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# Walden University

College of Education

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## Kristin Lunsford

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

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Dr. Jesse Richter, Committee Chairperson, Education Faculty
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Walden University 2017

## Abstract

# Challenges to Implementing Differentiated Instruction in Middle School Classrooms with Mixed Skill Levels

by

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MA, Georgia College and State University, 2004

BS, Georgia College and State University, 2003

Project Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education

Walden University

November 2017

#### Abstract

Implementing differentiated instruction in classrooms with students who have mixed skill levels often results in teachers facing many challenges. The purpose of this qualitative case study was to explore social studies teachers' perceptions of the challenges they faced when implementing differentiated instruction in classrooms with mixed skill levels and what teachers perceived they needed to help overcome these challenges. This project study was guided by the conceptual frameworks of constructivism from Piaget and Bruner along with the theoretical framework of Vygotsky's zone of proximal development. The research questions focused on the viewpoints of teachers on implementing differentiated instruction in their classrooms, what challenges they faced when implementing differentiated instruction in a social studies classroom with mixed skill levels, and what support teachers need to overcome these challenges. Data were gathered using structured interviews of the 10 individual teachers chosen through purposeful sampling from a school in metro-Atlanta, Georgia. Data were transcribed and analyzed using coding by highlighting common words to identify themes to answer the research questions. Data analyses revealed that teachers needed professional development that defined what differentiated instruction is, how to implement it, and how to get to know their students better, as well as time to observe other teachers implementing differentiated instruction. A professional development plan was developed to help meet these needs for teachers. Implications for social change include an improved understanding of differentiated instruction and how to support teachers to overcome the challenges of implementing differentiated instruction. This may lead to better instruction and more academic success for all students which may lead to better assessment scores.

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#### Section 1: The Problem

#### Introduction

Because of various legislative initiatives over the last few years, classrooms have changed and now have a more diverse setting of students with mixed skill levels (Bulgren, Graner, & Deshler, 2013). While this change can be beneficial for students, it also can create a challenge for teachers to be able to reach every student and their learning needs (Prain et al., 2013). With the diversity of learning skills in classrooms today, students' needs will not be met if they are all taught the same way (Lingo, Barton-Arwood, & Jolivette, 2011). This skill diversity in the classroom has led to teachers being challenged to meet the needs of all their students and many students' needs not being met (Larson, 2005). Teachers must adapt their classroom environment to meet the needs of students at all levels on the learning spectrum through differentiated instruction (DI; Beam, 2009).

#### The Local Problem

At a middle school in metro-Atlanta, Georgia, students are placed together for social studies classes no matter their skill level in social studies. Social studies classrooms have students who are classified as special education, gifted education, and regular education, and the expectation is that teachers will implement DI. According to school administrators at the study site, these classrooms with mixed skill levels have students who do not all learn at the same rate or in the same way, yet the teacher is expected to meet the educational needs of all these students. Students in the classrooms with mixed skill levels are not always served properly because teachers face challenges

when trying to differentiate (Dixon, Yssel, McConnell, & Hardin, 2014). According to the school district website, they have recognized that there are achievement gaps between the different subgroups of the skill levels and are working to implement instructional strategies to help all students.

The local problem at this middle school, according to the principal, is that students with different skill levels are not having their learning needs met when they are in an inclusion setting without the implementation of DI. While staff and administrators have recognized DI as a way to meet the different needs of all students, it is still not being implemented in most classrooms (Martin, 2013). Teachers at the research site have recognized some complications to implementing DI. DI is multifaceted and does require training, a positive attitude to implement it, planning time, and administrative support (Acosta-Tello & Shepherd, 2014). If these things are not in place, then DI is very challenging to implement. When a teacher does not implement DI because of the various challenges DI presents, there is potential for students' needs to not be met (Roe, 2010). Gifted students are not being challenged; therefore, their skill level is not reaching its full potential (Berman, Schultz, & Weber, 2012; Manning, Stanford, & Reeves, 2010; Schmitt & Goebel, 2015; Seedorf, 2014). Special education students' learning needs are not being met as some might need different learning strategies that those used or need more time and therefore are not able to meet the standards (Hornby, 2011). Regular education students are not reaching their full potential as they are not challenged to increase their skill level (King-Sears, 2008).

There are many implications when a teacher does not meet the needs of each student. These students who do not have their needs met will likely not be able to advance or meet their full potential, which is why, according to the district website, they have emphasized the importance of teachers implementing DI in their classrooms.

Assessment scores could indicate that students are not having their needs met and this could affect how schools are graded (King-Sears, 2008). The purpose of this study was to explore social studies teacher perceptions of the challenges they faced when implementing DI in classrooms with mixed skill levels and what teachers perceived is needed to help them overcome these challenges.

#### Rationale

#### **Evidence of the Problem at the Local Level**

According to the school report for the school under study, 12% of the student population is part of the subgroup of students with disabilities and 98.1% of those students are evaluated with the Criterion-Referenced Competency Test (CRCT) just like the regular education students. Based on the state assessments and the school report, students with disabilities are not being successful at ABMS, as 61% of them did not meet the state's standards on the social studies CRCT compared to students without disabilities, only 16% of whom did not meet the standards on the CRCT. Implementing DI is essential to promote success for each student (King-Sears, 2008). By implementing DI, educators could meet the needs of individual students with different skill levels in one classroom (Tomlinson & Imbeau, 2010).

Implementing DI is essential to help promote the learning of all students in classrooms with mixed skill levels, but the teachers in these classrooms are faced with many challenges and are not implementing DI (Acosta-Tello & Shepherd, 2014). Based on school leader observations, teacher discussions at department meetings, and student assessment scores at ABMS, there has been an evident gap in the practice of implementing DI. According to the school district report for the site of this study based on district leaders' observations, it was noted that DI was observed only 29% of the time. The principal of ABMS stated at a faculty meeting that, "As a staff, we understand the importance of using differentiation in the classroom, but we are not all utilizing it and we need to work on that." During the social studies department meetings, the teachers meet and discuss the progress of their students. The teachers compare how the different subgroups are performing. At one department meeting, a social studies teacher at ABMS recognized that the gifted education students seemed bored and were not being challenged; however, the students with disabilities were struggling to meet the standards, and the teacher felt she was not meeting the needs of all the students. Based on this identified gap in practice of teachers not implementing DI, there was a need for an increased understanding of what challenges teachers face to implement DI effectively and to explore what support teachers need to overcome these challenges.

The study focused on one middle school in metro-Atlanta, Georgia, but could be applied to schools across the nation as the trends have shown that DI is not implemented consistently at many schools (Dixon et al., 2014). This problem has been evident in the larger population of the state of Georgia. The data for the state of Georgia also showed

that special education students fall behind in meeting the state standards compared to regular education students. According to the school report, on Georgia's end-of-the-year state assessments, the CRCT social studies assessment, 55% of students with disabilities did not meet the state standards compared to 21% of students without disabilities.

Students with disabilities have continued to score well below the other students in social studies on the state assessment (CRCT) at ABMS. Only 56% of students with disabilities met or exceeded the state's expectation of the standards on the CRCT compared to 81% of the students without disabilities meeting or exceeding the standards. Data were not available from the Georgia Department of Education on the assessment scores of gifted students. According to the data across the state of Georgia, the needs of students with disabilities are not being met and there is need for improving the instruction of all students to increase the number of students meeting the standards because 1 out of 5 did not pass the social studies CRCT.

Schools are established to support the learning of all students, and if that is not being done then the school is failing and needs to improve (Lauria, 2010). All students do not learn in the same way or at the same pace, so differentiation should be incorporated into instruction to better serve all students (Fitzgerald, 2016; Lauria, 2010). Implementing DI has the potential to increase test scores for all students because their individual learning needs would be met.

This problem was chosen because of other teachers, and me, seeing many gifted students disengaged and many special education students struggling to master the standards. It was apparent that the learning needs of many students were not being met.

The school administration and district leaders doing observations also indicated that this is a problem. Based on the evidence of teachers not differentiating and students not meeting the standards, there was justification that this project study was needed to understand what support teachers need to help overcome any challenges they face in implementing DI in classrooms with mixed skill levels. Understanding what support teachers need can lead to educational decision makers offering them that support, which may in turn lead to DI that can lead to improved student outcomes.

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

According to the literature review, the problem of students not being able to be successful in school is an issue across the state of Georgia and the United States but also extends to other countries (Kearney, 2016). Inclusion is a global trend in education (Hwang & Evans, 2011). Even though inclusive education has been implemented for decades in the United States, teachers across the United States have consistently reported that they do not feel adequately prepared to meet the needs of all students in a classroom of students with mixed skill levels (Smith & Tyler, 2011). Because many classrooms today across the world are made up of students with mixed skill levels, education cannot be a one-size-fits-all approach, or some students will fall behind (Demski, 2012). Students with disabilities are expected to meet the same standards as the other students by the end of each school year, but as they do not all learn the same way or at the same rate, they are not meeting the standards (Hunter-Johnson, Newton, & Cambridge-Johnson, 2014). The literature also showed that many teachers are not differentiating. One study

found that in core academic areas students received no DI in 84% of the classrooms (Latz, Speir Neumeister, Adams, & Pierce, 2009).

The make-up of classrooms today has changed over time as students are not separated according to skill level, so special education students, regular education students, and gifted education students are all taught together (Dukes & Lamar-Dukes, 2009). More students with disabilities are being placed in general education classrooms due to the passing of legislation such as Every Student Success Act of 2015, formerly known as No Child Left Behind Act (2002), and the reauthorization of the Individuals with Disabilities Education Improvement Act (McCray & McHatton, 2011). In particular, there has been an increase in the integration of special education students into the regular education setting as a result of the passing of the least restrictive environment law (U.S. Department of Education, 2015). Along with special education students being placed in the general education setting, gifted students are also being mainstreamed in general education settings because of budget cuts (Cavilla, 2014; Seedorf, 2014).

General education teachers are required to take a more active role to serve students with disabilities (McCray & McHatton, 2011). It is imperative to ensure that all teachers are prepared to work with all types of students (Tomlinson et al., 2003). The purpose of this study was to investigate what teachers perceived was needed to effectively implement DI into their instruction to meet the needs of all students in a classroom of students with mixed skill levels. The research provided details for what training and supports the teachers thought would help them incorporate DI effectively into their instruction.

#### **Definition of Terms**

Classrooms with mixed skill levels: Classrooms that have students identified as special education students, regular education students, and gifted education students (Konstantinou-Katzi, Tsolaki, Meletiou-Mavrotheris, & Koutselini, 2013).

Differentiation: The practice of meeting the different learning needs of all students by modifying and adapting materials, content, student work, and assessments (De Jesus, 2012). Differentiation is an instructional practice that helps teachers create and utilize multiple passageways for students to learn whatever is taught (Tomlinson & Imbeau, 2012).

Differentiated instruction (DI): Includes some teaching strategies that provide students with a variety of resources and strategies to meet their individual learning needs (Bafile, 2009). Instructional strategies are tailored to meet the various needs, interests, and ability levels of students to increase student achievement (Tomlinson, 1999).

Gifted student: According to the Georgia Department of Education (2014), a gifted education student is defined as

one who demonstrates a high degree of intellectual and/or creative ability(ies), exhibits an exceptionally high degree of motivation, and/or excels in specific academic fields, and who needs special instruction and/or special ancillary services to achieve at levels commensurate with his or her ability(ies). (Gifted section, para. 1).

*Inclusion*: Students with disabilities integrated into the general education classroom (Gilmore, 2012). This program mandated by the Individuals with Disabilities

Education Act places students with disabilities in the same setting as nondisabled students and allows all students to participate fully in all educational opportunities (Obiakor, Harris, Mutua, Rotatori, & Algozzine, 2012).

Least restrictive environment: Least restrictive environment is a placement that is most conducive to providing a proper education for a student with disabilities based on their specific need (Sadioglu, Bilgin, Batu, & Oksal, 2013).

# Significance of the Study

This problem of students with mixed skill levels not having their learning needs met is significant because all students do not learn the same way, but they all have a right to learn (Douglas, 2004). For students to learn, their learning needs must be met. If a teacher does not differentiate to meet the different needs of students, then some students will not be able to meet the standards (Tomlinson et al., 2003). Students will sit through lesson after lesson and not achieve the intended outcomes. Those students will continue to struggle and not meet the standards. DI is important, and many teachers recognize this, but they struggle to implement it into their classroom because of different challenges (Roe, 2010). Understanding these challenges associated with implementing DI could lead to solutions for teachers to overcome these challenges and implement DI effectively (Tobin & Tippett, 2014).

This study could be useful for ABMS in that it may help provide information to decision makers about what training, resources, and support are needed better assist teachers to effectively implement DI; information that could be used for decision makers to better support the implementation of DI. The academic performance of students could

increase as a result of teachers differentiating (Tobin & Tippett, 2014). The implementation of DI could have many positive effects, including increased assessment scores, student participation, and classroom management (Lightweis, 2013). Researching teachers' perceptions on the challenges such as classroom management, planning time, developing a plan that can span a wide range of knowledge among students, or lack of resources when implementing DI in classrooms with mixed skill levels could provide information on what these teachers need to overcome these challenges.

Because social studies is not often regarded as an essential academic domain, many schools focus on mathematics and language arts (Winstead, 2011). This study provides information to help support teachers in social studies classrooms who sometimes are overlooked because of what is considered critical areas according to No Child Left Behind (Winstead, 2011). Social studies classrooms were the focus of this study because budget cuts affected many of these classrooms, and they no longer had coteachers who helped support students with special needs, so understanding what support these teachers need could be beneficial.

### **Research Questions**

A review of the literature indicated that DI is beneficial to meet the needs of all students when placed in a classroom of students with mixed skill levels (Levy, 2008; Morgan, 2014). The literature also indicated that teachers do not effectively implement DI because of various challenges in a classroom with mixed skill levels (Dixon et al., 2014). The purpose of this study was to examine teachers' perspectives on what

challenges they face when implementing DI and what support teachers need to overcome these challenges. The study sought to answer the following questions:

RQ1: What are the viewpoints of teachers on implementing DI in their classrooms?

RQ2: From the teachers' perspective, what challenges do they face when implementing DI in a social studies classroom with mixed skill levels?

RQ3: From the teachers' perspective, what support do teachers need to overcome these challenges when implementing DI in classrooms with mixed skill levels?

#### **Review of the Literature**

In this section, I have reviewed literature focusing on classrooms with mixed skill levels and teachers facing challenges to implementing DI. Articles reviewed included definitions of DI, the impact of teachers implementing DI, the need for DI, especially for special education students, and the lack of teacher training to implement DI. To accomplish this review of the relevant literature, I researched online sources that included Walden University Library and Google Scholar. Database searches through ERIC and SAGE found these articles. In searching the literature, the following key terms were used: differentiation, DI, and challenges to implementing DI. As concepts materialized and important terms became present, those concepts and terms were researched more deeply.

The reviewed literature included different perspectives about what DI is, why students need it to be successful, and the challenges to using it. It focused on the different formats of DI and why teachers face challenges to using it. The sources reviewed came from relevant peer-reviewed literature published over the last 5 years to help ensure

quality articles. I also read past dissertations on the topic of DI. This research brought me to information about DI and the challenges that teachers face when using it. This summary and review of current literature helped to build an understanding and leads to an interpretation of the significance of the study and its effects. DI has become a focus of classrooms today because the population of a classroom is more diverse, and society values the learning of all. In this section, I discuss the historical trends that created a more direct need for DI to be implemented in the classroom. This section then includes description of what DI is. The review then continues to provide support for how implementing DI can positively affect student performance. Finally, I have examined the challenges of implementing DI and what is needed to help these teachers overcome those challenges.

## **Conceptual Framework**

The concept of constructivism, originally developed by Piaget (Gash, 2014) and then later refined by Bruner (R. Sharma, 2014), was also applied to this study as it is embedded in DI (Lawton, Saunders, & Muhs, 1980). The theory of constructivism states that students learn based on prior knowledge and experiences in addition to their current contexts (Yilmaz, 2008). Teachers, who implement DI, apply constructivism through their lesson plans and activities as they take into account the learning needs of each student. Constructivism suggests that individuals construct a link to new knowledge based on their prior knowledge (Stubeck, 2015).

#### **Theoretical Framework**

Vygotsky's learning theory of the zone of proximal development was the theoretical framework basis for this study. According to Vygotsky (1978), the zone of proximal development is the difference in what a student can accomplish independently and what they can accomplish with the help of others. Vygotsky believed that students have the potential to learn, but that potential cannot be reached unless they are assisted by someone who uses strategies to meet their learning needs. Teachers can help students reach their zone of proximal development by providing activities that help foster a connection to new information (Subban, 2006). Vygotsky believed that a teacher's job was to create an environment that helped students reach their zone of proximal development. Teachers can help students make these connections through DI by providing encouragement through activities that interest the students or that the students feel they can be successful completing.

#### **Review of the Broader Problem**

Classrooms today have more students with disabilities being integrated more into the regular education population. Students with disabilities are being placed in general education settings more often as a result of legislation such as the Individuals with Disabilities Education Improvement Act of 2004, the No Child Left Behind Act of 2002, and the Every Student Succeeds Act of 2015, which expressed that students with disabilities should join in the general education curriculum with district and state assessments (Kilanowski-Press, Foote, & Rinaldo, 2010). Including students with disabilities in the general education classroom has increased dramatically over the past

few decades, which has affected all aspects of education (Forlin & Chambers, 2011). Most classrooms today include students who have disabilities and diverse learning needs (Konstantinou-Katzi et al., 2013; Martin, 2013; Woodcock, 2013). Diversity is a fact in most classrooms today at the elementary, middle, and high school levels.

Many states have seen a dramatic increase in the number of students with disabilities served in general education classrooms (Grskovic & Trzcinka, 2011). While this legislation sets to provide inclusion for these students, it also creates challenges because teachers must make changes to accommodate the needs of these students to help these students not fall behind (Wu, 2013). This legislation places pressure on teachers to adapt their teaching styles, often without any additional training or planning time (Hollenweger, 2011). Using DI can help assist teachers in adapting their teaching styles to meet the diverse needs in their classrooms.

Using DI can provide the approach necessary to reach the different learning needs of students in classrooms with mixed skill levels. There is potential for schools that promote DI to achieve higher scores on state assessments (Wu, 2013). Because DI attempts to meet the needs of each student, it can help students learn who otherwise would have fallen further behind (Vigdor, 2013). Students who are provided the chance to demonstrate learning in a way that highlights their strengths may be more engaged in their learning and be able to showcase more success (Crim, Kennedy, & Thornton, 2013). Recognizing how students learn best can have a big impact on their abilities in class.

Teachers recognize that not all students learn the same way, but most classrooms are not set up to meet the individual needs of all the students (Fuchs, 2010). Per Manning

et al. (2010), many classrooms are still structured for a "one-size-fits-all instruction" and this is not helping all students (p. 146). Some students need enrichment while others need remediation, while still others are fine at the current pace (Dixon et al., 2014). The one-size-fits-all approach is not fair to all the students as it will invariably leave some students out.

What is DI? For teachers to implement DI, they must understand what DI means (Dixon et al., 2014). DI is providing different learners with different resources and strategies that best meet their learning needs. Latz and Adams (2011) defined DI as a "mind-set that supports teacher effectiveness and encompasses a teacher's understanding of the academic, social, emotional, and psychological needs of all students in the classroom" (p. 781). In today's classroom, differentiation is a philosophy that allows strategic planning to meet the needs of diverse learners (De Jesus, 2012). Teachers can provide various assignments based on skill level or interest to meet the needs of all students (Dixon et al., 2014). Tiered assignments are a common form of DI as they allow the students to complete assignments based on their skill level. Examples of tiered activities include students in an accelerated group completing a presentation of information on the locations of countries in Southwest Asia, whereas another group not as advanced could create a travel brochure about the locations of the countries of Southwest Asia, and the struggling students could label a map of countries of Southwest Asia. DI is not meant to separate and label students, but rather to serve their various needs while mixed in heterogeneous classrooms (Wu, 2013).

DI can be achieved through differentiating the process, content, or product (Akos, Cockman, & Strickland, 2007; Tomlinson, 1999; Trinter, Brighton, & Moon, 2015).

Differentiating by content could include various levels of information such as varied levels of text and resources, small-group instruction that allows for remediation or enrichment, and resources available in different audio or video formats (Tomlinson & Strickland, 2005). DI by process denotes the activities that students participate in to understand the content. Strategies such as role play, tiered assignments, learning contracts, and learning centers can be used by teachers to implement DI by process (Tomlinson & Strickland, 2005). Students express their understanding of knowledge through products, so teachers can differentiate how students demonstrate they understand the content (Akos et al., 2007; Trinter et al., 2015); students could demonstrate their knowledge through performance, reports, diagrams, or computer-based presentations (Tomlinson, 2005).

Implementing DI. DI in a mixed-ability classroom refers to instruction that allows the teacher to meet the needs of all learners by providing multiple options for students to be able to learn and grasp various concepts and to be able to express what they have learned (Patterson, Conolly, & Ritters, 2009). There are many ways to differentiate instruction in the classroom to fit the needs of the students while allowing the teacher to maintain a comfort level of control (Scigliano & Hipsky, 2010). The important thing about implementing DI is that it happens in some form in the classroom (Bafile, 2009). For teachers to differentiate effectively, they must first recognize the

different aspects of the learning needs of the students in the classroom (Herrelko, 2013; Latz & Adams, 2011).

Teachers should provide various ways for students to be able to grasp content that does not dilute below the expectation of the standards set or change it before a lesson, during a lesson, or after a lesson (Bowgren & Sever, 2010). DI does not follow a specific set of guidelines or rules, so teachers can transform it to fit their needs and the needs of their students (Scigliano & Hipsky, 2010). Though DI allows for flexibility, it can also lead to some teachers having difficulty in implementation. Because there is not a specific guideline to follow that some teachers might appreciate, giving teachers the right knowledge about DI could help to ensure they implement it more effectively. Teachers must have knowledge about DI to make sure all activities are designed for students to meet the essential learning targets (Dixon et al., 2014). Teachers need to establish these specific learning targets first to ensure that all activities will meet the standard and provides opportunities for all students in the classroom to be successful (Dobbertin, 2012). Learning targets are standards-based statements of what students are expected to learn (Dobbertin, 2012). Teachers then use these learning targets to design specific activities that will help students meet those learning targets. These learning targets often are used in conjunction with assessments, so students understand what targets they have mastered (Dobbertin, 2012). See Figure 1 for an example of how a teacher might implement DI for the learning target of the geography of Southwest Asia. In Figure 1, there are strategies for different skill levels and examples of how to differentiate for content, process, and product based on three different skill levels. DI is tailored to student needs by providing different entry points, learning tasks, and outcomes (Watts-Taffe et al., 2013).

Learning Targets: Locate on a world and regional political-physical map: Euphrates River, Jordan River, Tigris River, Suez Canal, Persian Gulf, Strait of Hormuz, Arabian Sea, Red Sea, and Gaza Strip.

Locate on a world and regional political-physical map the nations of Afghanistan,

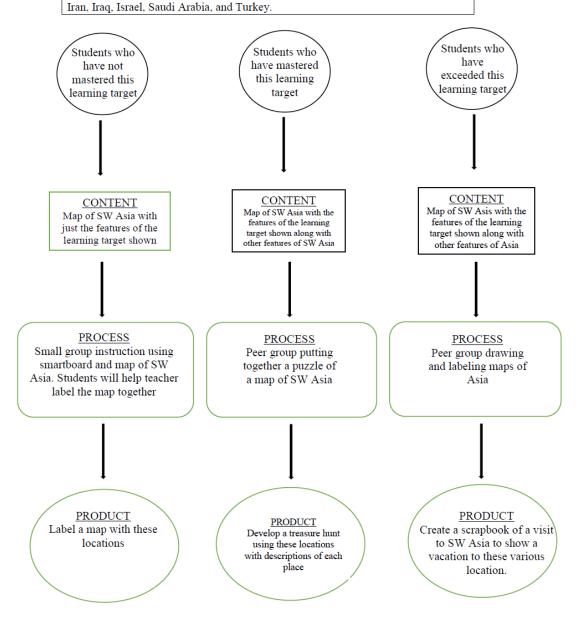


Figure 1. Learning targets for students' understanding of Southwest Asia.

DI is an approach that does not label or segregate students; it should work to serve all students in a heterogeneous classroom (Wu, 2013). Small group instruction can play a pivotal role in a differentiated classroom (Ford & North Central Regional Educational Lab, N.O, 2005). Small group instruction allows the teacher to work more closely with a smaller number of students to help them achieve more (Lipson & Wixson, 2012). Students who are more advanced or have a higher interest in a particular subject can complete an independent study project while the teacher works with a smaller group of students. Once the teacher gets the independent study group working, he or she could be able to focus more on the learning needs of the other students and give them more time and attention.

One approach to implementing DI is by using flexible or tiered grouping where different factors are taken into consideration for placing students based on characteristics such as gender, ethnicity, academic skill, interests, and personality (Herrelko, 2013; Patterson et al., 2009). These groups should be based on data for what the students' needs are and should often be reevaluated to ensure that these flexible groups are meeting each students' needs (Rakow, 2012). These collaborative groups could offer more flexibility to provide various strategies with the support of peer tutoring (Hoffman, 2002). These groups can also help motivate students through peer relations of wanting to be leaders among classmates (Wood & Jones, 1998). Assigning roles in the groups can help monitor and control negative classroom behavior (Wu, 2013). Students can help monitor that every person is completing their required tasks and contributing to the group (Patterson et al., 2009). By implementing grouping, a teacher can more easily assess what students

understand and what they do not because they will be in smaller groups (Hodges & McTigue, 2014; Tieso, 2003). Teachers can group within their classroom, or teachers of the same subject area can utilize each other and split students up in different classrooms based on skill level. Ability groups can be formed by different activities based on assessments (Herrelko, 2013; Rubenstein, Gilson, Bruce-Davis, & Gubbins, 2015). Herrelko (2013) found that students who were placed in ability groups based on assessments could achieve more academically. The results from Herrelko's study revealed that students' scores in Tier 0 increased 30 points, students in Tier 1 increased by 64 points, and Tier 2 students increased by 114 points.

Tiered lessons can also be constructed to provide DI by offering different degrees of difficulty of assignments to meet students' needs and challenge them to move up to higher levels of learning (Latz & Adams, 2011). Another example would be to give students a work packet with different degrees of difficulty, and depending on the students' skill levels determines how difficult the problems or tasks are for a particular student. Tiered tasks are a valuable tool as students are doing different activities or tasks that are focused on the same standard, but it allows for self-paced opportunities to practice skills and fluency (Kobelin, 2009). Sometimes implementing DI can require more work on the teacher's part at the beginning, but teachers in the same subject area can collaborate to share this workload. Teachers might have to give a little more effort when first implementing DI as it does take some training and planning (Bulgren et al., 2013). A common planning time of teachers in the same subject area can be beneficial to give teachers the time they need collaborate. In the end, DI can make their job easier as

students can be more successful as they will find more self-motivation (Bulgren et al., 2013; Hodges & McTigue, 2014; Morgan, 2014). Once students are more self-motivated, there could be fewer discipline issues in the classroom (Dukes & Lamar-Dukes, 2009; Van der Ploeg, 2013).

Using DI can look different from one teacher to another as there is not just one way to use it. Teachers must recognize their comfort level and build from there (Bowgren & Sever, 2010). Beam (2009) suggests that DI can begin with "low-preparation activities like student choice tasks, homework options, use of reading buddies, varied journal prompts, different pacing options, goal setting, flexible grouping, and interest explorations" (p. 7). As teachers become more comfortable with DI, they can increase the level of its use in their classrooms (Bowgren & Sever, 2010). Beam (2009) recommends activities that can be instituted requiring "high-preparation are tiered activities and labs, independent studies, multiple texts, alternative assignments, multiple-intelligence options, varying graphic organizers, tiered learning centers, choice boards, graduated rubrics, personal agendas, or stations developed by readiness, interest, or learning profile" (p. 7).

Another way to use DI is by using student choice tasks, which provides the students with a variety of activity options and allows them to choose according to their interests (Dotger & Causton-Theoharis, 2010). Students having a choice can be a powerful tool in implementing DI as it gives students the power to learn based on their interests and strengths (Crim et al., 2013). Studies have shown that students will have more motivation and achieve more when they find interest in a topic (Morgan, 2014).

Using learning targets is another example of how to differentiate in the classroom based on student assessments (Blanchard, 2003). This method calls for students to progress at their pace and use assessment results to determine what they need to work on (Dobbertin, 2012). Students work on tasks based on what the assessments indicate they still need help with to master the standards. Students are given tasks to meet specific learning standards (Moss, Brookhart, & Long, 2011).

There are several different learning styles, so DI allows each student to be reached no matter how they learn best (Allcock & Hulme, 2010). A teacher who implements DI allows multiple ways for students to access content, process it, gain an understanding of the concepts and skills, and then create products that demonstrate that they are learning (De Jesus, 2012). Content and strategies should be flexible aspects of the classroom to meet the students where they are and to challenge them to achieve more (Roe, 2010). Flexibility is important with DI since it requires blending multiple features of instruction at the same time (VanTassel-Baska & Stambaugh, 2005). DI allows for meeting the needs of each student, so being flexible is important because these student needs may change (Roe, 2010).

Research that supports the use of DI. Implementing DI could raise the scores of students with disabilities, students at-risk for school failure, regular students, and students characterized as gifted and talented (Wu, 2013). Chicago Public Schools conducted a research study and integrated a flexible differentiated-instruction-based strategy and reported they saw an increased performance for students who had high and low math skills (Rubenstein et al., 2015). Research is being conducted that shows the results

supporting the use of DI (Brighton, Moon, & Huang, 2015). Students served in a program where reading was differentiated were more likely to achieve more when presented with opportunities for self-interest and self-selection of reading materials (Morgan, 2014). When teachers DI, it showed students more on task and students in third grade increased their reading comprehension scores (Brighton et al., 2015). Over a seven, year period during this research study, the district reported improvement in all subject levels and all levels of proficiency. Results from this study showed that students in the lowest remedial band on state assessments reduced by 28% which left only 4% of this group classified as remedial (Beecher & Sweeny, 2008). Another research study that used a reading program showed that high-poverty students in an urban school resulted in significantly higher reading fluency scores compared to students who were not part of the program that used DI (Reis, McCoach, Little, & Kaniskan, 2011). Another research study showed that those students placed in a classroom that used DI increased their ITBS scores by 23% (Callahan, Moon, Oh, Azano, & Hailey, 2015).

Schools that enacted a research study for teachers to implement DI reported that they saw an improvement in students' attitudes about school and more engagement in learning along with improved scores on district and state assessments (Beecher & Sweeny, 2008; Doubet, 2012; Konstantinou-Katzi et al., 2013). In another research study, more than 90% of the teachers reported that they saw a significant increase in students' desire and motivation to read more and became more actively involved after integrating DI into their reading program (Reis et al., 2011). DI can have a positive impact on student behavior in the classroom. Over a three-year period of another research study,

one school noticed significant changes to students' behavior in classrooms where teachers focused on implementing DI. Teachers in the experimental group experienced significant changes at a 39% increase in more positive behavior of students compared to teachers in the control group (Van Tassel-Baska et al., 2008).

Pretests can be a tool that teachers use to organize a plan to implement DI. Another study looked at pretests and posttests scores of students and determined that those students exposed to DI could improve their individual progress with results showing that 67% of students increased their assessment score at least one letter grade (Konstantinou-Katzi et al., 2013). This study was used in a Calculus I class, and it lasted 13 weeks. The teacher used action research to plan lessons of the curriculum to meet the needs of the students. Assessments used throughout the study to gather evidence to document changes in the students' performance and attitudes. The students became active learners by taking part in joint discussions and collaboratively worked to complete assignments. DI was used throughout by the instructors outlining which knowledge must be attained by all students. They would then work with those students individually who struggled with this knowledge while other students progressed individually or in groups on learning activities in a hierarchic order. Technology was an important component of the DI used as applications developed to increase knowledge. These assessments included pretests, diagnostic questionnaires, in-class exams, and four assignments. A course completion survey was given as well along with in-class interviews of the students (Konstantinou-Katzi et al., 2013). DI can have an impact at all levels of learning to help all students increase their knowledge and achieve more success.

Results from another school favored an environment with DI for fifth-grade students (Brimijoin, 2005). The teacher in this study used a variety of assessments to collect data to determine the students' existing understanding of certain concepts. This teacher then used this data to design her lesson plans and continuously observed and evaluated the students' needs throughout the lessons. One technique that the teacher used to help gauge when the students needed additional help was through a "windshield" question approach. She asked the students how many were clear as glass (meaning they understood), how many had bugs (meaning they did not completely understand), and how many were completely covered in mud (meaning they did not get it at all; Brimijoin, 2005). The teacher believed this approach allowed her to evaluate the lesson quickly and modified it on the spot for certain students. This teacher used a variety of DI techniques such compacting, tiered lessons, ThinkDOTS (Think-Tac-Toe), graphic organizers, RAFTs for writing projects, anchor activities, and task cards (Brimijoin, 2005). The teacher saw positive results come from her use of DI.

When students started the school year, 47% had previously passed the statewide reading assessment, 53% had passed math, 34% had passed social studies, and 42% had passed science. At the end of the year, all subject areas showed an increase in student achievement with 74% of students passing reading, 58% passing math, 58% passing social studies and 74% passing science. This study also showed that some students improved their individual assessment scores by almost 30%. (Brimijoin, 2005, p. 257)

Promoting self-efficacy can be a result of implementing DI which can, in turn, lead to better assessment scores. DI was used to help improve reading scores at the middle school level. The reading levels of students increased by .88 grade levels and the NCE percentage rose by 6.6% (Stenson, 2006). This school focused their research on implementing a program that worked to promote self-efficacy among students for them to become active learners in their education. Graphic organizers and scaffolding were used to meet the students' needs and help them to feel success and not get frustrated (Stenson, 2006).

Implementing DI can be seen as a common-sense approach to planning (Stanford, Crowe, & Flice, 2010). Teachers who know their students and understand their learning needs will plan for DI as they create their lesson plans (High & Andrews, 2009; Tomlinson & Imbeau, 2012). Teachers who offer resources and activities that provide the needed pre-requisite skills and knowledge helps their students master the standards (Stanford et al., 2010). Students who feel understood, appreciated, and accepted tend to perform better academically and implementing DI allows students to feel these things (Tomlinson & Germundson, 2007).

**DI** can help all students. DI can help all kinds of learners from those with disabilities to those with advanced learning skills (Tomlinson & Javius, 2012). Students with disabilities can receive extra support and remediation if their teachers implement DI (Tomlinson & Javius, 2012). Gifted students can receive instruction that stimulates creativity and allows for higher order thinking skills to be used (De Jesus, 2012; Jones & Hebert, 2012; VanTassel-Baska, 2014; VanTassel-Baska, 2015. Regular education

students can also benefit from teachers implementing DI in that there is potential to increase their skill levels and assessment scores (King-Sears, 2008). Some students in social studies classrooms have more background knowledge and experiences than others who can help them achieve more in this subject. These students who come into a social studies classroom with more background knowledge and experiences will not necessarily be labeled as gifted because they just have extra interest in this subject. These students can be more successful in social studies through DI because they will be able to enhance their knowledge and interest by doing more advanced work than the others (Schmitt & Goebel, 2015). Being able to enhance their knowledge and interest also applies to regular education students who do not have a lot of background knowledge or experiences that would help them in social studies, they will not be labeled as a special education student, but they can receive remedial help through DI. Remedial strategies could include virtual field trips for students who have not been to some places that other students have, story books about places or historical events, or role-playing exercises that could allow those students to make a connection to a place or event.

DI supports enrichment. Often, when DI is discussed it is associated with helping students who are struggling (Tomlinson & Javius, 2012). While DI can help those students who are not performing adequately, there are also benefits to other students like gifted students (Tomlinson & George, 2004). Gifted students are often thought to be students who will progress on their own, but they also need specialized assistance (Park & Oliver, 2009; Schmitt & Goebel, 2015; VanTassel-Baska, 2015). Gifted students have different cognitive, societal, and academic needs and characteristics compared to their

classmates (Park & Oliver, 2009; Schmitt & Goebel, 2015). Teachers who work with gifted students need to help gifted students reach their full potential by implementing DI into their classroom (Seedorf, 2014; Schmitt & Goebel, 2015; Tomlinson, & George, 2004). Research studies have shown that gifted students have already mastered 40% of grade level standards at the beginning of a school year (McAdamis, 2000). Gifted students need the opportunity to be challenged through their interests and the teacher questioning their perceptions, and DI allows this to take place (Manning et al., 2010; Seedorf, 2014). Gifted students who are not presented with DI may not have as much achievement growth (Firmender, Reis, & Sweeny, 2013). Reading First schools that focused heavily on reading had all subgroups of students increase their reading level, but the gifted students' scores increased the smallest amount (Brighton et al., 2015). Gifted students who are not challenged could become underachieving students and not reach their full potential. Gifted underachievers are at risk for school failure or continued underachievement (Clinkenbeard, 2012). Social studies can provide gifted students an opportunity to engage in complex and challenging activities which can help them develop their critical thinking skills more (Kahveci & Atalay, 2015). Gifted students involved in a study that investigated whether the use of independent study enhanced the learning of gifted students showed that 86% of students responded positively about the experience of an independent study (Powers, 2008).

*DI supports students with disabilities around the world.* Initiatives to support students with disabilities are taking place in other countries as well (Ahmmed, Sharma, & Deppeler, 2012). The United Kingdom has the Every Child Matters program that works

to ensure that students with special education needs receive a quality education (Wu, 2013). The teachers in the UK experience many of the same challenges as teachers in the United States for accommodating special education students in the regular education classroom. Italy also has national policies that integrate students with disabilities in the general education classrooms, but also continues to conduct research on what needs to be done to make this a successful policy (Wu, 2013). Both the UK and Italy understand that there is a need to help teachers prepare for the challenges they face in classrooms with students of mixed skill levels (Wu, 2013). Even though many school districts, states, and countries have passed laws to include students with disabilities in the general education setting, it is not enough to guarantee these students will be successful (Meynert, 2014; Smith & Tyler, 2011). There must be support for the teachers working with students with disabilities in the general education classroom (Forlin & Sin, 2010). Across the world, these teachers indicate that they do not feel prepared to meet the challenges that this legislation and these initiatives demand (Philpott, Furey, & Penney, 2010). Just placing students with disabilities in inclusive settings is not enough to allow them to reach their full potential (Ferretti & Eisenman, 2010). The teachers working in these inclusive settings must have the skills, resources, and training necessary to use effective researchbased practices along with the support of school leaders who support the teachers and students (Smith & Tyler, 2011).

Challenges to implementing DI. Teachers understand that not all students learn the same way, but understanding how to meet these different learning needs is challenging (Prain et al., 2013). These challenges often impede teachers implementing DI

in their classrooms. Research has found that some of these challenges are a result of adverse attitudes of general education teachers, a deficiency of knowledge, and lack of administrative care (Jones, Yssel, & Grant, 2012; Orr, 2009; Roiha, 2014). The following sections will provide more details about how these barriers create challenges for teachers.

Teachers' attitudes. A teacher plays a vital role in how students perform in a classroom (Dee, 2011; Troxclair, 2013). While it is not the only factor that influences student achievement, it may have a heavy impact (Woodcock, 2013). Teachers that work in classrooms that have students with mixed skill levels have reported having various attitudes about the students in these classrooms (Dee, 2011). Many teachers feel that they are not prepared for the responsibility of educating students with mixed skill levels (Fuchs, 2010). Teachers have also reported that they feel pressure because of assessments when students with disabilities are in their classrooms (Pearcy & Duplass, 2011). They feel that it is difficult to cover the entire curriculum and meet the needs of all students (Pearcy & Duplass, 2011). Students who are in these classrooms with teachers who have negative attitudes and feel they are not prepared to teach students with various learning needs may struggle to achieve their full potential both academically and socially (Smith & Tyler, 2011; Troxclair, 2013).

Teachers need to be fully trained to understand the implications of having special education students in their classrooms (Woodcock, 2013). Students who have individualized education plans (IEPs) are entitled to certain modifications and accommodations as set in that legally binding document (La Salle, Roach, & McGrath, 2013). Some teachers may perceive that these students with disabilities in the general

education setting should be learning at the same pace as other students in the classroom, but those teachers need to understand that those students may not learn at the same rate or in the same way (Wu, 2013).

Teachers must have the attitude that every student in the classroom is important. The attitude of a teacher plays a vital role in the success of each student (Male, 2011; Troxclair, 2013). The student should be able to trust that a teacher is doing what is best for each person in the classroom (Wu, 2013). A teacher's negative feelings can have a tremendous impact on behaviors, student learning and the overall success of the inclusion program (Fuchs, 2010). In making sure that every student feels important, the teacher must get to know each student and their learning styles and levels (Herrelko, 2013). The teacher needs to be able to work with each student's level and not give work that is too hard or too easy (Wu, 2013).

Some teachers are struggling with the changes in education and their attitude is that students with special needs should not be in the general education classroom (Grskovic & Trzcinka, 2011). Even though approximately 65% of students with disabilities are considered as having mild/moderate disabilities, some educators continue to question integrating them into the regular education classroom (Brandes & Crowson, 2009). Teachers who have negative attitudes about including these students in their classrooms have reported that because of their beliefs about the placement of these students, they do not differentiate instruction for them (Grskovic & Trzcinka, 2011). Teachers must have more training and professional development to give them the

confidence to accept and accommodate all students in their classrooms (Sadioglu et al., 2013).

Lack of teacher training. Many teachers have reported that they do not feel prepared to teach in classrooms that have students with mixed levels because they have not received the proper training (Sadioglu et al., 2013). Many colleges do not have education programs that require any special education courses be taken (Costello & Boyle, 2013). Teachers recognize that they need more training from the start (Glazzard, 2011). Many have expressed that their teacher education programs could have done a better job to prepare them for the diverse classrooms they would be in (Fullerton, Ruben, McBride, & Bert, 2011). Veteran teachers were educated on mainly content area and not special education (Glazzard, 2011).

Alternative certification programs have developed across the nation—in 2007, all states and the District of Columbia offered alternative routes to licensure—to help ease a shortage of teachers (Grskovic & Trzcinka, 2011). These programs offered alternative routes to receiving a teaching license, but they did not require any training for working with students with disabilities (Quigney, 2010). This lack of training for working with special education students is challenging for these new general education teachers (Grskovic & Trzcinka, 2011). In 2005-2006, 69,000 people were issued teaching certificates in the United States through alternative routes (Grskovic & Trzcinka, 2011). This is a large number of teachers who may be in classrooms with students with special needs, but they have not had any training to help meet the needs of those students (Quigney, 2010).

A classroom of students with mixed skill levels can be challenging for the teacher to make accommodations to meet the needs of every student (Ashby, 2012). Teachers often feel unprepared to meet this challenge as they have not been given the proper training (Horne, Timmons, & Adamowycz, 2008). Proponents of inclusion understand the importance of DI, but there is a lack of teachers being trained to effectively meet this expectation (Voss & Bufkin, 2011). According to teachers interviewed in the research study by Horne et al. (2008), training was cited as one of the main things teachers wanted to better serve students. When the teachers feel that they are not prepared to teach students with mixed skill levels, then their attitudes about being in an inclusion classroom are negative and can impact the learning environment (U. Sharma, 2012). Training these teachers can help them feel that they can more adequately serve students, and their attitude will improve (Loreman, Sharma, & Forlin, 2013; Voss & Bufkin, 2011). When a teacher's attitude is positive, it often leads to the performance of the students improving (U. Sharma, 2012).

Many general education teachers have not received special education training, and this affects their attitude about the inclusion of students with disabilities (Hsien, Brown, & Bortoli, 2009). General education teachers need training on how to effectively manage a classroom of students with mixed skill levels (Hwang & Evans, 2011). These teachers need additional training on how to handle the frustrations of students with disabilities while being able to maintain expectations of the classroom (Grskovic & Trzcinka, 2011). It is also important that principals receive training as well, so they can be instructional leaders and offer support (Hertberg-Davis & Brighton, 2006). Special education teachers

need training as well, so they can serve as consultants to the general education teachers (Hamilton-Jones & Vail, 2014). Student learning depends on the quality of teachers and if teachers are not trained on working with the students in their classrooms, then these student's will not be able to learn to their full potential (Park & Oliver, 2009).

A positive attitude about teaching in an inclusion classroom has been found to be as equally important as possessing knowledge of the subject (Horne et al., 2008). Teachers often are prepared with the content knowledge, but lack how to deliver that knowledge to a diverse group with mixed skill levels (Hwang & Evans, 2011). Teachers who are trained to serve special education students do not see the inclusion of students with disabilities as a disadvantage (Hsien et al., 2009). Teachers who are trained report they have the "appropriate skills, knowledge, confidence and efficacy to cater for children with disabilities in their classrooms" (Hsien et al., 2009, p.34). When teachers do not have the proper training to instruct students with disabilities then those students do not receive the proper support to be successful (Horne et al., 2008). Cooper, Kurtts, Baber, and Vallercorsa (2008) conducted a study that found that half the teachers who participated had concerns about feeling unprepared to meet the needs of students with disabilities while simultaneously instructing the other students in the classroom. This feeling of being unprepared can lead to tension and can significantly affect all the students in the classroom (Dee, 2011).

Many teacher preparation programs separate general education teacher training from special education teacher training (Fullerton et al., 2011). These general education teacher programs are not preparing these teachers for the real-world classroom as more

and more are becoming inclusive (Dee, 2011). Many new teachers do not have the experience necessary to manage an inclusive classroom, and the lack of training does not allow them to meet the needs of all students (Fullerton et al., 2011).

Once teachers are at a school, they often depend on administrators to guide them through serving in an inclusion classroom, but teachers reported they feel that their administrators are not able to help them as they do not have sufficient information to train them (Orr, 2009). Professional development is often provided by administrators, but if they are not properly trained on serving students with mixed skill levels in a classroom, then administrators will not be able to train their teachers to serve those students (McHatton, Boyer, Shaunessy, & Terry, 2010). Since teacher effectiveness is strongly linked to student outcomes, it is a problem if teachers are not trained to instruct students with mixed skill levels (Smith & Tyler, 2011).

Teachers need specific training on what DI is and how to effectively use it in their classrooms as well as receiving continued support and planning time to implement the training (Kappler-Hewitt & Weckstein, 2012). Teachers feel that they hear the words DI often, but do not receive training that they can use in their classroom (Chesley & Jordan, 2012). Teachers recognize that DI is important, but do not have a clear understanding of how to implement it (Dee, 2012).

Training teachers from the very beginning could help prepare them more for the reality of what a classroom today is like (Forlin, Earle, Loreman, & Sharma, 2011).

Teacher training programs are not fully training teachers nor principals to meet the demands of students with disabilities in today's schools (Ko & Boswell, 2013). The lack

of teacher preparation also extends to veteran teachers who report that professional development does not prepare them for the demands of a classroom with mixed skill levels (Smith & Tyler, 2011).

It is important that teacher education programs require all teachers to be provided training for working with special education and other subgroup populations like English Language Learner (ELL) students (Grskovic & Trzcinka, 2011). Teachers in general education classrooms need to learn about special education to provide a quality education that meets different learning styles and rates of learning (Ajuwon et al., 2012). Many colleges today are including special education awareness programs as part of their education programs (Fullerton et al., 2011). New models have been developed for teacher education programs that help integrate special education and general education (Fullerton et al., 2011). Unfortunately, many of the general education teachers today received their training before these changes in the college programs and did not receive any training to work with students with disabilities (Grskovic & Trzcinka, 2011). Many preservice teachers reported that they had not witnessed any DI taking place in the classrooms they observed, so they have no example to follow when they have their classrooms (Martin, 2013).

It should be expected that teachers today have an understanding that they need to be equipped to teach students with disabilities as it is a certainty that they will have these students in their classroom (Fuchs, 2010). This holds true for high school general education teachers as they are usually the main provider of instruction for students with disabilities compared to the special education teachers (Grskovic & Trzcinka, 2011). At

the high school level, many special education teachers who serve as co-teachers go from different class to class and even subject area, so they depend on the general education teacher to provide the main instruction. It is reported that 79% of high school students with disabilities were in general education classes most of the day, with 55% of them spending more than 80% of their school day in inclusion (Grskovic & Trzcinka, 2011). High school students are being prepared for the real world, so it is important that they are in the least restrictive environment.

Inclusion is not something that is just a trend or for right now (McMaster, 2013). It is here to stay and is a civil rights movement for all students to be included and have their learning needs met (Orr, 2009). It is imperative that teachers can overcome any challenges associated with having students with mixed skill levels in their classrooms (Smith & Tyler, 2011). Teachers who overcome the challenges implementing DI could have a tremendous impact on the academic performance of their students and providing teachers with the proper training could help them overcome these challenges (Dixon et al., 2014).

The role of the administration to support DI. Support from the administration can play a vital role in teachers working in classrooms with mixed skill levels (Ahmmed et al., 2012). It is essential for principals to provide significant, knowledgeable, and continual leadership to inspire teachers to implement DI (Regional Education Laboratory Mid-Atlantic, 2015).

Administrators need to understand what it is like to work with special education students and they need training to be able to offer support to their teachers (Milligan,

Neal, & Singleton, 2012). It is important that administrators receive professional development training in the area of special education to stay up-to-date on legislation and best practices, so they can offer support to their teachers through professional development (McHatton et al., 2010). Effective leadership plays a vital role in how teachers respond to inclusion (McHatton et al., 2010).

Administrators play a crucial role in programs implemented at their schools. When implementing anything new, administrative support and being available for the teachers is crucial (Milligan et al., 2012). Any change can create stress and uncertainty, so a faculty must have the support of the administration to implement DI (Weber, Johnson, & Tripp, 2013). Support from the administration can help teachers to have confidence to try new things like DI and to see it through when any challenges arise (Ahmmed et al., 2012). Administrators who have a visualization for DI are the facilitator to assisting this practice in their schools (Regional Education Laboratory Mid-Atlantic, 2015). DI could be more successful in a school if teachers and administrators work together on its implementation. The administration needs to recognize the value of DI and understand that it is vital that teachers use DI in their classrooms. School leaders must learn about DI to support their teachers using it. Administrators should understand why DI matters, what it ought to look like, how teachers should develop it, how to help teachers with their concerns about implementing DI (Regional Education Laboratory Mid-Atlantic, 2015). Knowledgeable leaders are vital to producing significant changes across schools.

There is concern that implementing DI does not support an environment of fairness because not all students are doing the same thing (Manning et al., 2010; Prain et al., 2013). Differentiation is a philosophy that not all students will receive the same type of instruction or assignment, but that they will receive what they need (Roe, 2010). Differentiation ultimately provides a fair environment because students will be given what they specifically need to be successful (Tomlinson & Doubet, 2005). Teachers need the help of administrators to support them when they have parents who feel that DI is not fair. Since all students do not learn the same way, it would not be fair to students if just one type of teaching style was implemented in the classroom with just one type of assignment (Tomlinson, 1999). Those students who do not learn that particular way would be left out and their learning needs would not be met. Parents and community members need to be informed about how DI works and how it can meet the needs of all students (Tomlinson & Imbeau, 2012). Data can be presented to the community to show them how DI is a positive instructional strategy (Kumar, 2010).

This review of the literature provided an understanding of what DI is, the importance of implementing DI, and how to differentiate. The literature provided various descriptions of what it means to differentiate, and how it is necessary to meet the needs of all students since every student is different (Lauria, 2010).

### **Implications**

This project study could have a positive social impact because a plan developed based on the data collected about how to help teachers overcome the challenges of implementing DI when working in a classroom with mixed skill levels. Teachers could

then be better prepared to differentiate to meet each student's learning needs and consequently students could increase their level of achievement.

This research could help support the professional education practice at the local site by identifying what challenges teachers face when working in classrooms with mixed skill levels and what support is needed to help them overcome these challenges. After identifying what challenges teachers face and what support is needed to overcome these challenges, a project developed to assist the teachers so they will be able to implement DI effectively. This project may include establishing professional learning communities where teachers collaborate to develop model lessons that include tiered activities. These learning communities could be encouraged by administrators providing time for teachers to prep and engage in these learning communities and creating an environment where the entire faculty supports the use of DI. This project focused on social studies teachers, but it could ultimately be used for all teachers and altered to fit the needs of all subject areas.

As a result of the information gathered for this study, the need for adequate training, resources, and ideas was highlighted to help teachers be more effective in implementing DI. The information from this study could help teachers better manage a classroom with mixed skill levels more effectively with the right resources to overcome any challenges that occur when implementing DI. If teachers can effectively implement DI in classrooms with mixed skill levels, this could lead to students' skill levels increasing. DI can help students make significant gains in academic skills along with improving their attitudes about learning (Wu, 2013). Students who are able to make significant academic gains and improve their attitudes about learning could have the

ability to go out into society and be more productive. The social change that could happen as a result of this study is that it might help foster an understanding of how to support teachers who work in classrooms with mixed skill levels, and the information that is gathered could help administrators make decisions to support teachers in implementing DI that could lead to better student outcomes which could lead to more productivity in society.

# **Summary**

Implementing DI in classrooms with mixed skill levels can produce a positive impact on student performance, but teachers are faced with challenges in these classes and do not implement DI. Understanding the challenges that these teachers face when implementing DI can help lead to support being offered to these teachers. This qualitative study involved interviewing teachers to understand their perceptions about the challenges they face when working in classrooms with mixed skill levels and what support is needed to help them teach all students in these classrooms.

Section 2 presents how this project study was conducted. This section discusses the qualitative research design and approach, the participants, data collection, data analysis, and limitations.

# Section 2: The Methodology

#### Introduction

Teachers are faced with many challenges, especially when teaching in a mixed skill level classroom. This study was designed to gain a better understanding of the needs of teachers who are teaching students with mixed skill levels in their classrooms. Many classes today have a mixture of gifted students, regular education students, and special education students. Qualitative research provides a way to understand relationships in a real-world setting (Yin, 2011), such as mixed skill level classrooms.

In Section 2 I describe the research design and approach, participants, data collection process, and methods of data analysis for this study. The research design is a qualitative case study that used an interview approach with open-ended questions to gather data about the perceptions of teachers on the challenges of implementing DI in mixed skill level classrooms. These questions probed for explanations on the opinions and perceptions of the teachers being interviewed.

# **Research Design and Approach**

I chose a qualitative research design for this study because it is necessary to examine the perceptions of teachers as stated directly by them. One of the main features of a qualitative research study is examining the meaning of people's lives by representing their perspectives and contributing insights to existing concepts (Yin, 2011). Through the design of this project study, I examined the perspectives of teachers on the challenges they face in implementing DI and what support they feel they need to successfully overcome these challenges.

A qualitative research approach was beneficial for this study because I could conduct research and gather data using common terms that are easily understood (Yin, 2014). The type of qualitative study I completed was a case study as I investigated a distinct subject, which was social studies teachers (Bogdan & Biklen, 2007). The case study was the best design to use because it described the events of a certain case (Yin, 2011), which in this study was the teachers and the challenges they faced to implement DI in a classroom with mixed skill levels.

The participants included social studies teachers who were teaching or had taught in the last 2 years in classes with mixed skill levels (a combination of special education, regular education, or gifted education). I selected social studies teachers at ABMS (pseudonym) because they did not receive support from a coteacher and only had a paraprofessional available to assist the students who qualified for special education services. Because this study focused on the perceptions of teachers, it was necessary to gather data directly from them. The data came from the interview responses from these teachers.

# **Research Design**

This was a case study as the social studies teachers were a controlled group who had a common content area, and the concentration was on what teachers perceived about the challenges they face when implementing DI and what is needed to overcome these challenges (Merriam, 2009). The focus of this study was on a particular case—the perceptions of teachers regarding the challenges they faced implementing DI in a classroom with mixed skill levels. The results of this case study could then also be

applied to other situations (Yin, 2011). I analyzed the data through coding methods to identify common themes and trends, which are discussed in further detail below. The coding methods involved reading through the data and compiling a list of words and phrases that represented common topics and patterns that appeared (Bogdan & Biklen, 2007). The list of words and phrases included *resources and technology needed, behavior and classroom management, professional development and training, challenges*, and *overcoming challenges*. These coded categories were then sorted.

# Justification for the Design

A case study was the best choice for this study because quantitative research like surveys would not have provided rich data to reflect the perceptions of the teachers. Interviews allowed for better understanding of the perceptions of the teachers because the responses to the questions can be probed further. The teachers were in real-world situations and expressed their views through their own words in this qualitative approach. By conducting a qualitative study, statistical averages did not represent the participants, as would have been the case in a quantitative study (Yin, 2014). A quantitative study would not allow for the teachers' views to be expressed by their own words. A survey would limit the amount of context that teachers would have been able to express about their perceptions (Yin, 2011).

A case study was the best design choice for this study because it allowed me to study the case in a real-world setting (Yin, 2011). A case study allowed me to focus on a particular situation (Yin, 2014), namely the perceptions of the teachers on the challenges they face when implementing DI in classrooms with mixed skill levels and what they

need to overcome these challenges. Results from this study could provide a deeper understanding of a real-world situation of teachers (Yin, 2011).

# **Participants**

I obtained a list of all teachers from the past 2 years who fit the criteria of having taught social studies with students who have mixed skill levels. I used purposeful sampling to select members for this study because this permitted participants who could offer relevant and detailed information (Yin, 2011). More precisely, a homogeneous sampling method (Creswell, 2012) was used where contributors were chosen for the study who had the cohesive subject of teaching social studies classes that have students with mixed skill levels. The right number of participants to use for a study can be difficult to determine and is different for every study. It is important to take into account the number of possible experts available along with the data that are to be gathered (Flick, 2009). For this study, approximately 20 teachers met the necessary criteria to be eligible. Thomson (2004) recommended between 10 and 15 participants for a qualitative study to be rich and meaningful. I sought a minimum of 10 participants, as 10 is nearly 50% of all the teachers who qualified for this study.

### Access to the Participants

Approximately 20 teachers qualified to participate in the study. Following Walden Institutional Review Board (IRB) and district approval, I worked with the principal and the social studies department chair to gather a list of the potential participants. An e-mail was delivered to those educators eligible for the study, and this e-mail completely described the study (Appendix B). The e-mail invited teachers to reply if

they wanted to participate in the study. I followed up with those teachers who responded with interest and contacted them directly to give them a personal overview of the study and got their signatures on the consent letter for participation. I selected the teachers to participate in the study from those who expressed interest in participating. Ten teachers responded to my invitation to participate in my project study, so I chose all 10 to be a part of it.

# **Researcher-Participant Working Relationship**

A researcher-participant working relationship was established before the start of this study with some of these educators through collaboration at various faculty meetings, grade level meetings, and department meetings from an earlier time when I worked at this school. The relationship continued to evolve through conversations about curriculum, student achievement, and students' learning needs. I am not a supervisor to any participants of this study as I have never had the authority to make any personnel decisions. I am not currently employed with this school, but I have maintained a professional relationship with some of the possible participants for this study. I expected the participants of this study to be honest and speak openly about their experiences in their classrooms. I worked to establish a comfortable environment with each participant before the interview to get to know the participant on a more personal level with a discussion of topics that includes biographical information. I allowed them to choose the time of the interview that best fit their schedule. I spent some time with each participant before the interview started to help them feel comfortable with me.

# **Protection of Participants**

I protected the participants of this study as the information they provided was kept confidential. I used a password-protected audio-recording device to record their interviews and then used a password-protected laptop to transcribe their interviews. I protected all names throughout the study by using a letter system to protect the identity of all those involved. I pledged to keep all information confidential as the recorder, which allowed for the participants to speak freely and honestly throughout the study.

Participants freely volunteered to take part in this study and could freely withdraw at any point without any social repercussions if they felt that necessary. No participants withdrew from the study. Participants also had the choice to not answer certain questions if they did not want to. All participants chose to answer all the questions.

I took care and concern with the rights of the participants. Before the participants agreed to take part in the study, I provided them with a consent form (Appendix B) that outlined specifics about confidentiality, protection from harm, and voluntary participation. All interview notes were kept in a locked filing cabinet at my home throughout this study. I will destroy any data collected 5 years after my degree is granted. I also recorded my commitment to keep all participants protected from any connection to be made to them and the district. The forms that the participants signed and the audio file of my recording discussing confidentiality have been kept on my password-protected laptop that has been in my possession or stored at home.

I established the right to be protected from harm to guide the participants to selfunderstanding of their role to help promote a positive learning environment and to help promote the implementation of DI. During the interviews, I consciously paid attention to the participant to feel for anything that may indicate any uneasiness. However, this did not occur during any of the interviews. All participants of this study did so voluntarily and could have withdrawn from the study at any time if they felt they needed to.

#### **Data Collection**

To examine the perceptions of teachers on the challenges they face and what is needed to help them overcome these challenges of implementing DI, data came from interviews with the social studies teachers. I interviewed teachers participating in the project study individually to gather their thoughts and perceptions on the challenges they face using DI in classrooms with mixed skill levels and what would help them overcome these challenges. The interviews focused on what training teachers have been given on DI, what support was available for teachers to implement DI, and what resources were available to accommodate implementing DI. Each teacher was asked a total of 14 questions. I used a published protocol of eight standard questions (see Appendix C for interview questions and Appendix D for permission to use this protocol), and I added questions of my own to focus specifically on the challenges the teachers face in their own classrooms as well as demographic questions (Horne et al., 2008). Adding my own questions to the published protocol questions helped to gather rich data to focus on the purpose of this project study that included classrooms with special education students, gifted students, and regular education students (Appendix D). The published protocol questions focused mainly on special education students. Adding my own questions

allowed me to gather data to include all students and the challenges the teachers face in implementing DI in classrooms with all these students.

Each interview lasted approximately 25 to 45 minutes and took place before and after school depending on the availability of the teachers. The interviews took place by phone or FaceTime at a time convenient for the participant. The participant chose a location for the interview that was comfortable for them to be on the phone or FaceTime. I did not begin to collect any data for this study until I received IRB approval. Once I received IRB approval (#03-14-17-0336541), I worked to gain approval from the school and district and then began reaching out to the potential participants.

### **Interview Plan and Data Collection**

During one-on-one interviews, open-ended questions probed each contributor; I recorded these interviews and transcribed them within 48 hours. This quick turn-around time helped to preserve the integrity of the interviews. The core interview questions came from a study conducted by Horne et al. (2008) about identifying teacher supports for inclusive practice.

# **Keeping Track of Data**

I recorded the interviews using two audio-recording devices to ensure that it was recorded, and I later transcribed them. I also took notes during the interview to have details available about the interviewee during the interview. I systematized the data in electronic archives by a letter that I assigned each participant to ensure confidentiality. It was essential to keep the records controlled as there is a great quantity of information related with qualitative research (Creswell, 2012).

#### The Role of the Researcher

The professional role I played in the setting of this study was that of a classroom teacher and social studies department chairperson. Some of the teachers interviewed were at the school at that time, but I am no longer at this school, so I have no authority over any of these teachers. I resigned from the school in 2013 to become a stay-at-home mother and further my education. Because some of the teachers interviewed were not at the school when I was, I took some time before the interview began to introduce myself. I tried to put these teachers at ease by establishing a comfortable environment for the interview so that they would speak openly and honestly. For those familiar with me, I also took some time with them to put them at ease about being interviewed by someone they know.

# **Data Analysis**

The analysis process began with compiling the data (Yin, 2011). Once I finished the interviews with each educator, I used member-checking. This involved having those I interviewed examine a written summary of their interview, and I asked for their opinions regarding the accuracy of this summary to ensure the information I documented was fair and correct. After completion of the member-checking of the summaries, I examined them to document any common themes. I engaged visual strategies first to help analyze data throughout the study. I used circle diagrams early in the study to assist me in establishing categories during the study. The categories established were assessments, colleague support, building trust and relationships, routines, consistency, expectations, experience, asking for help, observing, communication, and lack of supplies. Establishing

these categories promptly helped me keep the data structured and have a continual exploration throughout the study (Bogdan & Biklen, 2007).

The second phase of analyzing the data involved disassembling, which involved breaking the data down into smaller sections (Yin, 2011). When the interviews concluded, I applied a highlighting system to code the interviews and diagrams by theme and fostered a list of coding classifications. The coding classifications consisted of words and phrases that I noticed as I analyze the data. These codes were emergent codes as I developed them based on the data (Haney, Russell, Gulek, & Fierros, 1998). These codes included resources and technology needed, behavior and classroom management, professional development and training, challenges, and overcoming challenges. I kept the data together and organized so it was easily retrievable (Merriam, 2009). The third phase of this data analysis was reassembling that involved grouping these codes together by commonalities that could be incorporated together to help teachers overcome these challenges; for example, more training through professional development, more administrative support, or more available resources (Yin, 2011).

I also had an individual not engaged in the study, an auditor, examine some of the transcription notes to help identify collective themes in the documents. The auditor signed a confidentiality agreement as well to keep the integrity of the project study and protect the participants' rights. The auditor, who had knowledge of qualitative data and analysis, and I evaluated and deliberated about the themes I developed. Using an auditor during the study helped determine strong points and flaws of the study and established precision and credibility (Creswell, 2012). Using an auditor throughout the study helped

me distinguish and gauge any biases that arose and improved validity to the records. As field notes were recorded for this project study, I employed member checking. This encompassed requesting the participants to verify that the conclusions and interpretations I formed were fair and resonate with the participants (Creswell, 2012). Employing member checking ensured that the data are valid and therefore suitable. I continued the data analysis process by interpreting the codes.

The final phase of the data analysis involved drawing conclusions based on the interpretations of data. I based the conclusions on the common themes, circle diagrams, highlighted codes and coding classifications that I developed during the different phases of the data analysis process (Yin, 2014). Again, I used an auditor to review my conclusions based on the interpretations of the data.

# **Accuracy and Credibility of Findings**

To help ensure accuracy and credibility, I used an established protocol for this study. This protocol, used by Dr. Horne in a previous qualitative study (Appendices D and E), helped to make sure that the data gathered were useful and reliable based on the questions of the interview. Dr. Horne granted her permission for me to use this protocol for my study (Appendix C). After the interviews, I imposed various tools such as member checking and the use of an auditor to help ensure the data and interpretations are accurate.

# **Discrepant Cases**

When conducting any research, plans must be made in advance for discrepant cases. According to Creswell (2003), real life can involve different viewpoints that could be contradictory of one another. It is important to provide discrepant information that is

contradictory to themes since contradictory information can add to the credibility of the research (Creswell, 2003). The interviews in this qualitative study all had open dialogue regarding the perceptions of teachers on the challenges they face to implementing DI in classrooms with mixed skill levels.

# **Data Analysis Results**

### **Data Collection Process**

After I obtained IRB approval (#03-14-17-0336541) to conduct research on this case study on the perceptions of teachers on the challenges of using DI in mixed skill level classroms, I needed to locate and contact participants using a purposeful sampling method. First, I contacted the principal of the school by e-mail, and he provided a list of current social studies teachers at the school. Then, I contacted the social studies department chair by e-mail, and she provided a list of past social studies teachers from the last two years. I then contacted the teachers by e-mail with an invitation to participate in my project study. This initial contact with the teachers yielded six participants who electronically consented to take part in the study. I followed up with the remainder of the possible participants by e-mailing a reminder letter about the study. This contact with the teachers yielded four more teachers who electronically consented to take part in the study.

After receiving electronic consent from the participants, I set up interviews based on dates and times convenient for each participant. The interviews lasted 25 to 45 minutes. These interviews began with a repetition of the confidentiality agreement detailed in the consent form that each participant signed as well as a reminder that the

session would be audio recorded and transcribed. I conducted the interviews using the interview guide by Dr. Horne (Appendix D). At the end of each interview, I reminded the participant that they would receive a copy of the transcript of the interview and requested that they check the transcript and respond to me that they agreed with the transcript. The review of the transcripts for this study provided a way for participants to to check the transcripts for accuracy. I also e-mailed the participants a copy of my conclusions, the themes, so that they could state that they agree with what I concluded. This is known as member checking.

# **Transcription Method**

After I completed each interview, transcription began immediately and I completed this within 48 hours. I copied all audio recordings to a password-protected file on my computer. I also saved each transcription on my computer in a password-protected file.

## **Data Analysis**

After I transcribed each interview and member checking concluded, the preliminary reading of the transcript started. During this initial reading, I maded notes in the margins that consisted of important details, initial thoughts, and possible themes. I also e-mailed my auditor a copy of each interview transcript so she could also help me identify common themes. After I read through the transcripts several times, I made a list of themes and assigned each theme a highlighter color. I then went through each transcript, and highlighted the parts that matched each theme. The themes that I had created were resources, professional development, management, challenges to using

differentiated instruction, and overcoming those challenges. After I finished highlihting a hard copy of the transcripts for the different theme topics, I then copied and pasted each highlighted part into one section together on the computer using Microsoft Word.

# **Findings**

In this section, the findings from the analysis from the teacher interviews are presented to answer the three research questions in this project study with the themes. To help protect the identity of the teachers participating in this study, I have stripped the gender out. All teachers interviewed indicated that they had a positive attitude about differentiated instruction. When asked about using DI for different skill levels of their students, the teachers agreed that using DI was necessary for improving student learning. The teachers all felt that using differntiated instruction could help to meet the needs of all students in their classes with mixed skill levels.

I analyzed the research findings to answer the following research questions:

RQ1: What are the viewpoints of teachers on implementing DI in their classrooms?

RQ2: From the teachers' perspective, what challenges do they face when implementing DI in a social studies classroom with mixed skill levels?

RQ3: From the teachers' perspective, what support do teachers need to overcome these challenges when implementing DI in classrooms with mixed skill levels?

During the interview process, the teachers acknowledged the importance of using differentiated instruction for classes with mixed skill levels, their perspectives towards DI practices, the challenges associated with using differentiated instruction, and the

resources needed to overcome these challenges to successfully implement DI. All of the teachers acknowledged that they have seen benefits to using differnetiated instruction in their classes with mixed skill levels, but it does take time and extra planning in order to effectively manage it. A recurring theme prevalent during the interviews was that teachers felt they needed to have more opportunities to see DI modeled for them.

Through my questioning, I was able to gather information about each teacher's knowledge of DI, how they implement it, the training and professional development they have received, and their viewpoints towards DI.

Definition of DI. When asked about how they define DI, most of the teachers gave similar responses by acknowledging that all students do not learn the same way and the possible benefits to students if DI was used. Teacher C stated, "It's just me providing all of my students' different avenues for their learning and mastery. Just making sure that every student masters whatever level they are on." Teacher D stated, "Allowing students to move flexible through the curriculum while providing voice and choice in their assignments." Teacher H elaborated, "I think DI is where students are able to work at their own pace. I think it's where there is no set right or wrong especially with some of the needs of the special needs students." Teacher E expressed, "It's being able to address individual needs to understand that what works for one level of students is not going to work for the other. It's not only taking their intelligence into consideration but some of their social issues, family issues, personal motivation things like that and basically tailoring lessons as much as possible to meet individual needs."

Furthermore, Teacher K expressed, "Really DI is meeting the student where they are at but challenging them to rise to the next level by offering different opportunities for them to show that." Finally, Teacher J stated, "DI is where instruction meets the individual need of the student."

Implementing DI. The participants of this study had varying responses to how they have implemented DI in their classrooms. The teachers shared that using techniques like flexible grouping, student choice tasks, leveled reading pieces, and allowing students to work at their own pace to successfully implement DI in their classrooms. Flexible grouping is an approach that allows the teacher group students by skill level. Teachers can choose to groups of students together at the same skill level or group higher skill level students with lower skill level students so that they are able to help them. Teacher E has had success using mixed skill level groups. She stated, "Sometimes it is good to mix in your higher levels with your lower levels in social studies because the higher levels will have the discussions and make some of the lower ones think about things they wouldn't otherwise."

Teachers also expressed that giving students choices' for how they will learn the information has been beneficial. The teachers have found that the students are more receptive to completing assignments and trying to learn the information if they feel they have a say in how they go about doing that. Teacher B agreed with this approach as she stated, "We need to reach out to the different interests and abilities of your students and offer them voice and choice in their learning so that they can have differentiated tracks to get where they need to be and I think examples of that would be teaching different

learning styles." Teacher E also expressed that she plans her lessons for the gifted level and then uses a backwards design approach to create various formats of the assignment and students are able to choose which format is best for them. She stated, "I know what I want my students to achieve from this interdisciplinary project speaking to the gifted I work backwards from that and say okay this child over here who is either identified special ed or very low academically for whatever reasons is not going to pull out the information from this barrage of info they get from the project so you really have to have more a single focus for the subject." Teacher K also lets students drive their learning by being able to come up with their own project ideas. She stated that, "I even do things like where they can write me an essay or they can draw me a picture. It just really depends on what the topic is and what is appropriate."

Since social studies involves a lot of content reading, it is important for the teacher to be able to determine the reading level of each student and to provide materials to meet the different reading levels in the classroom. Teacher A expressed, "Social studies requires them to learn and memorize a lot of information which can be challenging for kids that have reading delays or processing issues so you have to get to know that kid." Teacher E also agreed with the importance of understanding the reading levels in the class by stating that "guided reading out loud for the lower achievers that's my primary or one of my biggest teaching strategies is to make sure the kids are reading because if you can't read you can't function."

Teachers also discussed the importance of allowing students to move at different paces. Students were able to master skills before having to move onto other skills.

Teacher J also expressed the importance of students being able to move at their own pace and also being given the option of assignment choices. She expressed, "Students are able to use their learning pathways to move through the curriculum at their own pace and in a way, they choose works for them." Teacher K also expressed how using pre-tests and post-tests has had a big impact in her classroom and allowing kids to move at their own pace. She stated,

So, something they have really enjoyed this year is when they score high enough, and after I conference with them, they can skip a bunch of work that they don't have to do. And then they can have more time focusing on the bigger ideas and those higher depths of knowledge tasks. So, I think they really like that and because I made believers out of them. I think they do try harder on their pretests to show me what they know or taking their time to fully read the question and try to problem solve the question. But, I have had kids who have said I have no idea how I scored an 80 I need to do the work and they know that about themselves.

So, my biggest thing about DI is allowing them to skip ahead.

Teacher J also uses pretest scores to help drive her instruction. She stated, "They are able to use their pretest scores and their pathways to choose assignments at a higher depth of knowledge."

**Professional development.** When asked about trainings or professional development that they have received on the topic of DI, the teachers in this study agreed that they have received some training, but that they need more trainings where DI is

actually modeled to them. The participants responses did vary on when they received this professional development and whether they found it to be beneficial.

Teacher A expressed that the best professional development experience she had was being able to visit a school that has successfully implemented DI. She liked being able to see first-hand in action DI being implemented and being able to talk to the teachers about their experieces. She stated,

I went to High Tech High where they are already implementing it, and implementing it well, so I got to talk to real teachers and they told me some of the pitfalls and some of the benefits and I got to get my hands on real projects.

Teacher A felt being able to see DI being implemented and being able to see actual projects was very valuable. She felt that this was more valuable than just hearing about DI.

Teachers are always about what can I take with me. Talking to me about theory is great, and theory is important but give me a take away. Give me something I can have in my hands, something that I can start tweaking and using and trying and experimenting with.

Teacher C also traveled to another school to view first-hand how to implement DI. She thought that was the most valuable professional development experience she has been offered. She stated, "I went on a trip to a school in Chicago and I was actually able to sit and watch a real-life classroom that was using PBL to see how they interact with their special needs students as well."

Teacher B felt that he has received various opportunities of professional development in different settings from the administration at her school to school district leaders. She expressed, "I feel like our administration supports us pretty well when we need professional development. We have a real nice plan for a mixture of county wide professional development and in house professional development." Teacher B also expressed how it is important to ask for help when you feel like you might need more training. She stated,

Usually I feel comfortable asking if I need help with something. I feel comfortable asking hey can you find me help with this or training with this and when it comes to specific professional development or assistance with students with disabilities, I feel they may even be more accommodating because they understand the importance and the accountability that goes with it.

Teacher K expressed how there is constant training at the school on a variety of topics, but how recently the focus has been on personalizing the learning and implementing DI. She also appreciates how the trainings are starting to model implementing DI more. She stated,

We have a personalized learning coach at the school and she sat with a small group of teachers and they were on level one starting out and I was maybe 2 or 3 steps ahead of them so I was able to move on and continue working without being held back by sitting in a meeting where I already knew what I need to know.

Throughout the interviews, the teachers stated numerous times how they need professional development that actually modeled DI being implemented. Teacher B stated,

"I feel like in a lot of cases, we were told to differentiate. We were told how to differentiate, but we really never had it modeled often enough to see it to practice it." Teacher B felt that professional development activities needed to be more hands on. She stated, "A professional development activity where the trainer modeled a differentiation activity instead of a worksheet or handout on them I feel would have been helpful."

Teacher G also expressed her desire to see DI being modeled. She stated, "I really would like to get out of the building and see more differentiation workshops. See what other teachers are doing that I might not be doing. I think that would help."

Teacher K expressed how some of the professional development trainings are starting to model implementing of DI more and she has found that to be very helpful. She stated,

They have done a lot to teach us how to differentiate and how students can make choices for themselves as we don't have to always tell them every single thing to do. Giving the students more agency in the classroom. We've done lots of training on what that looks like and how it looks different in different content areas.

Teacher K also expressed how valuable it is for their professional development trainings to be formatted similar to how they should be formatting their own classrooms. She described the professional developments lately as being more practical and helpful. She stated,

They have been wonderful and even started this year, before professional development would be you go sit in these meetings and maybe you already knew stuff about what you were learning and maybe you didn't need to be in there for

an hour. So, they have changed and created a professional development that looks very similar to personalized learning where we get to pick or if we have already completed things we can go on to the next item on the list and we don't have to wait. And then they are there to help us.

Attitudes towards DI. The attitudes of the teachers interviewed about DI expressed positivity about the need to use DI to meet the needs of all of their students. The teachers expressed understanding about the possible positive implications to student learning that could result when DI is used. Teacher B verbalized how implementing DI should be the standard so that all students are able to learn. She stated, "We need to reach out to the different interests and abilities of your students and offer them voice and choice in their learning so that they can have differentiated tracks to get where they need to be."

Challenges to implementing DI. The teachers agreed that implementing DI could be beneficial to student learning, they also agreed that there are challenges to it.

Many of the teachers stated that implementing differentiated isntruction is challenging sometimes because of classsroom management, lack of planning time, and lack of resources.

Teacher G stated that figuring out the best method to reach each student is a challenge. She stated, "The biggest challenge is figuring out what is going to work for them and some of them you don't know whether it's not working or they just don't want to do it." Teacher H also commented about how some students do not respond to various methods and it is frustrating to figure out why and if something else would work better for them. She stated, "Engaging all the students. Some of the students just weren't into it.

I don't know if that was their way of coping, but they would not engage themselves in the instruction and what was going even if it was a game or project or whatever. I think that was the most frustrating."

Teacher K shared her challenge of implementing differentiated instruciton was learning how to keep up with all the different things happening in her class at one time and how to assess all the different things. She stated, "Keeping up with everything the student is doing and everything the student has mastered is really difficult for me." Teacher K expressed her desire to be able to come up with some sort of grading system that could monitor better the students progressing all at different rates. She stated,

You have to come up with grading management system because it would be very easy for a student to fall behind and if you're not really carefully tracking everything they have completed so as the teacher if you don't stay on top of grading and stay on top of where the students are falling in the curriculum then you are a disservice to the kid who is quiet and sitting back because they may not be doing anything.

Teacher J commented how she does not feel she has enough time to reach each student. She stated, "My biggest challenge is I am only one person and I have a classroom of 20+ students all in different spots who really need me. When you only have about an hour with them a day, it is really hard to balance your time with students and help them when needed. I often feel like an octopus being pulled in many different directions."

Being able to manage a classroom when implementing DI can be challenging to manage the behavior of the students. Teacher C commented, "The challenges that I face is sometimes with the students in the different rotations, sometimes I feel like some are not getting the full benefit of the station at times because they are distracted or playing so I have to really be careful how I design my station to make sure friends are not together." Teacher E also commented on the challenges of managing student behavior. She stated, "The biggest problem that I have run into is the upper ones getting bored when I am trying to work with the lower ones and the lower ones getting overwhelmed and shut down when I am working with the higher ones." Teacher E also expressed her frustration at the large class sizes and trying to work with a small group. She felt that too many of students get off task when she is not able to give all the students her attention. She stated, "I have about 30 in the room at all times so if I sit down with 3 or 4 kids who need extra help, I'm going to have 25 others going crazy because they need their hands held or they need the room to be under complete and absolute control at all times."

Support to overcome challenges. The teachers offered their perspectives on what they felt could help them overcome the challenges to implementing DI. Many teachers felt that having more planning time, more resources, and a supportive co-teacher certified in social studies would be beneficial. Teacher B discussed that benefits of having a supportive teacher in his classroom and the benefits this provided. She stated,

I had a para a few years ago, who took it upon herself to look through the IEPs of each student on our team and make a binder for me and her and on the cover, it had a matrix with every kid's name and the exceptionality with every accommodation. Across from the name she had the Xs on all of them so we didn't have to flip through or memorize what everyone got. That way we were able to look at that matrix and instantly see student A gets accommodations BC and D. I found that to be incredibly helpful.

Teacher B continued about the benefits of a supportive teacher. She commented, "They really help to ensure that the students' needs are being met. They help make sure the right students receive the right accommodations at the right time." Teacher K also stated the importance of having a support teacher who is content knowledgeable. She stated,

I think always having someone who is a content specialist is always best for the students because not only are they there to help the students through something, they don't have to stop and read and ask me. They will be able to stop and help them understand and it's a lot easier.

Teacher K described her experience having a co-teacher, who had content knowledge, in a mathematics classroom versus having paraprofessional, who does not have the content knowledge in the social studies classroom and how beneficial it was to have someone helping with content knowledge. She stated, "The difference between a mathematics classroom and having that content specialist there and the social studies classroom not having a content specialist is a huge difference. They can't move through the content as fast because the person doesn't know."

Teacher A also expressed how a support teacher could be helpful as well. She stated, "I think having that extra person when you have a student that is struggling with content regardless of whether they are identified or what it is. Being able to pull those

kids out whether it be for extra data collection purposes or just to give them some time to work one on one would have made a huge difference."

What do teachers need? Many teachers expressed that time was an issue when trying to implement DI. Teacher C stated that her biggest need was time. She said, "I could use more time and some resources. I think with the social studies we don't have enough like the other subject. So, I think more resources and more time could definitely make my teaching more effective."

Several teachers commented how they needed more resources and materials to implement DI Teacher C stated, "As far as online technology we don't have as many programs as math and language arts so I think overall if we had more social studies programs like the other subjects it would be more of a support for us rather than us having to go and pull information all the time from different places to match our unit." Teacher D also expressed the need for more technology. She stated, "More technology support would have been helpful when I was co-teaching. We did not use a learning system in social studies like the other subjects which is an online program that helps the students. I think it would have been nice to have that option for students in social studies." Teacher F also expressed the need for more technology. She stated, "We have to bring your own technology and a lot the students don't have technology, or they forget it or they just don't have it. I just have one computer, so we have computer sharing in the classroom."

Teacher K expressed how she needs more materials but understands it is hard to ask the parents to provide those things when the school cannot. She stated, "Majority

aren't doing well economically so I feel like a lot of them have limited access to materials so when you want to do something like a special project, the parents are turned off to that because they might have to buy something." Teacher K shared her frustrations with the lack of resources available as she feels she could create more opportunities and different project options for the students. She stated, "If we had more of the basics, I feel like it would be a lot more helpful to me."

What should teachers do? Many teachers expressed that getting to know their students really helped them overcome the challenges to implementing DI. Teacher A stated that teachers should, "Identify what level they are reading on. Social studies is really content heavy, and it requires them to learn and memorize a lot of information which can be challenging for kids who have reading delays or processing issues so you have to get to know that kid." Teacher H also expressed the importance of getting to know your students. She stated, "You should develop relationships with the kids. Get to know them and how they fit because if they know that you care and what you are doing is for them then they will open up to you and they won't shut down on you as much."

Teacher H believes that students are more likely to respond to teachers who treat them with respect. Teacher H expressed, "It happens so often that teachers get frustrated because kids won't do but if you respect them and treat them like they are human, they will do more for you. They will know that you are not just bossing them it's because you care about them."

Utilizing your administration and colleagues can be beneficial as well to overcome the challenges associated with implementing DI. Teacher D stated how great a

resource other teachers can be to overcoming challenges. She stated, "I consulted with the other teachers on my team to get ideas on what was working in their classrooms with different students. I also worked closely with the other social studies teaches on my grade level and we would plan lessons and create activities together that would work for different levels." Teacher F has also relied on other supportive staff as well. She stated, "Our science teacher has the same students, so we collaborate together. I can see what she is doing to keep the students engaged."

#### Conclusion

A case study design was used to research the perceptions of middle school social studies teachers on the challenges of implementing DI in classrooms with mixed skill levels. Individual interviews were conducted and provided data on the perceptions of social studies teachers on the challenges they faced to implementing DI and what could help overcome those challenges. Data from the interviews were hand coded to help identify possible themes and patterns. The transcriptions of the interviews were member checked to help ensure accuracy. The responses of the participants in the interviews provided the researcher with a deeper understanding of the challenges associated with implementing DI and how to possibly overcome those challenges. Participants revealed that they believed that DI was beneficial and should be implemented, but also acknowledged that it was difficult to do sometimes. Participants felt they lacked resources and materials, lacked time, and they needed more professional development opportunities to be able to see the implementation of DI. I also found that the teachers' understanding of DI varied and it was apparent that some teachers had a better

understanding of it where some just were making accommodations to support students. Many of the teachers did not use common vocabulary associated with DI like differentiating the content or process or tiered activities. A reason for this may be that terminology changes often in education and this particular school has now transferred to using the terminology of personalized learning. Section 3 will discuss the project derived from this research study. Section 4 will include a reflection of the project. This reflection will include the project study's limitations, strengths, and potential impact for social change, as well as self-analyses, project implications, applications, and directions for future research.

# Section 3: The Project

#### Introduction

The purpose of this project study was to examine the perceptions of teachers on the challenges they had encountered in implementing DI. The teacher participants provided a wealth of knowledge on the challenges they faced using DI and what they felt they needed to overcome those challenges. The interviews with the teachers indicated a need for professional development that defines what DI is and models how to implement it effectively. The interviews also indicated that teachers need to understand the importance of getting to know their students better so that they understand their learning needs and interests. The project was developed to address the challenges and the ways to overcome those challenges as expressed by the teachers interviewed for this project study. Section 3 presents a description of the plan which will include the goals, content, rationale, resources, and implementation.

# **Description and Goals**

In this study, I explored the social studies teachers' perceptions of using DI in their classes with mixed skill levels. During the interviews, it was apparent that the teachers still had some difficulty describing what it truly means to differentiate instruction. To be able to use DI, teachers must have a clear understanding of what it is. The teachers also expressed that there is a need to be able to see what DI really looks like. Teachers described the need to be able to observe DI in action instead of just being told about it at professional development meetings. Teachers who had the opportunity to

observe teachers who used DI described this as the most worthwhile experience to enhance their understanding of using DI.

For me to explore the teachers' perceptions of using DI, it was necessary for me to have discussions with them personally. This allowed me to hear their views on the challenges they faced using DI and what they needed to overcome these challenges. I noticed that not all teachers were able to accurately describe what it means to differentiate instruction. Several teachers described more accommodations to help students rather than differentiating instruction to meet the students' needs. Several of the teachers did have a good understanding of what it meant to differentiate instruction and they described different techniques that they have used in their classrooms to differentiate instruction. These teachers shared various practices that would assist other teachers in effectively using DI. These teachers described using student choice options, tiered activities, and station rotations that are geared toward different skill levels, and using different levels of resources.

The goals of this project study were based upon the perceptions of the social studies teachers on the challenges they face and what they need to overcome those challenges by creating a professional development plan. The professional development plan that developed based on the findings of this project study will have three sessions that focus on the target areas detailed by the data from the teachers' interviews. The first session focuses on creating an understanding of what DI is and outlining specific strategies that could be used in the classroom. This second part of this session will include a modeling portion so that teachers will be able to see what DI really looks like.

The second session focuses on teachers being able to get to know their students through various strategies using the Morning Meeting approach. The third session focuses on teachers being able to observe other teachers implementing DI and reflecting on their observations. I determined that a 3-day professional development plan could help address the challenges teachers face in using DI and how to overcome these challenges.

#### Rationale

The purpose of this study was to explore the perceptions of social studies teachers on the challenges they face in using DI and what they need to overcome these challenges. The findings indicated that the teachers needed a better understanding of what differentiated means, how to implement it, and to see it being implemented. They also indicated that they need to be able to get to know their students' skill levels better and their interests also to help meet their learning needs. As a result of the findings, this project study provided a framework to develop a professional development plan to help social studies teachers understand DI and how to implement it effectively.

The teachers may benefit from a 3-day training session of professional development that focuses on DI and will provide them an understanding of what DI is and how to implement it effectively. The training will give teachers the opportunity to witness DI being modeled throughout the three sessions. These sessions will provide teachers with real examples of strategies they can use in their classrooms. These DI sessions could provide teachers with the confidence to implement DI in their classrooms by helping them understand what it means to differentiate instruction and how to overcome any challenges associated with DI.

#### **Review of the Literature**

Based on the research, I determined that professional development trainings should offer teachers opportunities to expand and apply new knowledge. The literature suggested that the principles of adult learning should be applied to any professional development training sessions. Often when these adult learning principles are applied, adults can make more connections to new information and it makes it more applicable and more likely that the adults will obtain new knowledge. The concentration of this literature review was the theory and literature to feature the study's findings and the genre of the project. Databases, accessed through Walden University's library system, included Education Research Complete, ProQuest, Dissertations and Theses, and ERIC. Search terms included *DI*, *adult learning*, *professional development*, and *professional learning communities*.

# **Professional Development**

The product of this project study was a professional development plan that establishes an understanding of DI and how to effectively implement it. Professional development works to advance the effectiveness of teachers in raising student achievement through a sustained, comprehensive, and intensive approach that is classroom focused (Williford et al., 2017). Professional development assists teachers by giving them an opportunity to guide teachers to improve their students' skills and knowledge in class. Teachers need opportunities to acquire new knowledge to advance their teaching styles to meet the needs of their students. Professional development can have a variety of formats such as workshops, lectures, reflective journals, action research,

or collaborative planning time (Brown & Militello, 2016). Professional development that has the expectation that teachers will just do what they are told by a presenter after 1 day is not realistic (Kennedy, 2016). Professional development seen as a one-time event is often viewed as a time filler for in-service days and is often ineffective for succeeding in any educational reform or improvement (Brown & Militello 2016). Professional development has been criticized for its passive approach to learning and for often being a single-event format (Bowe & Gore, 2017). To ensure that this professional development plan is not viewed as just a time filler, it involves a 3-day plan that will span over a 4- to 6-month period. Professional development should promote real learning that motivates teachers rather than just adding noise to their working environment (Kennedy, 2016).

For teachers to be able to educate students with multiple skill levels, teachers need to be trained properly. Teachers, like students, learn in a variety of ways, so they need training that meets their needs. In training activities, it is necessary to consider the differences among teacher learning just like is done in student learning (Chen & Herron, 2014). Adults and children have varied learning styles. According to O'Brien (1989), these learning styles can be grouped into three different modalities: auditory, visual, or kinesthetic. It is important to know one's own learning style and the learning styles of the students.

Knowles, Holton, and Swanson (2005) theorized that adults have different learning styles, as do adolescents. Knowles popularized the term *andragogy*, which describes the adult learner like children in that they both could experience many different learning styles according to need and the situation (O'Toole & Essex, 2012). Knowles

(1984) suggested four principles that should be applied to adult learning: 1. Adults should be part of the planning and evaluation. 2. The basis for learning comes from experience and this includes mistakes. 3. Adults learn more when they can connect immediate relevance and impact to their job or life. 4. Adult learning should be problem-centered instead of content-oriented. Adults learn based on needs and experiences, so teachers who identify the need for professional development about differentiation are likely to learn more (Knowles et al., 2005). Professional development opportunities should be offered to teachers who work with classes that have mixed skill levels among the students. The humanist theory of learning can also be incorporated into a professional development opportunity. This theory states that people must have the desire to learn (Jackson, 2009). Teachers who work in classrooms of students with mixed skill levels must want to meet the needs of each student through differentiation.

The project was designed to create realistic views of implementing DI by allowing teachers to see DI modeled for them. Professional development gives teachers the opportunity to be active learners. Teachers need to remember that learning should never stop and there is always room for improvement and adjustments to their teaching techniques. The world and technology change, so teachers need to be able to understand these changes and update their knowledge and skills to meet the needs of students (Chen & Herron, 2014).

Modeling DI during professional development. Professional development should convey to teachers what is expected in the classroom. If a school expects their teachers to differentiate instruction, then the expectation should be modeled for them

during any training sessions for teachers. Professional development should provide teachers the opportunity to see in action what is expected and not just talked about. (Kappler-Hewitt & Weckstein, 2012). It is not practical to think that teachers will use new strategies in their classrooms by just delivering them through monologue and expecting them to take notes (Brown & Militello, 2016).

One school district had an initiative that all teachers would embrace DI and implement it in their classes. They knew that in order to do this they had to train the teachers so that they would be motivated to do it (Kappler-Hewitt & Weckstein, 2012). This district saw great success in the implementation of DI because they believed they had an effective system of training their teachers by modeling what they expected. This school district started by having their teachers complete a self-assessment about their knowledge of DI (Kappler-Hewitt & Weckstein, 2012). The teacher then used this assessment to develop their differentiation goal, which led into their performance goal. The school administrators then developed a choice board for teachers (Kappler-Hewitt & Weckstein, 2012). Teachers selected from a variety of activities that they wanted to do to meet their goals. Teachers also had the option to create their own activities. The school believed that promoting choice empowered the teachers and motivated teachers intrinsically, and more teachers actively participated in this professional development (Kappler-Hewitt & Weckstein, 2012). Adults want to be able to make choices about their learning, which includes deciding what to study, how to complete it, and how to present their learning and when (Koralek, 2007).

Establishing learning communities. Having the support of colleagues and being able to collaborate can help teachers develop. Establishing learning communities to enhance professional development can have many benefits. Professional learning communities are described as groups engaging in ongoing collaborative activities to identify and work towards common goals, share and disseminate knowledge, and share and reflect on individual methods and practices (Tan & Caleon, 2016). Professional learning communities are typically characterized by shared values and vision, collective responsibility for student learning, reflection of practice, and collaborative as well as individual teacher inquiry (Bowe & Gore, 2017). Learning communities support participants to engage rigorous and challenging inquiry into practice (Bowe & Gore, 2017). Teachers involved in a professional learning community strive to reach common goals together, become involved in dialogue, generate opportunities for reflection, and are accountable for results (Svanbjornsdottir, Macdonald, & Frimannson, 2016).

# Implementation, Potential Resources, and Existing Supports

The school under study is already equipped with what is needed for this project to be implemented. The school has computers, Internet, smart boards, and projectors available to use in the data room. Each teacher will have access to the Internet from their school-issued laptops during the professional development sessions. The school has a personalized learning coach who will be able to facilitate these professional development workshops, so there will be no extra cost to hire someone to manage these sessions. The administrators and the personalized learning coach will develop a calendar for when these

sessions will be scheduled. If there are any technical issues, the school has a technology coordinator on site to help make sure the technology works during each session.

#### **Potential Barriers**

This project was designed to be presented to all social studies teachers at this middle school and possibly the other middle schools in the district. One barrier to this is that not all social studies teachers have the same planning period, so the sessions would have to be presented numerous times each. This could become cumbersome to the personalized learning coach to have to facilitate numerous sessions in a day. Other potential barriers could be teachers not being willing to actively take part in the sessions or the amount of time away from their planning periods. A possible solution to this barrier is scheduling these trainings throughout the year on teacher in-service days. It is my hope that social studies teachers will have a positive attitude as they gain a better understanding of how to implement DI effectively. It is also my hope that social studies teachers will consistently implement DI in their classrooms.

# **Proposal for Implementation and Timetable**

It is essential to share the findings of this study with the school administrators and community stakeholders. The proposed project is a 3-day professional development workshop (Appendix A) over a 6-month period. This professional development plan includes three major aspects that were defined from the findings of the data. These aspects include defining what DI is, modeling how to effectively implement DI, and creating class communities to get to know each student better. The workshop will include video clips of teachers detailing their experiences implementing DI. They will provide

real examples of the challenges they faced and how they overcame those challenges.

Teachers will also be presented with best practices that they can implement in their classrooms, and they will have time to collaborate in groups to develop lesson plans for their students using these best practices.

The second day of workshops will take place approximately two to three months after the first session. The time in between the sessions will allow teachers time to apply what they learned from the first session and time to reflect before the second session. The second workshop will involve trainings on how teachers can get to know their students better. It is important for teachers to have an understanding of their students which includes their background and personal interests (Mills, 2014). Examples of creating classroom communities through Morning Meeting will be modeled for the teachers (Bornstein & Bradely, 2007; Boyd & Smyntek-Gworek, 2012). Teachers will then have time to collaborate with their fellow teachers to develop Morning Meeting plans for their classes.

This third session will take place approximately two to three months after the second session, so teachers are able to have time to finalize lesson plans using differentiated instruction and allow time for teachers to observe those lessons. The third day of workshops will involve the teachers observing video clips (included in Appendix A) of teachers differentiating instruction and observing each other implementing DI. The teachers will be able to analyze and reflect on their observations. The teachers will also have time to collaborate with each other after their observations to discuss what they saw and what they could use in their own classrooms.

The completion time for this professional development is estimated to be 4 to 6 months depending on when in-service days are scheduled and if planning periods must be used. If the county wants all social studies teachers to be trained, then that will take approximately one year depending on whether each school has a personalized learning coach or if they will have to share. The data room is the ideal location for these trainings to take place because that is where all the resources and technology are housed. Those teachers trained through this professional development can help train any new social studies teachers to the school.

# **Roles and Responsibilities of Student and Others**

My role now for this project study is to communicate the value of this professional development project to the school and district leaders. The school administration and district leaders will then decide the importance of implementing the project. I will be the one to implement the project. The role of the social studies teachers would be the benefits they receive from the collaboration time with the other social studies teachers and the time they had together to plan and collaborate lessons that implement DI. The role of the administration is to encourage the social studies teachers to be enthusiastically engaged and involved during the workshops. Administrators would also be able to witness the students actively engaged in differentiated lessons and activities that resulted from the teachers participating in the trainings.

#### **Project Evaluation**

To assess the effectiveness of this project, different assessments will be conducted after each training session. These assessments tools will help to determine the strengths

and weaknesses of each session to make any necessary changes for the successive sessions or future sessions. After each session, there will be different evaluations given to each teacher. The first session will be followed by a formative assessment which will include items about the video clips, the demonstration of resources, the worth of teacher collaboration, the progress of lesson plans, and the overall experience for each teacher. The items on the evaluation will be based on a scale from 1 to 3 with 1 being not helpful, 2 being slightly helpful, and 3 being very helpful.

The second evaluation will be outcome based. Part of the session will be for the teachers to collaborate and develop lesson plans together. These lesson plans should be developed so that they can be implemented immediately in the teachers' classrooms. The lesson plans will be evaluated for ease of implementation. This open-ended outcome-based evaluation will offer the teachers the opportunity to share their plans in future training sessions.

The third evaluation will include a summative assessment that will be given to the teachers to complete 3 to 4 weeks after the training sessions. The evaluation will be openended to allow teachers to give the facilitator feedback on what they found helpful or not. This information will be beneficial and will allow the facilitator to make any necessary changes to future training sessions.

The administrators and other key stakeholders should be present for the training sessions. This will help them have a better understanding of the expectations of implementing DI in the social studies classrooms. The administrators will be able to support any teachers who may have questions or need assistance implementing certain

facets of DI into their lessons. Other key stakeholders who include board members and community members could gain an understanding of the effort and time that teachers put into planning their lessons to implement DI.

# **Implications Including Social Change**

# **Local Community**

The community in metro-Atlanta, Georgia that is the focus of this study is made up of school board members, school administrators, faculty and staff, parents, and students. There is great potential that this study could have positive implications for social change. The students will be the ones to reap the most benefits of this study as they will receive lessons that target their learning needs better. DI can be a catalyst for students to love learning and become more engaged in the classroom.

All students receiving DI can impact the progress in class. The low-level learners could find more success in the classroom. On-level learners will be challenged to work towards the next level and increase their skill level. They could also have more excitement for social studies and look forward to learning. The gifted learners will also see a positive impact as DI will challenge them by providing enrichment activities.

Besides the students receiving benefits from DI lessons, the teachers and school could as well, as they could see their students become more engaged in their classrooms. This could also lead to higher test scores. The teachers may find that classroom management is also easier when DI is used as students might be more engaged and there could be less discipline issues.

# **Far-Reaching**

The results of this study could have far reaching possibilities beyond this metro-Atlanta school district. This professional development plan could serve as a prototype for other districts across Georgia or the United States. A large social change could occur if other school districts implement this DI model just like this metro-Atlanta school district. This project study could benefit many schools across the nation and not just this one school.

### **Conclusion**

This professional development opportunity was created because there was a need to help social studies teachers overcome the challenges of implementing differentiating instruction to better meet the needs of their students. Social studies teachers will be able to improve their professional growth by having the opportunity to collaborate and learn and reflect on implementing DI. Combining data from my interviews along with my research, I developed a 3-day professional development program for social studies teachers in my previous district. In section 4, I provide detailed information about the project study along with my reflections, conclusions, and recommendations.

#### Section 4: Reflections and Conclusions

#### Introduction

The purpose of this case study was to explore the perceptions of social studies teachers on the challenges they face to implementing DI in classrooms with mixed skill levels, and I offer my reflections in Section 4. I will also examine my role as a scholar, practitioner, and developer. I conclude this section with the implications on social change and possible future research.

# **Project Strengths**

The strengths of the project are an organized professional development plan for social studies teachers to take during preplanning and during the day throughout the school year. The first strength of the project is providing professional development to help teachers implement DI into their classrooms and provide support to overcome any challenges that occur. Another strength of the project is that students will benefit because of DI because various students' needs will be addressed. Both teachers and students could experience an increase in their excitement for teaching and learning. This ongoing professional development that supports teachers implementing DI could help teachers boost students' learning levels and garner better performance ratings on standardized testing.

### **Recommendations for Remediation of Limitations**

As is the case with any study, this project does have limitations. The limitations I see include the financial burden the district could face and the resistance of teachers wanting to participate. Using teachers and personalized learning coaches in the district

who have mastered DI could help reduce any costs associated with this project. By using people within the district, this would alleviate any cost associated with bringing in outside experts or speakers. Teachers could be hesitant to participate in this professional development opportunity if they are unsure of exactly what is involved or how much time will be required of them. For this project to be a success, it is essential that the teachers are given a thorough explanation about what this professional development entails, what is required of them, and the possible benefits they could see in their classrooms. The success of this project will be ensured if teachers commit to implementing DI and work to overcome any challenges.

# **Scholarship**

Developing this project gave me more knowledge and a better understanding of DI and the impact it could have to help reach the learning needs of all students. It helped me to see that DI can help students achieve more academically in the classroom. I grew as a qualitative researcher by deepening my critical thinking skills by exploring peer-reviewed literature. After my own experiences as an educator trying to implement DI and facing some challenges, I knew the importance of gaining more teachers' perspectives on this problem, so I developed this case study. I listened to the teachers and gained insight on their perceptions of DI. As a result of this study, I proposed a 3-day professional development workshop to work with teachers to train them on understanding what DI is and how to implement it effectively.

Before this project study, I had used DI in my classroom for years, but never had a full professional development devoted to how to implement it and what challenges

would arise and how to overcome them. I often saw or heard of other teachers struggling to implement DI as well. The research revealed that this was a universal problem with many teachers. After this project study, I have a better understanding of effectively implementing DI. The research and teacher interviews revealed numerous strategies and supports to differentiate instruction and how to overcome any challenges. Schools and districts expect teachers to use research-based approaches, and this project study used research-based methods to develop a professional development plan.

# **Project Development and Evaluation**

This research project was selected to assist social studies teachers with implementing DI and overcoming the challenges associated with doing that. To help fulfill the goals of this project, a professional development plan was created to train teachers over a 3-day period. During my time completing this project study, I learned the value of peer-reviewed literature to develop my plan. I concluded that all professional development workshops are not created equal. Professional development workshops need to be developed and delivered with research-based methods (Evans, 2014). Many professional development workshops that teachers have attended are 1-day trainings that do not have any evaluation involved or any follow-up. This does not allow for further inquiry, development, or support. Many teachers view those professional development experiences as just information sessions and not an active learning opportunity. Professional development that is developed and evaluated based on research can have great effects on the educational system. As a result of that revelation, this project study and its evaluation process is research based.

# **Leadership and Change**

Completing this project study led me to acquire many new skills. I became more inquisitive and deepened my critical thinking skills through analysis of many literature articles. I also gained confidence in my leadership skills as my knowledge increased about what DI really means and how to implement it effectively. I now have the confidence to be able to train teachers and collaborate with teachers to help them to be able to differentiate instruction. I feel teachers will be able to relate to me as a fellow teacher to train them, as teachers are more likely to follow the leadership of their colleagues rather than the mandates of their administrators (Kappler-Hewitt & Weckstein, 2012).

# **Analysis of Self as Scholar**

My journey at Walden University afforded me the opportunity to grow as a scholar. Throughout this journey, I have researched and read through many articles and learned how to analyze and synthesize the data and information presented to be able to answer research questions. I became more confident in my knowledge of understanding the importance of differentiating instruction and in my ability to implement it. This learning gave me the passion to return to teaching again now that my children are getting older. I gained the confidence to be a leader and take on a new role at another institution training teachers on implementing DI. This project provided me with a platform to provide teachers with a research-based professional development opportunity to be trained on implementing DI and overcoming the challenges associated with that.

Conducting research on this topic led me to create an innovative project study that will contribute positive change in the education field.

# **Analysis of Self as Practitioner**

When I was a classroom teacher, I became aware of the term *DI* through a professional development meeting. This meeting, though, left me with many questions, and I did not know where to go to find the answers. I tried to implement DI the best I could with the information I had and tried to do more research on my own, but as a classroom teacher trying to plan lessons I did not have the time to grasp a clear understanding of how to implement DI effectively, especially while having a classroom of students with mixed skill levels.

I recognized that I was not the only teacher facing this problem of knowing how to implement DI effectively. I saw and heard about many teachers attempting to implement DI, but they often gave up because they felt it was too challenging. I developed this project study based on those observations and conversations with the other teachers. After I identified this problem, I reviewed literature that pertained to this topic, conducted research, and analyzed the findings. I then created a professional development plan based on my research and findings. While going through this process, I improved my research and writing skills along with my organizational and management skills. I feel that I have grown professionally as my passion for DI has led me to be a better educator, mentor, and leader to invoke a positive change in education.

# **Analysis of Self as Project Developer**

As the make-up of classrooms has changed, the mindset of teachers and their teaching styles have had to adapt as well. I developed this project based on being able to meet the needs of all students in a classroom with mixed skill levels. I realized that just teaching one way did not work for all students. Through my research, I began to understand the various learning needs of students and how to meet each students' needs. This project began as something I saw necessary in my own classroom, but I soon realized that many teachers could also benefit from this project. I developed a professional development opportunity to help other educators grow professionally to meet the needs of all the students. Going through this doctoral journey allowed me to become a student and learn more about DI and the best practices associated with implementing it.

Developing this project instilled in me the love of learning and teaching with the hope of being able to help other teachers reach all their students. This project has the potential to activate a great change in education by guiding teachers in implementing DI. When I developed this project, I first focused on the content of each workshop. I soon realized that teachers do not just want lots of information thrown at them for hours. They want practical applications given to them and they want time to collaborate and plan with other teachers for what would work best in their classrooms. I realized that allowing the teachers time to reflect and evaluate was an essential component of professional development. Developing this project guided me to accept a new position to lead teachers and train them to implement DI.

# The Project's Potential Impact on Social Change

The field of education is constantly changing, so it is important that teachers stay up-to-date on new methods and applications. DI is an approach in education to meet the needs of diverse learners in a classroom that has been around for years. The need for DI in classrooms is more evident today because of state assessments indicating that not all students are meeting the standards and students with mixed skill levels being in the same classroom. DI is needed to better meet the learning needs of students. Social change brought on by this project could affect the local level along with a more far reaching level.

At the local level, social change is brought on by the social studies teachers learning methods to effectively implement DI in their classrooms to help meet the needs of all students. The students will benefit academically when their learning needs are met from teachers consistently using DI. The school will benefit from social studies teachers' exemplary teaching practices, improved student engagement and learning, and higher student assessment scores. Beyond the local level, this professional development plan may be used by other schools and districts across the district to train their teachers to effectively use DI. DI has the potential to revolutionize the education system across the United States.

# Implications, Applications, and Directions for Future Research

*DI* is a term many teachers have heard, but many do not have a full grasp on how to effectively implement it. Much of the professional development opportunities offered to teachers defines DI but does not offer practical applications of how to implement it.

Many of the teachers who took part in this project study are familiar with what DI is, but have had challenges in really implementing it in their classrooms. Many of the teachers commented that having an opportunity to see DI modeled for them would be beneficial. The professional development plan that I created will give teachers the opportunity to learn what DI is, see it modeled, collaborate with other teachers to develop lesson plans for their own classes, and allows time for reflection. This could then lead to students becoming more engaged which could increase their assessment scores. There is potential that there could be less classroom management issues for the teachers as well if the students are more engaged and this helps create a more positive environment for the teachers and students.

During this study, I only explored the perceptions of social studies teachers, but that could be extended to teachers of any subject area for future research. Future studies could also include observations in addition to interviews. This study focused on just social studies teachers, but could be adapted to reach teachers of any subject. This professional development can be modified to apply to all subject area teachers.

#### Conclusion

Completing this section allowed me to reflect on my doctoral journey. I evaluated myself as a scholar, practitioner, and project developer. I also assessed my project and its strengths and weaknesses along with the possible benefits that could result from it and what future research is possible to enhance my project. I also reflected on how this journey made me grow as a person both personally and professionally. I now view myself as a leader and an advocate for DI. Completion of this project study has been a huge

endeavor and one I am proud of. I believe I have made a positive contribution to the education community locally and afar and I will continue to be a life-long learner.

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# Appendix A: The Project

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# **Professional Development: Implementing DI**

# **Differentiated Instruction**



This project is intended to be a hands-on approach to learn to implement DI effectively in social studies classrooms. This professional development workshop is based on research in DI along with findings of a study done at a metro-Atlanta, Georgia school district. Results of this study indicated the need for professional development where teachers can see DI being modeled and trained on best practices for implementing it.

#### **Target Audience**

The target audience for this project will be general education and special education teachers who teach social studies in middle school.

#### **Professional Development Seminar Schedule**

This project includes three sessions for the professional development workshop that will occur over the course of 3 nonconsecutive days. The adult learning theory by Knowles will be used as a guide to certify the effectiveness of this workshop.

#### **Program Goals**

- **A.** Educate teachers on understanding what DI is.
- **B.** Provide social studies teachers with the essential skills to implement DI in their classrooms.
- **C.** Provide teachers with the opportunity to collaborate through colleague interaction on how to implement DI.
- **D.** Provide teachers the opportunity to see examples of DI being implemented in classrooms through video clips and observing colleagues.

#### **Program Outcomes**

- **A.1.** Social studies teachers will recognize the necessity of DI and reveal an increased knowledge about what DI is and is not.
- **B.1.** Teachers will reveal an understanding of how to implement DI for all students within their social studies classrooms.
- **C.1.** Teachers will use their time with colleagues to develop lesson plans implementing DI.
- **D.1.** Teacher will observe DI being implemented to gain a better understanding of how to implement in their classrooms.

#### **Program Objectives**

- **A.1.a.** As a result of the introducing DI, social studies teachers will identify DI by content, process, and product. Teachers will also reveal their understanding of getting to know their students by interest and learning style.
- **B.1.a.** As a result of providing teachers with the knowledge and resources to implement DI, social studies teachers will develop activities and lesson plans to implement in their classrooms using DI.
- **C.1.a.** As a result of providing teachers time to collaborate with colleagues, teachers will develop lessons with DI.
- **D.1.a.** As a result of teachers observing DI being implemented, teachers will gain a better understanding of how to implement in their own classrooms. Teachers will gain the knowledge and confidence necessary to implement DI in their own classrooms.

#### Day 1 Resources

1. Table supplies: paper, chart paper, pens, markers, laptops, printer

- 2. Projector
- 3. Videos
- 4. Notebook
- 5. Evaluation

Day 1: What is DI?

Time	Activity			
8:30-	Teacher Arrival/Sign in			
8:45	Welcome/Rules (light continental breakfast will be served in the data room			
	for participants			
8:45-	This portion of the workshop will begin with a getting to know you			
9:00	icebreaker. The room will be divided into 4 groups. Each group will be			
	given a piece of chart paper. Each team will have 1 minute to write down as			
	many words as they can that they associate with the term DI.			
9:00-	The presenter will introduce the purpose of this professional development			
10:00	and a PowerPoint detailing what DI is. The slides are the PowerPoint are			
	included below.			
10:00-	Restroom and snack break			
10:15				
10:15-	Teachers will view PowerPoint presentation on ways to implement DI.			
11:15	During this presentation, teachers will view video clip modeling different			
	aspect of DI being modeled. Teachers will complete an observation			
	summary after each video clip and create brainstorm lists of using these			
	strategies in their classrooms.			
11:15-	Whole group discussion on PowerPoint presentations and videos viewed.			
11:30				
11:30-	Lunch on your own.			
12:30				

# Differentiated Instruction A series of 3 workshops

**Note to Trainer:** Welcome teachers to the professional development training workshop. Explain that the training today is to help teachers understand what DI is and how is it implemented.

# Differentiated Instruction Professional Development Workshops

- Workshop I: What is DI and how is it implemented?
- Workshop II: Strategies for Getting to Know Your Students Better
- Workshop III: Observations in Classrooms and Overcoming Challenges Associated with Implementing Differentiating Instruction



**Note to Trainer:** Explain that the professional development will consist of 3 workshops about DI.

# Learner Objectives:

- Teachers will...
  - Become accustomed with vocabulary associated with differentiated instruction
  - Recognize basic principles of differentiating content, process, and product in an academically diverse classroom
  - Be able to implement one or more instructional strategies that support differentiated instruction.

Note to trainer: Explain the objectives for today's workshop.



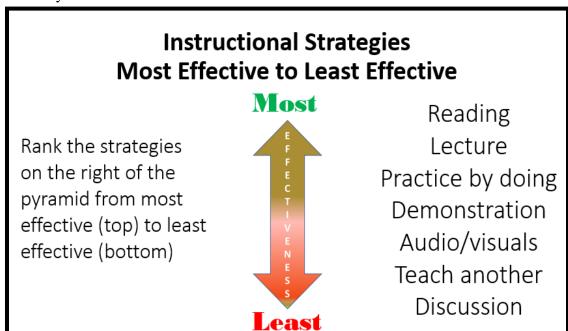
**Note to trainer:** Describe how students come into the classroom with a variety of readiness levels, learning styles, prior education experiences, interests, personal experiences, and motivators. These things should all be considered when instructing them and how to best reach them. Therefore, differentiating instruction is necessary.



Differentiation is simply a teacher attending to the learning needs of a particular student or small groups of students, rather than teaching a class as though all individuals in it were basically alike.

- Carol Ann Tomlinson

**Note to trainer:** Trainer will read this quote to the teachers and lead a discussion about what they think it means.



**Note to trainer:** Trainer will have the teachers rank the strategies from most to least effective.

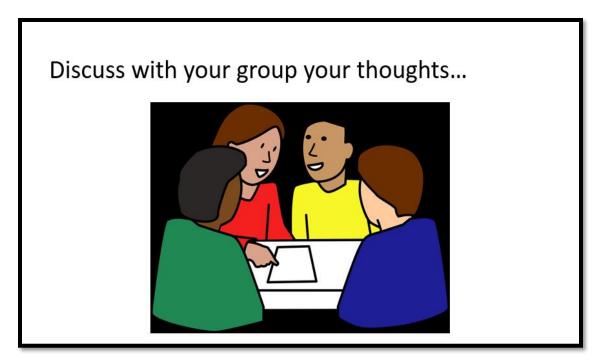
# Instructional Strategies Most Effective to Least Effective Real

Now try to guess the percentage of information a "typical student" may retain for each



Reading
Lecture
Practice by doing
Demonstration
Audio/visuals
Teach another
Discussion

**Note to trainer:** Have the teachers guess the percentage of information a typical student may retain from each strategy.



**Note to Trainer:** Trainer will lead a discussion among the teachers about the most effective and least effective strategies and the percentage of retention from each strategy.





Teach others 95%
Practice by doing 75%
Discussion 50%
Demonstration 30%
Audio/visuals 20%
Reading 10%
Lecture 5%

**Note to trainer:** Trainer will present the percentages of retention for each strategy and lead a discussion amongst the teachers about these findings.

# So what do we do now with that information?

You know you have a class of students with mixed skill levels and you know some teaching strategies will not be effective with them...

**SO...** 

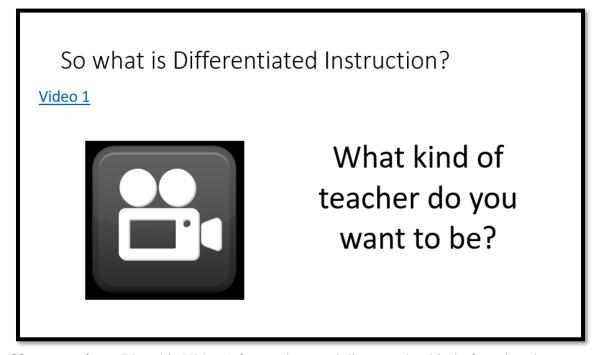
Differentiated Instruction to the Rescue



Note to Trainer: Read slide.



**Note to trainer:** Allow the teachers to take a 15-minute break.



**Note to trainer:** Play this <u>Video 1</u> for teachers and discuss what kind of teacher they want to be and what they need to do to be that kind of teacher.

# What is Differentiated Instruction?

- Includes some teaching strategies that provides students with a variety of resources and strategies to meet their individual learning needs (Bafile, 2009).
- Instructional strategies are tailored to meet the various needs, interests, and ability levels of students to increase student achievement (Tomlinson, 1999).
- Differentiated instruction is providing different learners with different resources and strategies that best meet their learning needs.



Note to Trainer: Discuss with the teachers the definitions of what DI is.

# Differentiated Instruction by...

#### Content...

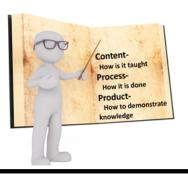
Could include various levels of information such as varied levels of text and resources, small-group instruction that allows for remediation or enrichment, and resources available in different audio or video formats

#### Process...

Denotes the activities that students participate in to understand the content. Strategies such as role play, tiered assignments, learning contracts, and learning centers can be used by teachers to implement differentiated instruction by process

#### Product...

Students could demonstrate their knowledge through performance, reports, diagrams, or computer-based presentations



**Note to trainer:** Discuss the different ways to differentiate instruction by content, process, and product.

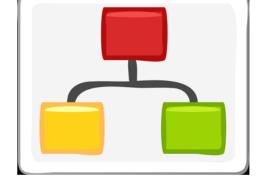
# Ways to Implement Differentiated Instruction...

- Establish learning targets
  - What do you want the students to know
- •Then design activities to help students meet those learning targets
  - Differentiate for content, process, and product
  - Differentiate for mixed skill levels

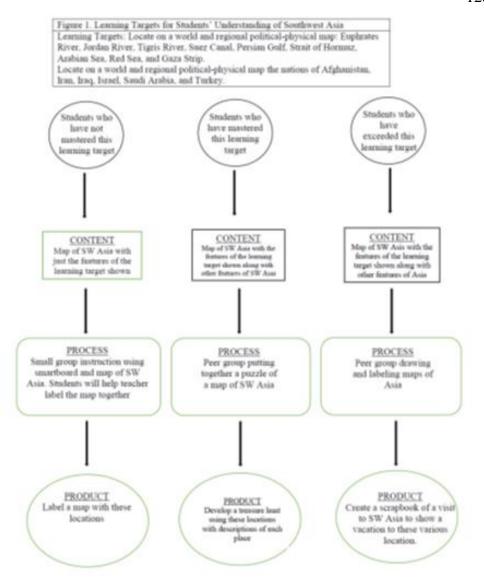


**Note to trainer:** Discuss the ways to implement DI by establishing learning targets and designing activities for different levels to meet those learning targets.

Tailor activities to student needs by providing different entry points, learning tasks, and outcomes



**Note to trainer:** Discuss how teachers need to meet student needs by providing different entry points, learning tasks and outcomes based on each students' learning needs.



**Note to trainer:** Discuss flowchart of possible activities for a learning content tailored to different learning levels offering different options for content, process, and product.

12:30-1:30	Teachers will view PowerPoint presentation on ways to implement DI.			
	During this presentation, teachers will view video clip modeling			
	different aspect of DI being modeled. Teachers will complete an			
	observation summary after each video clip and create brainstorm lists			
	of of how to use these strategies in their classrooms.			
1:30-1:45	Whole group discussion on PowerPoint presentations and videos			
	viewed.			
1:45-2:00	Restroom and snack break			

2:00-2:45	Teachers will work in pairs to create lesson plans based on the strategies presented today.
2:45-3:15	Teachers will present their ideas and lesson plans to the whole group.
3:15-3:30	Ticket out the door: Evaluation.

# A Differentiated Classroom...

- Teachers provide various assignments based on skill level or interest to meet the needs of all students
- Can be achieved through differentiating the process, content, or product
- Is flexible
- Is NOT just giving the "smart" students more work



Note to trainer: Discuss what a differentiated classroom looks like.

# Ways to Implement Differentiated Instruction...

# Small group instruction

- Allows teacher to work more closely with a smaller number of students to help them achieve more (Lipson & Wixson, 2012).
- Students that are more advanced or have a higher interest in a particular subject can complete an independent study project while the teacher works with a smaller group of students.
- Once the teacher gets the independent study group working, he or she could be able to focus more on the learning needs of the other students and give them more time and attention.

Note to trainer: Discuss small group instruction as one way to implement DI.

## Ways to Implement Differentiated Instruction...

# Flexible/tiered grouping

- Grouping where different factors are taken into consideration for placing students based on characteristics such as gender, ethnicity, academic skill, interests, and personality
- These groups should be based on data for what the students' needs are and should often be reevaluated to ensure that these flexible groups are meeting each students' needs (Rakow, 2012).
- These collaborative groups could offer more flexibility to provide various strategies with the support of peer tutoring (Hoffman, 2002). These groups can also help motivate students through peer relations of wanting to be leaders among classmates (Wood & Jones, 1998). Assigning roles in the groups can help monitor and control negative classroom behavior (Wu, 2013). Students can help monitor that every person is completing their required tasks and contributing to the group (Patterson et al., 2009). By implementing grouping, a teacher can more easily assess what students understand and what they do not since they will be in smaller groups
- Teachers can group within their classroom or teachers of the same subject area can utilize each other and split students up in different classrooms based on skill level

**Note to trainer:** Discuss flexible/tiered grouping to differentiate instruction.

# Ways to Implement Differentiated Instruction...

### Tiered Lessons

- Tiered lessons can also be constructed to provide differentiated instruction by offering different degrees of difficulty of assignments to meet students' needs and challenge them to move up to higher levels of learning (Latz & Adams, 2011).
- Another example would be to give students a work packet with different degrees of difficulty, and depending on the students' skill levels determines how difficult the problems or tasks are for a particular student.
- Tiered tasks are a valuable tool as students are doing different activities or tasks that are focused on the same standard, but it allows for self-paced opportunities to practice skills and fluency

Note to trainer Discuss tiered lessons to differentiate instruction.

# Ways to Implement Differentiated Instruction...

### Student Choice Tasks

- Provides the students with a variety of activity options and allows them to choose according to their interests (Dotger & Causton-Theoharis, 2010).
- Students having a choice can be a powerful tool in implementing differentiated instruction as it gives students the power to learn based on their interests and strengths (Crim et al., 2013). Studies have shown that students will have more motivation and achieve more when they find interest in a topic (Morgan, 2014).

Note to trainer: Discuss student choice tasks to differentiate instruction.

# **Differentiated Instruction in Action**

- Video 1
- Video 2
- Video 3
- Video 4
- Video 5
- Video 6
- Video 7



**Note to trainer:** Pass out video observation form to teachers and have them complete while watching each video clip. Play each video clip for the teachers. After each video clip, have teachers discuss their observations and how they could use it in their classroom. Video 1 Video 2 Video 3 Video 4 Video 5 Video 6 Video 7

**Teacher Observation Form (Videos Day 1)** 

Teacher Observation Form (Videos Day 1)							
	What aspects of DI	How could you use this in	Questions/Other				
	did you observe?	your classroom?	comments about vide?				
Video 1							
Video 2							
V: 1 2							
Video 3							
Video 4							
Video i							
Video 5							
Video 6							
V: 1. 7							
Video 7							

## Session 1 Evaluation...

Please turn in your responses before you leave...

- 1. What did you learn today?
- 2. What was the most beneficial part of the workshop?
- 3. What was the least beneficial part of the workshop?
- 4. What would you like to learn more about?

**Note to trainer:** Have the teachers complete this evaluation and turn it in before they leave. Discuss with teachers the expectations of what they should do in between each workshop. The expectations are that teachers should try to implement at least one of the lesson plans shared during Day 1. Teachers should be ready to come and discuss their experiences with this implementation.

#### **Day 2 Resources**

- 1. Table supplies: paper, chart paper, pens, markers, laptops, printer
- 2. Projector
- 3. Videos
- 4. Notebook
- 5. Evaluation

#### **Day 2: Getting to Know your Students**

Teachers learn strategies to get to know their students better in order to meet their learning needs. The teachers will learn about different learning styles and how to assess

learning styles. Teachers will also learn how to create a classroom community through Morning Meetings.

Time	Activity
8:30-	Teacher Arrival/Sign in
8:45	Welcome back (light continental breakfast will be served in the data room
	for participants
8:45-	Discussion follow up from the last workshop. Teachers will discuss any
9:15	strategies that they implemented from the last workshop.
9:15-10	The presenter will introduce the purpose of this professional development
	and a PowerPoint detailing the importance of getting to know your students
	to differentiate instruction for them.
	The first part of this presentation will focus on learning styles.
	The first part of this presentation will focus on learning styles.
	Teachers will complete a learning style inventory quiz or online What's
	your learning style? 20 Questions
	Teachers will take a few minutes to discuss their results of their learning
	styles inventory.
10:00-	Restroom and snack break
10:15	
10:15-	The presenter will continue the presentation going into how teachers can
10:45	use learning styles to plan instruction and develop lesson plans.
10:45-	Teachers will work in small groups to collaborate and plan lessons and
11:15	activities based on learning styles for their classroom content.
11:15-	Whole group discussion on PowerPoint presentations, videos viewed, and
11:30	activities developed.
11:30-	Lunch on your own.
12:30	

## Differentiated Instruction Workshop #2

## GETTING TO KNOW YOUR STUDENTS

**Note to Trainer:** Welcome teachers and give an overview of today's workshop and its features of getting to know students better through learning styles, interests, and creating a classroom community through morning meetings.

## **Learning Styles**

- <u>Visual-</u> You prefer using pictures, images, and spatial understanding.
- <u>Auditory-</u> You prefer using sound and music.
- <u>Verbal-</u> You prefer using words, both in speech and writing.
- <u>Kinesthetic-</u> You prefer using your body, hands and sense of touch.





**Note to Trainer:** Discuss with teachers the different learning styles of visual, aural, verbal, physical, and logical.

## What is my Learning Style?



**Learning Style Quiz** 

**Note to trainer:** Discuss the learning style inventory and how it can assess how a person learns best. This learning style inventory is completed online. If teachers do not have access to their own computer at this time, then provide printed copies. <u>Learning Style Quiz</u>

## **Break Time...**



**Note to trainer:** Give the teachers a 15-minute break

## So now what do we do with learning styles results for our students?



- Plan assignments based on each learning style
- Create student choice boards

Now What do we do?

**Note to trainer:** Discus with teachers how they will use their students' results of the learning styles results to drive instruction and plan assignment opportunities.

# When I See... Understand.

- •'Classic' Written Activities assignments like essays and short answer questions
- •Outlining Outline a chapter in a book or other reading piece
- •Flash Cards Create flashcards that can submitted and also used for review.
- •SQ3R Survey, Question, Read, Recite and Review an effective reading comprehension method.

**Note to trainer:** Discuss activities and assignments that would help visual learners.

### Visual Learners

- Social studies examples...
- Visual Video 1
- Visual Video 2
- Visual Video 3
- Visual Video 4



**Note to trainer:** Pass out the teacher observation form to the teachers to complete while viewing the videos. Play the videos for teachers to observe and allow for any discussion. Visual Video 1 Visual Video 2 Visual Video 3 Visual Video 4

Teacher Observation Form (Videos) Day 2

	What aspects of the learning style were observed?	How could you use this in your classroom?	Questions/Other comments about video?
<b>Visual</b> Visual Video 1			
Visual Video 2			
Visual Video 3			

Visual Video 4		
Auditory Auditory Video 1		
Auditory Video 2		
Auditory Video 3		
Auditory Video 4		
Kinesthetic Kinesthetic Video 1		
Kinesthetic Video 2		

Kinesthetic Video 3		
Kinesthetic Video 4		

## **Auditory Learners**

- Cooperative Learning- Include auditory interaction activities between students
- Class Discussions Students discuss the lesson with teacher support.
- Debates Students can work in groups to debate an issue.
- Recitations Students recite or memorize poetry or other readings
- Musical Activities



**Note to trainer:** Discuss the possible activities for auditory learners.

#### **Auditory Learners**

- Social studies examples...
- Auditory Video 1
- Auditory Video 2
- Auditory Video 3
- Auditory Video 4



**Note to trainer:** Discuss the possible activities for auditory learners. <u>Auditory Video 1</u> Auditory Video 2 Auditory Video 3 Auditory Video 4

#### Kinesthetic Learners

- Dramatic Presentations Students present their When I do it... information through a play or other dramatic presentation
- Speeches With Props Students can stand before the class and speak about a topic while using props.
- 'Teacher' for the Day Activities Give students parts of a lesson that they are to 'teach' to the rest of the class.
- Simulations Students move around the classroom as they simulate an event like a presidential election
- Manipulatives Students enjoy being able to use manipulatives in classes like globes and compasses
- Outdoor Activities Give students assignments that require them to go outside and move around.



**Note to trainer:** Discuss the possible activities for kinesthetic learners.

#### **Kinesthetic Learners**

- Social studies examples...
- Kinesthetic Video 1
- Kinesthetic Video 2
- Kinesthetic Video 3
- Kinesthetic Video 4



**Note to trainer:** Discuss the possible activities for kinesthetic learners. <u>Kinesthetic Video 1 Kinesthetic Video 2 Kinesthetic Video 3 Kinesthetic Video 4</u>

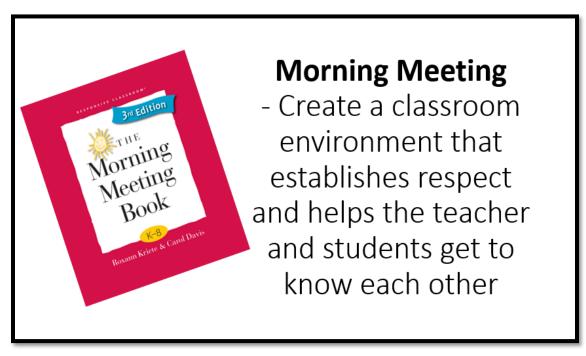
## Stop... Collaborate... Plan

Work together to develop activities and lesson plans based on your content and the different learning styles.



**Note to trainer:** Give the teachers time to collaborate together and plan activities and lesson plans together in small groups. After that time, have all the teachers come together and share their ideas and plans with the whole group.

12:30-	Teachers will view PowerPoint presentation on creating classroom
1:30	communities through Morning Meeting.
1:30-1:45	Whole group discussion on PowerPoint presentations and videos viewed.
1:45-2	Restroom and snack break
2-2:45	Teachers will work in pairs to create lesson plans based on the strategies presented today.
2:45-3:15	Teachers will present their ideas and lesson plans to the whole group.
3:15-3:30	Ticket out the door: Evaluation.



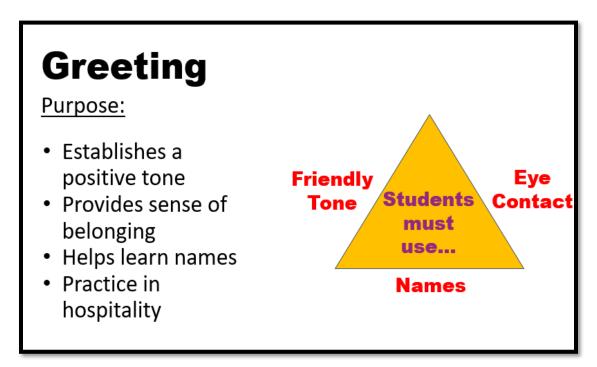
**Note to trainer:** Discuss The Morning Meeting Book and its message to create a comfortable classroom environment where students and teachers get to know each other better.

4 Elements to the establishing a community through Morning Meeting:

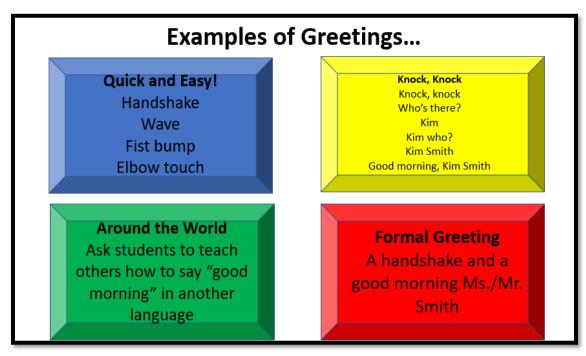
- Greeting
- Sharing
- Group Activity
- Morning Message



**Note to trainer:** Discuss how Morning Meeting is divided into 4 parts.



**Note to trainer:** Discuss the first part of Morning Meeting is the greeting and its purpose.



**Note to trainer:** Discuss examples of greetings.



**Note to trainer:** Play video clips for teachers of examples of Morning Meeting greetings. Greeting Video 1 Greeting Video 2

## **Sharing**

#### Purpose:

- Improves communication skills
- Increases knowledge of others
- · Practice speaking in a group
- Reinforces vocabulary skills
- · Boosts reading and writing success
- Builds confidence



**Note to trainer:** Discuss how the second part of Morning Meeting is sharing and its purpose.

## **Sharing**

#### Sharing....

Each student needs a chance to share. Students stay on topic and use clear voices

#### Audience....

Use appropriate audience skills.

Respond with an appropriate question or comment if called on



**Note to trainer:** Discuss the expectations of the sharing part.

## **Examples of Sharing...**

- Weekend News
- Bear Share
- •5 Words
- Give me FIVE
- Question of the Day
- Mill to Music



Note to trainer: Discuss examples of sharing.



**Note to trainer:** Play video clips for teachers of examples of Morning Meeting sharing time. Sharing Video 1 Sharing Video 2

## **Group Activity**

#### Purpose:

- Inspires a sense of community
- Active participation
- Inspires cooperation and inclusion
- Accommodates varying abilities
- Highlights learning



Note to trainer: Discuss the purpose of the group activity part of Morning Meeting.

## **Examples of Activities...**

- I have... Who has???
- Matching Game
- Four Corners
- Calendar Time
- Questions and Clues
- Charades
- Pictionary



**Note to trainer:** Discuss examples of activities.

## **Morning Meeting: Group Activity in Action**

- Activity Video 1
- Activity Video 2





**Note to trainer:** Play video clips for teachers of examples of Morning Meeting sharing time. <u>Activity Video 1 Activity Video 2</u>

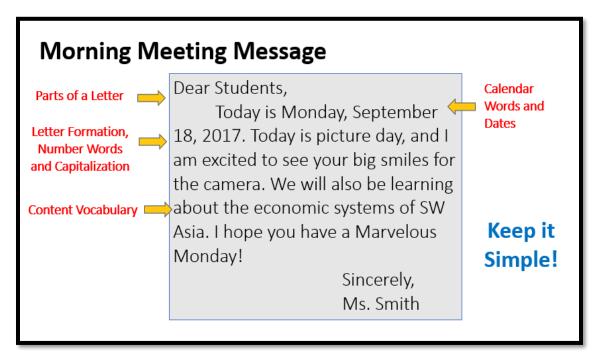
## Message

#### Purpose:



- Share and discuss upcoming events
- Transition into the class day
- Reinforces language and math skills in a meaningful way
- Could include calendar activities, class jobs, lunch menu, or other daily routines

**Note to trainer:** Discuss the morning message part of Morning Meeting and its purpose.



**Note to trainer:** Share the different parts of a morning message.



**Note to trainer:** Play video clips for teachers of examples of Morning Meeting sharing time. Discuss with teachers that they need to pair up with another teacher and set a schedule for when they plan to observe each other over the next 2 months.

Day 3: DI in Action

Teachers will observe one of their colleagues delivering a lesson with DI. Teachers will complete the observation form during their observation.

#### **Classroom Observation DI Form**

On a scale of 1 to 5, 1 being Strongly Disagree; 2 being Disagree; 3 being Neutral; 4 being Agree; 5 being Strongly Agree

Context/Goal Setting:

Context/Goat Setting.					
Connected new subject matter to prior learning and/or experience.	1	2	3	4	5
Established distinct learning targets (knowledge, understanding,	1	2	3	4	5
skills).					
Finished the class with a concentration on goals/meaning of lesson.	1	2	3	4	5
Majority students seem aware of and comprehend the learning	1	2	3	4	5
targets.					
Provided rubrics or other guides to concentrate students on goals.	1	2	3	4	5
Comments:					

#### Student Assessment:

Acknowledged student questions/comments during lesson.	1	2	3	4	5
Implemented & used outcomes of pre-assessment to alter the	1	2	3	4	5
lesson.					
Implemented assessment at end of lesson to measure student	1	2	3	4	5
learning.					
Implemented assessment during lesson to measure comprehension.	1	2	3	4	5
Comments:					

Attention to Individuals/Building Community:

Communicated with students as they arrived/left class.	1	2	3	4	5
Helped advance awareness of one another's strengths/contributions.	1	2	3	4	5
Involved whole class in sharing/planning/assessing.	1	2	3	4	5
Related with individual students during class.	1	2	3	4	5
Comments:					

#### Instructional Practices and Classroom Procedures:

Communicated distinct instructions for numerous tasks.	1	2	3	4	5
Exhibited effective classroom leadership/supervision.	1	2	3	4	5
Provided effective rules/procedures that supported individual	1	2	3	4	5
needs.					
Utilized flexible use of classroom area, time, resources.	1	2	3	4	5
Used numerous methods of instruction, with prominence on active	1	2	3	4	5
learning.					
Varied student groupings: individual; pairs; small groups.	1	2	3	4	5
Comments:					

Positive, Supportive Learning Environment:

2 osuv, v, supporture 2000 total					
Exhibited respectful behavior toward students.	1	2	3	4	5
Active participation by a broad range of students.	1	2	3	4	5
Emphasis on competition against self, not other students	1	2	3	4	5
Exhibited compassion to different cultures/ethnicities.	1	2	3	4	5
Recognized/celebrated student strengths/achievements.	1	2	3	4	5
Students comfortable asking questions/requesting support.					
Comments:					

Quality Curriculum:

Lesson focused on significant ideas, topics, or problems.	1	2	3	4	5
Lesson targeted one or more State learning standards.	1	2	3	4	5
Tasks highlighted thought/meaning vs. drill & practice.	1	2	3	4	5
Comments:					

Preparation for and response to Learner Needs:

Attended properly to advanced students.	1	2	3	4	5
Attended properly to students who struggle with learning (LD;	1	2	3	4	5
ELL; reading; etc.).					
Attended properly to students with physical/behavioral challenges.	1	2	3	4	5

Displayed preparation for a variety of student needs.				4	5				
Comments:									
Evidence of Differentiation:									
Content: e.g. materials of varied readability and/or interest;	1	2	3	4	5				
multiple ways to access ideas/information; etc.									
Process: e.g., tiering; contracts; compacting; readiness-based	1	2	3	4	5				
small-group instruction; different homework; choices about how									
to work (alone, pair, small group); tasks in multiple modes;									
variety of scaffolding; etc									
Products: e.g., product assignments with multiple modes of	1	2	3	4	5				
expression; with choices about how to work (alone, pairs, small									
group); opportunity to connect learning with individual interests;									
variety of assessment tasks; variety of scaffolding; etc.									
Comments (example of differentiation based on readiness,									
interest, & learning profile):									
Did the lesson meet the needs of learners at all skill levels? (choose of	ne (	nlv	)						
$\Box$ (1) Yes $\Box$ (2) No	110	)111 y	,						
_ (1, 110 = (2,110									
If No, toward what type/s of student did the lesson seem geared? (choose all that apply)									
$\square$ (1) Below basic $\square$ (2) Basic $\square$ (3) Proficient $\square$ (4) Advanced									
Examples:									

evaluation form and provide feedback on how their lesson went.
Evaluation 3: Summative Evaluation
Please provide a thorough answer to each question:
1. Were you able to execute your lesson plans like you had planned?
1.How did students react to the lessons when you used DI?
2. What challenges did you face when implementing your lessons with DI?
3. What parts of your lesson worked best?
4. What parts of your lesson will you change next time you implement DI?
6. What advice would you like to share that may be beneficial to others when creating

and implementing on lessons using DI?

After each teacher delivers their lesson that includes DI, they will complete the summative

#### Appendix B: Letter of Invitation and Consent Form

Dear		
Dear		

I am inviting you to participate in a project study. My name is Kristin Lunsford, and I am working on a doctoral degree in Curriculum, Instruction, and Assessment through Walden University. I am conducting a project study entitled Challenges to Using DI in a Middle School Classroom with Mixed-Skill Levels. Your perceptions will assist me in completing this study. The purpose of this study is to examine teacher perspectives on what challenges teachers face when implementing DI and what support teachers need to overcome these challenges. The study invites social studies teachers who have taught students with mixed skill levels in their classrooms.

This study will consist of an interview that will involve approximately fourteen questions and will last approximately 25-45 minutes. If you decide to take part in this study, I will contact you to schedule an interview that is outside of your contract day or school hours. Each participant will decide the location for the interview to take place that they feel is secure and private. I will record the interview for accuracy purposes and will give each participant a pseudonym to introduce their interview to the recorder.

Your participation in this study is voluntary and will remain confidential. There will be no incentives offered or granted for participating in the study. There will be no adverse effects if you choose to participate or you choose not to. Participating in this study will not affect your job. I will be the only one who will know your position as a participant in this study as your name or any other identifying information will not be included in any written information. Any district, school, and teacher names will all be

withheld from this study. All records of the interviews will be kept safely in my possession and will be destroyed five years after the acceptance of this project study.

By signing below, you are asserting that you have read the above and agree to participate in the study, "Challenges to Implementing DI in Middle School Classrooms with Mixed-Skill Levels." Your signature also shows that you are allowing me permission to audio-record the one-on-one interview. By signing below, you also agree to the terms discussed above. Furthermore, you understand that there are no other terms or conditions, expressed or implied. Your signature below shows your agreement to participate, and you recognize that you may decide to not answer any questions that make you feel uncomfortable and that you may withdraw your permission at any time with no consequences.

Signature of Participant

Date

Date

Signature of Researcher

#### Appendix C: Interview Protocol Questions

The predominant question addressed in this study is: What are the perceptions of teachers on the challenges they face when implementing DI in a classroom with mixed skill levels?

The case study will examine the following sub-questions:

- 1. Can you give me a sketch of your life as a teacher? (Include such things as years of experience, grades and subjects taught, educational background.)
- 2. What training/professional development like in-services, classes, mentors or coaches did you receive prior to and while having a special needs child in your class?
- 3. Could you tell me about the types of accommodations that are needed for the special needs child/children in your class?
- 4. What supports (time, personnel, and materials) did you receive from the special education/resource teacher?
  - Were there any negative effects from having this support? (Please elaborate.)
  - Were there any positive effects from this support? (Please elaborate.)
- 5. What supports did you receive from the administration?
- 6. What supports did you receive from the other staff?
- 7. Did you receive support from a teacher assistant? If so, how much and what type of support was provided?
  - Were there any positive effects from this support?

- Were there any negative effects?
- 8. Were there any supports that would have made your teaching more effective for the whole class?

#### Appendix D: Permission to Use Interview Protocol

Phyllis Horne,

I recently reviewed your article, "Identified Teacher Supports for Inclusive Practice", and I am requesting permission to use your interview questions. I am conducting a research study on teachers in classrooms with students with multi-skill levels. My study is focused on a school that has special education, regular education students, and gifted education students in one classroom. My study is looking at teachers' perceptions of teaching in these classrooms and what resources and training they need to meet the needs of all these students. The interview questions you had as part of your study would be beneficial to my study. Is it okay if I use your questions? Thank you so much.

#### ~ Kristin Lunsford

On Sunday, May 25, 2014 6:20 PM, Phyllis Horne phorne@gov.pe.ca> wrote:

Hi, Kristin.

Yes, you can use the interview questions. Best of luck with your research.

Phyllis Horne

Phyllis Horne Board Chair Health PEI

#### Appendix E: Additional Interview Questions

- 1. How do you define DI?
- 2. What DI strategies have you used in your classroom?
- 3. What challenges did you face when using these DI strategies?
- 4. What support or resources do you feel would help you use DI more?
- 5. What DI strategies did you use for gifted students?
- 6. What challenges did you encounter in meeting the needs of the gifted students?