *The differentiated instruction book of lists*. San Francisco, CA: Josey-Bass.
- Friedman, A. M., & Garcia, E. R. (2013). "People with real experiences": Using mobile devices in high school social studies. *Social Studies Research & Practice*, 8(3), 115-127.

- Fulton, K. (2012). Upside down and inside out: Flip your classroom to improve student learning. *Learning & Leading with Technology*, 39(8), 12–17.
- Gage, N., Lierheimer, K., & Goran, L. (2012). Characteristics of students with high incidence disabilities broadly defined. *Journal of Disability Policy Studies*, 23(3), 168-178. doi: 10.1177/1044207311425385
- Gavin, K., Casa, T., Firmender, J., & Carroll, S. (2013). The impact of advanced geometry and measurement curriculum units on the mathematic achievement of first grade students. *Gifted Child Quarterly*, 57(2), 71-84. doi: 10.1177/0016986213479564
- Goodwin, B., Lefkowitz, L., Woempner, C., & Hubbell, E. (2011). *The future of schooling: Educating America in 2020*. Bloomington, IN: Solution Tree.
- Gredler, M. E. (2012). Understanding Vygotsky for the classroom: Is it too late? *Educational Psychology Review*, 24(1), 113-131. doi 10.1007/s10648-011-9183-6.
- Green III, P. C., Baker, B. D., & Oluwole, J. (2012). The legal and policy implications of value-added teacher assessment polices. *Brigham Young University Education & Law Journal*, (1), 1-29.
- Gregory, G., & Chapman, C. (2013). *Differentiated instructional strategies: One size doesn't fit all* (3rd ed.). Thousand Oaks, California: Corwin.

- Gunn, T. M., & Hollingworth, M. (2013). The implementation and assessment of a shared 21st century learning vision: A district-based approach. *Journal of Research on Technology in Education, 45*(3), 201-228.
- Guskey, T. R., & Yoon, K. S. (2009). What works in professional development. *Phi Delta Kappan, 90*(7), 495-500. Retrieved from <http://www.pdkintl.org>
- Hall, T., Strangman, N., & Meyer, A. (2003). Differentiated instruction and implications for UDL implementation. National Center on Accessing the General Curriculum Retrieved June 9, 2010 from:
http://www.k8accesscenter.org/training_resources/udl/diffinstruction.asp.
- Hamdan, A. R., & Mattarima, K. (2012). Flexible differentiated instruction in heterogeneous classrooms as a destination of congruent curriculum. *International Conference on Education and Management Innovation, 30*(4), 280-285.
- Hammonds, L., Matherson, L. H., Wilson, E. K., & Wright, V. H. (2013). Gateway tools: Five tools to allow teachers to overcome barriers to technology integration. *Delta Kappa Gamma Bulletin, 80*(1), 36-40.
- Hatch, J. A. (2002). *Doing qualitative research in education settings*. Albany, NY: State University of New York Press.
- Heritage, M., Kim, J., Vendlinski, T., & Herman, J. (2009). From evidence to action: A seamless process in formative assessment? *Educational Measurement: Issues and Practices, 28*(3), 24-31.

- Hernandez, R., Roberts, M., & Menchaca, V. (2012). Redesigning a principal preparation program: A continuous improvement model. *International Journal of Educational Leadership Preparation*, 7(3), 1-12.
- Hewitt, K. K., & Weckstein, D. K. (2012). Programs in practice: Differentiated instruction-begin with teachers!. *Kappa Delta Pi Record*, 48(1), 35-46.
- Hodges, T. E., & Conner, E. (2011). Reflections on a technology-rich mathematics classroom. *Mathematics Teacher*, 104(6), 432-438.
- Hove, M. C., & Corcoran, K. J. (2008). Educational technologies: Impact on learning and frustration. *Journal of Teaching of Psychology*, 35, 121-125.
- Hsu, P. S. (2012). Examining the impact of educational technology courses on preservice teachers' development of TPACK. *Teaching Education*, 23(2), 195–213.
- Hsu, P. S. (2013). Examining changes of preservice teachers' beliefs about technology integration during student teaching. *Journal of Technology and Teacher Education*, 22(1), 27–48.
- Jadallah, M., Anderson, R. C., Nguyen-Janiel, K., Miller, B. W., Kim, I.-H... Wu, X. (2010). Influence of a teacher's scaffolding moves during child-led small-group discussion, *American Educational Research Journal*, 48(1), 194–230.
- Johnson, L. (2014). Adapting and combining constructivist grounded theory and discourse analysis: A practical guide for research. *International Journal of Multiple Research Approaches*, 8(1), 100–116.

- Johnson, L., Adams Becker, S., Cummins, M., Estrada, V., Freeman, A., & Ludgate, H. (2013). *NMC Horizon Report: 2013 K-12 Edition*. Austin, Texas: The New Media Consortium.
- Jones, B. D. (2007). The unintended outcomes of high-stakes testing. *Journal of Applied School Psychology, 23*(2), 65-86.
- Kanevsky, L. (2011). Differential differentiation what types do students want? *Gifted Child Quarterly, 55*(4), 279-299.
- Keengwe, J., Pearson, D., & Smart, K. (2009). Technology integration: Mobile devices (iPods), constructivist pedagogy, and student learning. *AACE Journal, 17*(4), 333-346.
- Killion, J. (2013). Tapping technology's potential: Shrinking budgets, looming standards, and a dizzying array of innovations are changing the professional learning landscape. *Journal of Staff Development, 34*(1), 10-12.
- King, A. (1993). Sage on the stage to guide on the side. *College Teaching, 41*(1), 1103-1201.
- Lai, K. W., Pratt, K., & Trewern, A. (2011). Learning with technology: Evaluation of the Otago secondary schools technology project. Dunedin, New Zealand: The Community Trust of Otago.
- Lalley, J. P., & Gentile, J. R. (2009). Adapting instruction to individuals: Based on the evidence, what should it mean? *International Journal of Teaching and Learning*

in Higher Education, 20(3), 462-475. Retrieved from

<http://www.isetl.org/ijtlhe/pdf/IJTLHE393.pdf>

- Lantolf, J. P., & Poehner, M. E. (2011). Dynamic assessment in the classroom: Vygotskian praxis or second language development. *Language Teaching Research*, 15(1), 11-33.
- Lauzier, M. & Haccoun, R.R. (2014). The interactive effect of modeling strategies and goal orientations on affective, motivational, and behavioral training outcomes. *Performance Improvement Quarterly*, 27(2), 83-102.
- Levy, H. M. (2008). Meeting the needs of all students through differentiated instruction: Helping every child reach and exceed standards. *Clearing House*, 81(4), 161-164.
- Liftig, I. (2010). Differentiated instruction to the rescue. *Science Scope*, 33(6), 1.
- Logan, B. (2011). Examining differentiated instruction: Teachers respond. *Research in Higher Education Journal*, 2(13), 1-14.
- Lynch, S. A., & Warner, L. (2008). Creating lesson plans for all learners. *Kappa Delta Pi Record*, 45(1), 10-15.
- Maguth, B. M. (2012). In defense of the social studies: Social studies programs in STEM education. *Social Studies Research & Practice*, 7(2), 65-90.
- Mangal, S. K., & Mangal, S. (2013). *Research methodologies in behavioural sciences*. PHI Learning: Delhi.
- Manning, S., Stanford, B., & Reeves, S. (2010). Valuing the advanced learner: Differentiating up. *Clearing House*, 83(4), 145-149.

- Mansor, A., Eng, W., Rasul, M., Mohd Hamzah, M., & Hamid, A. A. (2012). Effective classroom management. *International Education Studies*, 5(5), 35-42.
- Marzano, R. J. (2003). *The changing nature of school reform. In what works in schools: Translating research into action*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Moore, K. (2014). *Effective instructional strategies from theory to practice*. Thousand Oaks, CA: SAGE Publications, Inc.
- Morgan, H. (2014). Maximizing student success with differentiated learning. *Clearinghouse*, 87(1), 34-38. doi: 10.1080/00098655.2013.832130
- National Assessment of Educational Progress. (2011). The nation's report card: Trial urban district assessment reading, 2011. Retrieved from <http://nces.ed.gov/nationsreportcard/pdf/dst2011/2012455.pdf>.
- National Council for the Social Studies. (2008, June). Curriculum guidelines for social studies teaching and learning: A position statement of National Council for the Social Studies. Social Education.
- Nevin, A., Falkenberg, C. A., Nullman, S., Salazar, L., & Silió, M. C. (2013). Universal design for learning and differentiated instruction: Resolving competing mandates of the Individuals with Disabilities Education Act and No Child Left Behind.

Proceedings COERC: Third Annual College of Education Research Conference:
pp.92-97.

New York State Department of Education. (2012). Guidance on **New York State's** annual professional performance review for teachers and principals to implement education law 3012-c and the commissioner's regulations. Retrieved on February 12, 2015 from <http://www.nysed.org/uploads/content/APPR-Field-Guidance.pdf>.

New York State Report Card. 2014 Retrieved on February 12, 2015 from <http://data.nysed.gov/profile.php?instid=800000041374>.

New York State K-12 Social Studies Framework. (2015). Retrieved October 17, 2015 from <https://www.engageny.org/resource/new-york-state-k-12-social-studies-framework>

No Child Left Behind Act (2001). Pub. L. No 107 -110, & 115 Stat. 1425.

Nuance. (2008). Dragon naturally speaking (Version, 10) [Computer software].

Burlington, MA: Author.

NYSUT Legal and Professional Department. (2015). 2015-2016 enacted state budget preliminary analysis. Albany, NY.

Owens, S. (2013). We teach how we've been taught: expeditionary learning unshackling sustainability education in US public schools. Retrieved from http://www.jsedimensions.org/wordpress/content/we-teach-how-weve-beentaught-expeditionary-learning-unshackling-sustainability-education-in-u-s-publicschools_2013_06/

- Pace, J. L. (2011). The complex and unequal impact of high stakes accountability on untested social studies. *Theory & Research In Social Education, 39*(1), 32-60.
- Peshek, S. (2012). Assessment and grading in a differentiated mathematics classroom. *Ohio Journal of School Mathematics, (65)*, 45-50.
- Pham, H. L. (2012). Differentiated instruction and the need to integrate teaching and practice. *Journal of College Teaching & Learning, 9*(1), 13-20.
- Pierce, R. L, Cassady, J., Adams, C. M., Speirs Neumeister, K. L., Dixon, F.A., & Cross, T. L. (2011). The effects of clustering and curriculum on the development of gifted 73 learners' math achievement. *Journal for the Education of the Gifted, 34*(4), 569-594. doi: 10.1177/01623532110340040
- Postras, E. G., & Lajoie, S. P. (2012). The MetaHistoReasoning tool: A metacognitive tool for fostering domain-specific metacognitive activities in learning through historical inquiry. In A. Weerasinghe, R. Azevedo, I. Roll, & B. du Boulay (Eds.), *Proceedings of the workshop on self-regulated learning in educational technologies: Supporting, modelling, evaluating, and fostering metacognition with computer-based learning environments* (pp. 41–44). City, Greece: Crete.
- Ravitch, D. (2010). *The death and life of the great American school system: How testing and choice are undermining education*. New York, NY: Basic Books.
- Reeves, D. B. (2009). *Leading change in your school: How to conquer myths, build commitment, and get results*. Alexandria, VA: ASCD.

- Reeves, S., & Stanford, P. (2009). Rubrics for the classroom: Assessments for students and teachers. *Delta Kappa Gamma Bulletin*, 76(1), 24–27.
- Reis, S. M., McCoach, D. B., Little, C. A., Muller, L. M., & Burcu, R. (2011). The effects of differentiated instruction and enrichment pedagogy on reading achievement in five elementary schools. *American Educational Research Journal*, 48(2), 462-501.
- Richfield Springs Central School. Retrieved October 17, 2015 from <http://www.richfieldcsd.org>.
- Rock, L. M., Gregg, M., Ellis, E., & Gable, A. R. (2008). A framework for differentiating classroom instruction. *Preventing School Failure*, 52(2), 31-47.
- Rosen, Y., & Beck-Hill, D. (2012). Intertwining digital content and a one-to-one laptop environment in teaching and learning: Lessons from the time to know program. *Journal of Research on Technology in Education*, 44(3), 225-241. Retrieved from <http://www.iste.org>.
- Rubin, H. J., & Rubin, I. S. (2005). *Qualitative interviewing the art of hearing data*. Thousand Oaks, CA: Sage Publications.
- Sadlier, H. D. (2011) Homework: What's the point? *International Journal of Learning*, 17(10), 155-163.
- Sangra, A., & Gonzalez, S. M. (2011). The role of information and communication technologies in improving teaching and learning processes in primary or secondary schools. *Journal of Asynchronous Learning Networks*, 15(4), 47-59.

- Santamaria, L. (2009). Culturally responsive differentiated instruction: Narrowing gaps between best pedagogical practices benefitting all learners. *Teacher's College Record, 1*(111), 214-247.
- Santangelo, T., & Tomlinson, C. (2009). The application of differentiated instruction in postsecondary environments: Benefits, challenges, and future directions. *International Journal of Teaching & Learning in Higher Education, 20*(3), 307-323. Retrieved from <http://www.isetl.org/ijtlhe/pdf/IJTLHE366.pdf>.
- Sauquoit Valley Central School** Retrieved May 5, 2015 from <http://www.svcsd.org/Domain/4>.
- Sauquoit Valley Central School District** APPR Plan (2013). Retrieved on February 12, 2015 from <http://usny.nysed.gov/rttt/teachers-leaders/plans/docs/sauquoit-valley-appr-plan.pdf>
- Schul, J. E. (2011). Revisiting an old friend: The practice and promise of cooperative learning for the twenty-first century. *Social Studies, 102*(2), 88-93.
- Servilio, K. L. (2009). You get to choose! Motivating students to read through differentiated instruction. *Teaching Exceptional Children Plus, 5*(5), 2-11.
- Smart, K. L., Witt, C., & Scott, J. P. (2012). Toward learner-centered teaching: An inductive approach. *Business Communication Quarterly, 75*(4), 392-403.
- Smit, J., & Van Eerde, H. A. A. (2011). A teacher's learning process in dual design research: Learning to scaffold language in a multilingual mathematics classroom. *ZDM The International Journal on Mathematics Education, 43*(6), 889-900.

- Smit, J., Van Eerde, H. A. A., & Bakker, A. (2013). A conceptualization of whole-class scaffolding. *British Education Research Journal*, 39(5), 817-834.
doi: 10.1002/berj.3007
- Snyder, K. E., Nietfeld, J. L., & Linnenbrink-Garcia, L. (2011). Giftedness and metacognition: A short term longitudinal investigation of metacognitive monitoring in the classroom. *Gifted Child Quarterly*, 55, 181-193.
- Sparapani, E. F., Walker, R. H., & Van Tiflin, M. E. (2013). About differentiated instruction. In E. Sparapani (Ed.), *Content area applications and other considerations for teaching in grades 5-12 in the twenty-first century* (pp. 21-32). Lanham, MD: University Press of America.
- Spector, J., Johnson, T., & Young (2014). An editorial on research and development in and with educational technology. *Educational Technology Research & Development*, 62(1), 1-12.
- Spelman, M., & Rohlwmg, R. (2013). The relationship between professional development and teacher learning: Three illustrative case studies of urban teachers. *Journal of Research In Innovative Teaching*, 6(1), 155-171.
- Sousa, D. A., & Tomlinson, C. A. (2011). *Differentiation and the brain: How neuroscience supports the learner-friendly classroom*. Bloomington, IN: Solution Tree Press.
- Stake, R. (1995). *The art of case research*. Thousand Oaks, CA: Sage Publications.

- Stake, R. E. (2000). Strategies of inquiry: Case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed.; pp. 435-454). Thousand Oaks, CA: Sage.
- Stake, R. E. (2013). *Multiple case study analysis*. New York, NY: The Guilford Press.
- Subban, P. (2006). Differentiated instruction: A research basis. *International Education Journal*, 7(7), 935-947.
- Sweet, D. (2014). Microlectures in a flipped classroom: Application, creation and resources. *Mid-Western Educational Researcher*, 26(1), 52-59.
- Tobin, R., & Tippett, C. (2014) Possibilities and potential barriers: Learning to plan for differentiated instruction in elementary science. *International Journal of Science & Mathematics Education*, 12(1), 423-443.
- Tomlinson, C. A. (1995). Deciding to differentiate instruction in middle school: One school's journey. *Gifted Child Quarterly*, 39 (2), 77-87.
- Tomlinson, C. (1999). *The differentiated classroom: Responding to the needs of all learners*. Alexandria, VA: Association for Supervision and Curriculum Design.
- Tomlinson, C. (2000). Reconcilable differences: Standards-based teaching and differentiation. *Educational Leadership*, 58(1), 6-11.
- Tomlinson, C. A. (2001). *How to differentiate instruction in mixed-ability classrooms*. (2nd ed.) Alexandria, VA: ASCD.

- Tomlinson, C. (2003). *Fulfilling the promise of the differentiated classroom: Strategies and tools for responsive teaching*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Tomlinson, C.A. (2005a). *How to differentiate instruction in mixed-ability classrooms* (2nd ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Tomlinson, C. A. (2005b). This issue. *Theory into practice*, 44(3), 184.
doi:10.1207/s15430421tip44031.
- Tomlinson, C. A. (2007, March). Differentiation and change: Fiddlers on the schoolhouse roof. Presentation at the ASCD Annual Conference, Anaheim, CA.
- Tomlinson, C.A. (2009). Intersections between differentiation and literacy instruction: Shared principles worth sharing. *New England Reading Association Journal*,
- Tomlinson, C. (2013, March). Differentiating instruction using common core standards. [PowerPoint research presentation]. Presented at Best Practices Institute spring workshop conducted at the Institutes on Academic Diversity, Curry School of Education, University of Virginia, Charlottesville, VA.
- Tomlinson, C. (2014). *The differentiated classroom: Responding to the needs of all learners* (2nd ed.). Alexandria, VA: ASCD.
- Tomlinson, C. A., & Allan, S. D. (2000). *Leadership for differentiating schools & classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development.

- Tomlinson, C., Brimijoin, K., & Narvaez, L. (2008). *The differentiated school: Making revolutionary changes in teaching and learning*. Alexandria, VA: Association for Supervision & Curriculum Development.
- Tomlinson, C. & Imbeau, M. (2010). *Leading and managing a differentiated classroom*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Tomlinson, C., & McTighe, J. (2006). *Integrating differentiated instruction and understanding by design: Connecting content and kids*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Tricarico, K., & Yendol-Hoppey, D. (2012). Teacher learning through self-regulation: An exploratory study of alternatively prepared teachers' ability to plan differentiated instruction in an urban elementary school. *Teacher Education Quarterly*, 39(1), 139-158. Retrieved from <http://www.teqjournal.org>
- Tucker, B. (2012) The flipped classroom. *Education Next*, 12(1),82-83.
- U.S. Department of Education. (2010). A blueprint for reform: The reauthorization of the elementary and secondary education act. Washington, DC: Author. Retrieved from <http://www2.ed.gov/policy/elsec/leg/blueprint/>.
- U.S. Department of Education. (2011). ESEA flexibility. Washington, DC: Author. Retrieved September 25, 2011, from www.ed.gov/esea/flexibility
- Van de Pol, J., Volman, M., & Beishuizen, J. (2010) Scaffolding in teacher– student interaction: A decade of research. *Educational Psychology Review*, 22(3), 271–297.

- Von Hover, S., Hicks, D., & Washington, E. (2011). Multiple paths to testable content? Differentiation in a high-stakes testing context. *Social Studies Research & Practice, 6*(3), 34-51.
- VanTassel-Baska, J. (2012). Analyzing differentiation in the classroom: Using the COS-R. *Gifted Child Today, 35*(1), 42-48.
- Vatanartiran, S., & Karadeniz, S. (2015). A needs analysis for technology integration plan: Challenges and needs of teachers. *Contemporary Educational Technology, 6*(3), 206-220.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Walker Beeson, M., Journell, W., & Ayers, C. A. (2014). When using technology isn't enough: A comparison of high school civics teachers' TPACK in one-to-one laptop environments. *Journal of Social Studies Research, 38*(3), 117-128.
- Wallace, T. (2014). A comparison of professional development practices in rural and urban high schools. *Rural Educator, 35*(2), 11-15.
- Walqui, A. & Van Lier, L. (2010). *Scaffolding the academic success of adolescent English language learners: A pedagogy of promise*. San Francisco, CA: WestEd.
- Watson, S. (2011). Somebody's got to fight for them: A disadvantaged and marginalized school's learner centered culture of learning. *Urban Education, 46*(6), 1496-1525.
doi: 10.1177/0042085911413148

- Watts-Taffe, S., Laster, B., Broach, L., Marinak, B., McDonald Connor, C., & Walker-Dalhouse, D. (2012). Differentiated instruction: Making informed teacher decisions. *Reading Teacher* [serial online], *66*(4), 303-314. Retrieved September 24, 2014 from Education Research Complete, Ipswich, MA.
- Weber, C. L., Johnson, L., & Tripp, S. (2013). Implementing differentiation: A school's journey. *Gifted Child Today*, *36*(3), 179-186. doi:10.1177/10762175134866646
- Wells, R. A., & Shaughnessy, M. F. (2010). An interview with Carol Ann Tomlinson. *North American Journal of Psychology*, *12*(1), 643-648.
- Welsh, M. (2011). Measure teacher effectiveness in teacher education: Some challenges and suggestions. *Journal of Advanced Academics*, *22*(5), 750-770. doi: 10.1177/1932202X11424882
- White, P., Syncox, D., Heppleston, A., Isaac, S., & Alters, B. (2012). Putting research into practice: Pedagogy development workshops change the teaching philosophy of graduate students. *Canadian Journal of Higher Education*, *42*(1), 98-111.
- Winstead, L. (2011). The Impact of NCLB and accountability on social studies: Teacher experiences and perceptions about teaching social studies. *Social Studies*, *102*(5), 221-227.
- Wood, D., Bruner, J., & Ross, G. (1976). The role of tutoring in problem-solving. *Journal of Child Psychology and Psychiatry*, *17*(2), 89-100.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: Sage.

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

Zimmerman, B., & Schunk, D. (Eds.). (2011). *Handbook of self-regulation of learning and performance*. New York, NY: Routledge.

Appendix A: Consent Form for Teachers

Consent Form

You are invited to take part in a research study of Nicole Waid. You were selected for the study because of your knowledge of differentiated instruction, content mastery, and your status of being a social studies teacher who teaches 7–12 grades. This form is part of a process called “informed consent” to allow you to understand this study before deciding whether to take part in this doctoral study.

This study is being conducted by a researcher named Nicole Waid, who is a doctoral student at Walden University. In this study, I am strictly acting as the researcher, and my past experiences as a possible colleague will be separate from my role in this study.

Background Information:

The purpose of this study is to examine ways social studies teachers who teach Grades 7-12 differentiate instruction.

Procedures:

If you agree to be in this study, you will be asked to:

- Participate in 1 interview (approx. 30-45 minutes each). This interview can be conducted via telephone if a convenient time cannot be agreed upon for a face to face interview. The interview will be digitally recorded to insure accuracy.

Here are some sample questions:

- Which strategies do you use to address students’ various learning levels in social studies?
- What professional development training have you had for providing differentiated instruction to your students?

Briefly describe your process of planning a differentiated lesson.

- Be observed teaching a lesson in your classroom. The observation will be about 35 minutes.
- Submit a copy of the lesson plan of the observed lesson to the researcher

Voluntary Nature of the Study:

Your participation in this study is voluntary. This means that everyone will respect your decision of whether or not you want to be in the study. There will be no negative ramifications if you decide not to be in the study. If you decide to participate in the study now, you can still change your mind during the study. Declining or discontinuing your

participation in the study will not negatively impact the participant's relationship with the researcher or the participant's access to services.

Risks and Benefits of Being in the Study:

There may be minimal risks in participating in this study as there may be mild discomfort with answering questions pertaining to your teaching practice. However, confidentiality will be maintained at all times. The benefits of this study include the analysis of instructional strategies used and how this enhances and assists in student learning.

Compensation:

There is no compensation for participation.

Confidentiality:

Any information you provide will be kept confidential. All interviews will be digitally recorded, downloaded to my personal computer, and become a password protected electronic file. Lesson plans and notes taken during observations will be locked in a filing cabinet with no direct identifiers on the data. Each participant will be randomly assigned a letter which will correspond to their information. The researcher will not use your information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the written findings of the study.

Contacts and Questions:

You may ask any questions you have now. Or if you have questions later, you may contact the researcher. If you want to talk privately about your rights as a participant, you can call the Walden University representative who can discuss this with you. The phone number of the Research Participant advocate is *612-312-1210*.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By replying to the email with the words 'I Consent' you are agreeing to participate in the study.

By checking the box, I affirm that I have read the consent form and am consenting to participate in the study described above.

The participant should keep/print a copy of the consent form.

Appendix B: Consent Form for Administrators

Consent Form

You are invited to take part in a research study of Nicole Waid. You were selected for the study because you are an administrator at one of the target districts in this research study. This form is part of a process called “informed consent” to allow you to understand this study before deciding whether to take part in this doctoral study.

This study is being conducted by a researcher named Nicole Waid, who is a doctoral student at Walden University. In this study I am strictly acting as the researcher, and my past experiences as a possible colleague will be separate from my role in this study.

Background Information:

The purpose of this study is to examine ways social studies teachers who teach Grades 7–12 differentiate instruction.

Procedures:

If you agree to be in this study, you will be asked to:

- Participate in 1 interview (approx. 30-45 minutes) each). The interview will be digitally recorded to insure accuracy.

Here are some sample questions:

1. How do you view differentiated instruction?
2. What do you look for when you are observing teachers?

Voluntary Nature of the Study:

Your participation in this study is voluntary. This means that everyone will respect your decision of whether or not you want to be in the study. There will be no negative ramifications if you decide not to be in the study. If you decide to participate in the study now, you can still change your mind during the study. Declining or discontinuing your participation in the study will not negatively impact the participant’s relationship with the researcher or the participant’s access to services.

Risks and Benefits of Being in the Study:

There may be minimal risks in participating in this study as there may be mild discomfort with answering questions pertaining to your teaching practice. However, confidentiality will be maintained at all times. The benefits of this study include the analysis of instructional strategies used and how this enhances and assists in student learning.

Compensation:

There is no compensation for participation.

Confidentiality:

Any information you provide will be kept confidential. All interviews will be digitally recorded, downloaded to my personal computer, and become a password protected electronic file. Each participant will be randomly assigned a letter that corresponds to their information. The researcher will not use your information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the written findings of the study.

Contacts and Questions:

You may ask any questions you have now. Or if you have questions later, you may contact the researcher. If you want to talk privately about your rights as a participant, you can call the Walden University representative who can discuss this with you. The phone number of the Research Participant advocate is **612-312-1210**.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By signing below, I am agreeing to the terms described above.

By checking the box, I affirm that I have read the consent form and am consenting to participate in the study described above.

Printed Name of Participant

Date of consent _____

Participant's Signature _____

Researcher's Signature _____

The participant should keep/print a copy of the consent form.

Appendix C: Interview Guide for Teachers

Interview Guide for Teachers

Topic of Study: Social Studies Teachers' Use of Differentiated Instruction to Help Struggling Learners

The purpose of this interview will allow me to gather information related to my Doctoral study topic of how social studies teachers who teach Grades 7–12 use differentiated instruction. I appreciate your participation in this study and your willingness to be interviewed. This interview will last approximately 30-45 minutes.

My procedures:

1. I will greet the participant.
2. I will discuss my research study and ask if the participant has any questions.
3. I will inform the participants that I will be recording the interview with a digital device to ensure the accuracy of the data.
4. I will explain that the taped interview will be transcribed using Dragon, a computer software program.
5. I will go over the details on the consent form and obtain a signature.

Interview Questions:

1. How long have you been teaching social studies?
Research Question #1
2. Which strategies do you use to address students' various learning levels in social studies?
Research Question #1
3. Briefly describe your process of planning a differentiated lesson.
Research Question #1
4. What types of educational technology do you think would help you better meet the needs of students in your classroom?
Research Question #1

5. How do you determine if a differentiated lesson was effective?

Research Question #1

6. What professional development training have you had for providing differentiated instruction to your students?

Research Question #2

7. What professional development do you feel would help provide more effective differentiated instruction?

Research Question #2

8. What type of professional development training have you received on utilizing differentiated instruction in the classroom? Have you received any professional on using educational technology to differentiated instruction?

Research Question #2

9. Briefly describe a differentiated lesson that used educational technology that you felt went well in your classroom.

Research Question #1

10. What type of additional professional development training do you need for implementing educational technology?

Research Question #2

11. Would it be possible if I could observe you teaching a differentiated lesson? (This question will be posed to the social studies teachers who discussed a lesson that went well that are willing to let me observe them social studies teachers).

Research Question #1

12. Are there any incentives for professional development offered by the school district?

Research Question #2

13. What have I not asked you that I should have asked?

Additional Comments

Thank you for your time and input

Appendix C: Interview Guide for Administrator

Interview Guide for Administrator

Topic of Study: Social Studies Teachers' Use of Differentiated Instruction to Help Struggling Learners

The purpose of this interview will allow me to gather information related to my Doctoral study topic of how administrators view differentiated instruction. I appreciate your participation in this study and your willingness to be interviewed. This interview will last approximately 30-45 minutes.

My procedures:

1. I will greet the participant.
2. I will discuss my research study and ask if the participant has any questions.
3. I will inform the participants that I will be recording the interview with a digital device to ensure the accuracy of the data.
4. I will explain that the taped interview will be transcribed using Dragon Naturally Speaking 10, a computer software program.
5. I will go over the details on the consent form and obtain a signature.

Interview Questions:

1. How do you view differentiated instruction?
Research question #3
2. What do you look for when you are observing teachers?
Research question #3
3. What types of differentiated instruction strategies do your social studies teachers use to the best of your knowledge?
Research question #1
4. Are there any incentives for professional development offered by the school district?
Research Question #2

5. What have I not asked you that I should have asked?

Appendix D: Observation Form

Participant: _____ Observer: _____
 Grade Level: _____ Time: _____
 Subject: _____ Date: _____

Field notes	Reflections
<p data-bbox="363 701 565 737">Physical Setting</p> <p data-bbox="363 842 643 877">Use of classroom space</p> <p data-bbox="363 1052 691 1087">Instructional resources used</p> <p data-bbox="363 1331 716 1367">Educational Technology used</p>	
<p data-bbox="363 1589 516 1625">Participants</p>	

<p>Number</p> <p>Roles</p>	
<p>Activities in the Lesson</p> <p>Objectives</p> <p>Instructional Strategies</p> <p>Assessments</p>	

<p>Subtle Factors</p> <p>Informal and unplanned activities</p> <p>Non-verbal communication</p>	

Appendix E

List of Codes**Differentiated Instruction Strategies (DIS)**

DIS.col	- student collaboration
DIS.cho	- student choice
DIS.mot	- prompting/motivating
DIS.rw	- real-world
DIS.iw	- independent work
DIS.rel	- teacher-student relationship
DIS.txt	-text based evidence
DIS.rev	-review
DIS.feed	- teacher feedback
DIS.form	- formative assessment

Administrator Perceptions

Ad.ls-	learning styles
Ad.mod-	modification
Ad.sn-	teacher meets students' needs
Ad.ch-	chunking information
Ad.rel-	student-teacher relationship

Educational Technology (EDT)

EDT.stu	-student use of technology
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EDT.tea	-teacher use of technology
EDT.not	- notes/readings distributed prior to class
EDT.sup	-tech support

Curriculum (CUR)

CUR.lt	-learning targets posted
CUR.plan	- curriculum planning
CUR.map	- curriculum mapping

Professional Development (PD)

PD.fu	-follow-up
PD.needs	-needs
PD.wants	-wants
PD.sup	-support
PD.paid	-paid
PD.ct	-co-teaching
PD. ap	- PD appropriateness