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Elementary Teachers' Perceptions of Effective Strategies to Increase Student Academic Achievement

Demetria L. Smith
Walden University

Walden University

College of Education

This is to certify that the doctoral study by

Demetria Smith

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Review Committee
Dr. Marilyn Robb, Committee Chairperson, Education Faculty
Dr. Christopher Godat, Committee Member, Education Faculty
Dr. Ionut-Dorin Stanciu, University Reviewer, Education Faculty

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2019

Abstract

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MA, Strayer University, 2009

BS, University of Memphis 2002

Project Study Submitted in Partial Fulfillment

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Abstract

At a Southwestern Tennessee school, students from low socioeconomic status backgrounds consistently perform low on the state standardized test TN Ready Tennessee Comprehensive Assessment Program (TCAP), as compared to students who are not from low socioeconomic status. In this qualitative case study elementary teachers' views on instructional strategies for reading and math, professional development, and professional learning communities (PLC) were examined through a theoretical framework based on Vygotsky's Zone of Proximal Development. The study included interview data from 9 teachers teaching Grades 3-5 who have been using strategies to help increase students' academic achievement. In addition, PLC meeting minutes, and teachers' data notebooks were reviewed. Data analysis consisted of open coding to develop common themes and patterns. The results of the analysis contributed to an understanding of how teachers benefit from ongoing professional development and PLCs to help them teach struggling students. These results led to the development of a professional development plan that provides reading and math strategies to increase all students' academic achievement levels. This contributes to a positive social change by creating opportunities to support teachers' instructional practices and use research-based strategies for reading and math instruction, ultimately increasing student achievement levels so that schools meet their mandated adequate yearly progress goals.

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Dedication

This study is dedicated to my family, friends, my team coworkers, and my best friend, Dr. Barbara Joyner. Also a special thanks to my parents, Queen E. Smith and C.L. Smith, Jr., and my brother, Cornelius Smith. Thank you for your support, encouraging words to endure through this process, prayers, and love throughout this journey. This process was a dream come true and it would not have been possible without you.

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Table of Contents

List of Tables

Section 1: The Problem

Introduction

The academic proficiency levels of student achievement are increasingly low among socioeconomic status (SES) students who live in high poverty areas. According to the Tennessee Department of Education, there is a high rate of poor reading and math skills among urban students. SES students and poor academic performance are usually linked to crime, poverty, violence and parental incarceration (Conradi, Amendum, & Liebfreund, 2016). When students struggle with reading, writing, and basic math skills, it places a huge burden on schools because student test scores are linked to the overall success of a school (Perkins & Cooter, 2013). According to Conradi et al (2015), "A significant number of students from high-poverty settings on average read with less proficiency than their wealthier peers" (p. 428). When students fail to read and comprehend what has been read, they struggle with other academic areas in school. Success in reading is fundamental because without reading fluency, academic success for students will be a struggle (Perkins & Cooter, 2013).

Low performing schools have begun to explicitly focus on reading and math skills in order for students to be successful in their overall primary and intermediate years of learning. Many states have implemented pre-K as a means to help students develop their phonics and vocabulary skills that relate to becoming a successful reader. School districts are adopting the math concepts from Eureka Math to help improve students' thinking skills and integrate those skills with reading (TN Department of Education,2014).

Many urban students at Title 1 schools in Tennessee struggle to perform at grade level on state standardized tests like TNReady, part of the Tennessee Comprehensive Assessment Program (TNReady TCAP). These students struggle with reading fluently and comprehending what has been read, therefore, they struggle tests because they do not understand or comprehend what they are reading. According to previous test scores at a school in Tennessee, there appears to be a high correlation between urban students failing to perform at grade level, and urban students living in high poverty and high crime areas (Conradi et al, 2015). According to Cooter and Perkins (2013), students who come from financially prosperous homes, and whose parents are well -educated tend to do better on standardized tests than those students living in poverty. As a result, educators are faced with a huge task of helping students become successful at performing at grade level on standardized TNReady TCAP tests.

Background of the Study

Every school year educators in Tennessee are faced with the task of encouraging urban students to perform at grade level state standardized tests, TNReady TCAP. Students are scored at various levels; below basic, basic, proficient, and advanced. Students who score proficient are considered able to perform at grade level. Students who score advanced are considered able to perform above grade level. Students who perform below basic and basic are students who perform below grade level. Educators spend substantial planning time focusing on strategies and interventions for the below basic and basic group of students. They also spend time planning for those students who are on or above grade level, but their primary target is students who struggle to be

proficient. Their main goal is to get low performing students to score proficient on the TCAP test. However, these students struggle at grade level for several reasons; many of them fail to read, comprehend, and understand vocabulary words. They face poverty issues, lacking parental involvement, absenteeism, or tardiness (Bridwell, 2012). Regardless of the many situations that urban students face, educators are still held accountable for educating their students to score proficient on state standardized tests.

This study will take place at an elementary school in Southeast Tennessee. The school serves 340 elementary students and has 24 staff members, which includes14 K-5 teachers, two administrators, three special education teachers, one counselor, and four enrichment teachers. Each grade level consists of two classes and each class has 18 - 30 students. This school services a large population of SES students living in low poverty areas. The school population includes 2% English language learners, and 95% of students receive free or reduced lunch. The ethnicity breakdown is of 5% Hispanic, 7% of Caucasian, and 88% African American.

Definition of the Problem

Students at a local elementary school in Southeast Tennessee struggle to perform at proficient or advanced levels on annual state assessments. This elementary school has a significant number of students scoring below grade level on their annual state assessments. The TNReady TCAP test is given to students in Grades 3 through 5 in the spring of every school year. All public schools in the state of Tennessee take the TNReady TCAP test. This test measures how well students have performed academically during the entire school year. Students are tested on reading and math

skills. The reading portion of the test has complex texts that consist of lengthy passages. Students have to be able to read those texts and answer questions with an essay -type answer. Students have to refer back to the text to support their answers with evidence from the text. They must provide a thorough explanation of their thought process as well. The math test consists of students having to read a multi- task word problems, decide how to solve the problems, and write a thorough explanation of their thought process. The math test also consists of students having to be able to perform computation skills with accuracy, and they must be fluent in basic facts of addition, subtraction, and multiplication. Not only do SES students struggle with knowing their basic math facts, but they also struggle with basic reading skills (Tennessee Department of Education, 2010).

Based on the data at Southeastern school in Tennessee students from low SES backgrounds fail to maintain a level of proficiency in reading and math. The problem analyzed in this study is a lack of structured information on how current instructional strategies teachers use can help increase student achievement levels. The purpose of this study is to examine the current instructional practices that teachers use to improve the academic achievement levels of their students due to the gap in instructional practices from the data, as represented on TNReady TCAP with SES students.

Evidence of the Problem at the Local Level

As Table 1 shows that during the 2013-2014 and 2014-2015school years, the non-economically students have a higher percentage of test scores resulting in proficient or advanced levels. Students in the economically disadvantaged group have a lower

percentage of test scores resulting in fewer students performing at proficient or advanced levels on the annual state assessment.

Table 1

Percentage of Math and Reading Proficiency Performance

MATH		
Subgroups	**2013-2014 %Proficient/Advanced**	**2014-2015 % Proficient/Advanced**
Economically Disadvantaged	**30**	**36**
Non- Economically Disadvantaged	**56**	**63**

READING		
Subgroups	**2013-2014 %Proficient/Advanced**	**2014-2015 % Proficient/Advanced**
Economically Disadvantaged	**35**	**38**
Non- Economically Disadvantaged	**65**	**67**

Note. Data from Tennessee Department of Education Report Card, 2010

Students identified as *non-economically disadvantaged* continue to increase in the proficiency or advanced category, but students in the economically-disadvantaged category show some growth over the 2-year period but do not reach the 50th percentile.

Teachers at the XYZ elementary school had an opportunity to view the data from the 2013-2014 and 2014-2015 school years during professional learning communities (PLC) meetings. During these meeting, teachers discuss strategies that can be implemented in the classroom for the upcoming school year. The strategies discussed are geared toward improving academic achievement for those students who do not reach the

50th percentile (Reich & Bally, 2010). Students have to be successful in both reading and math to experience academic success throughout their school years. However, in elementary schools, one of the main gaps in low reading and math scores are from students of different ethnic groups and students who come from low poverty homes (Allington, 2010).

Because low SES students at XYZ elementary school scored below the 50th percentile in reading and math, it has caused the school's adequate yearly progress (AYP) to dropped. There is a huge achievement gap among economically disadvantaged students being able to score proficient or advanced on annual state tests. This gap in practice causes teachers to analyze their instructional practices and strategies to determine which are most effective in closing the achievement gap among low SES students (Reich & Bally, 2010).

According to Mertler (2011), maintaining AYP has placed high levels of stress and pressure on teachers. Teachers feel that trying to meet AYP goals does not align with their current curriculum and instructional practices making it difficult to improve student academic success. Teachers are forced to create common assessments that align with the structure of the state test. Teachers are frustrated because many skills that should be taught for the grade level are not taught, but only the skills that will be tested are taught in order for students to master the test to meet AYP goals. The problem that teachers continue to emphasize is that they spend their teaching time teaching to a test versus teaching content knowledge that students need to achieve academic success.

Students learn test- taking strategies of the test, but not how to apply the knowledge needed to answer tested questions causing AYP goals to not be met (Metler, 2011).

At a Southeastern Tennessee elementary school, the superintendent believes that district's TN Ready test scores were significantly lower than the previous annual state assessment given a few years ago (Hopson, 2015). The TNReady TCAP test has more rigorous standards; therefore, teachers are held to a higher standard when providing students with instruction. Based on schools' low performance in the district, the superintendent realizes challenges are causing low performance of student academic achievement levels including low attendance, mobility, and a high poverty rate. Due to low academic achievement of schools the district launched the Achievement School District (ASD) system for those schools performing in the bottom 5% (Tennessee Department of Education, 2010). ASD schools are those that show continued low performance in student test data.

Additionally, when students do not perform well on annual tests, besides becoming an ASD school district teachers' scores in the Tennessee Value -Added Assessment System (TVASS) are lowered (Papay, 2011). The TVASS score is used to determine academic growth of students from school year to school year, and determine areas of academic improvement for students. However, if a large percentage of students fail to perform at grade level, the entire school is placed on an academic failing list. If schools do not make gains or academic growth over a period of time, the school closes and usually opens back up as a charter school, but when the school closes, all teachers and administrators lose their positions and have to look for jobs at another school. If the

school is a community school, parents have to find a source of transportation for their students to attend another school (Papay, 2011). If the school remains open, teachers use data from TVASS to reflect on using better instructional practices.

Rationale

In XYZ elementary school in Southeast Tennessee school district, students from low SES backgrounds scoring poorly on the annual standardized test called TNReady TCAP. Students in urban/rural areas have academic deficiencies that cause them to score poorly on state standardized tests such as TNReady TCAP. Students are faced with many issues that prevent them from performing well while in school. Some students face a lack of prerequisite skills for their current grade, a lack of ability read and comprehend text, a lack of vocabulary and writing skills, low poverty level homes, poor parental involvement, poor school attendance, and facing ongoing family tragedies (Perkins & Cooter, 2013).

After examining data from local schools in the XYZ elementary school district, most are failing to meet proficient academic standards; these schools that have more students of color than those schools that are meeting proficient academic standards (Tennessee Department of Education, 2010). There is a dire need to close the achievement gap for urban students. Initiating the use of Common Core Standards in reading and math will allow students to gain a better understanding of how to master skills that require analytical thinking, critical thinking, and writing (Cheshier, 2014). Underachieving students typically start the school year behind their current grade level, and they usually stay behind throughout their school years.

As a result of poor achievement in a school district in Tennessee, the district superintendent of XYZ elementary school held a meeting to discuss his new adoption plan of 80/90/100. This strategic plan was for 80% of high school seniors to graduate college or be career ready, 90% to graduate on time, and 100% of college and career-ready graduates to enroll in college or other post-secondary opportunities (Hopson, 2015). According to the district superintendent, low performance of students is a trend that will continue if we do not change course. The 10-year plan was geared toward improving, literacy and math skills, and providing training for teachers and leaders to ensure student success. This plan has the intent of allowing teachers to teach rigorous standards and improve their instructional strategies to increase academic levels. The plan began in 2015; therefore, the graduating class of 2025 should graduate 80/90/100% ready. Teachers have to reevaluate their instructional strategies and focus on researched based strategies shown to increase student academic levels. (Hopson, 2015). This plan came as a change for the district; however, but the ultimate goal of this strategic plan was to improve the academic success of all students.

Teachers at the local level continuously struggle to improve low SES academic achievement levels. Low achievement could simply be caused by the fact that some educators do not know how to effectively execute a lesson so that students are better equipped with the tools needed to pass the test. Another factor of low achievement could be that educators do not have enough content knowledge to teach reading and math at the elementary level (Genao, 2013). XYZ school district has implemented Instructional Learning Teams (ILTs) which consists of administrators and experienced teachers in the

areas of reading and math. These teachers serve as content leads and this allows them to use their current research based- strategies and share them with other teachers. The reading and math teachers conduct informal observations and provide feedback to help teachers improve instructional practices. Content leads provide peer-to-peer observations, professional development (PD), and collaborative planning sessions to help improve instructional practices. Content leads collaborate with the principal and assistant principal to identify areas of strengths, weaknesses, and common trends to help build on teacher best practices for instruction in reading and math. The ILTs were established by the district as one of the strategic plans to help improve academic achievement levels (Hopson, 2015).

During my interviews with teachers, I planned to gain a better understanding of the achievement gap related to reading and math achievement of low SES students and to find out what instructional strategies worked best for improving those students' academic achievements. I planned to discuss the types of PD teachers attended to better equip them with teaching instructional strategies, and whether their PLCs have contributed to helping them with instructional strategies.

The intent of this study was to explore instructional strategies being implemented in reading and math to determine which strategies effectively improve urban students' achievement levels. This study sought to determine which strategy helps students to perform at grade level on the TNReady TCAP test, as well as provide educators with PD to gain better insight on how to prepare students in the areas of reading and math. Several schools in Tennessee's XYZ school district that are low -performing schools with

low SES urban students; but some schools with the same kinds of students are performing well (Cheshier, 2014). This study sought to find which strategies work best to improve the academic achievement levels of low SES students.

Definition of Terms

Differentiated instruction: Providing multiples ways for students to learn the content being taught (Taylor, 2015).

Intervention: Providing students with a program to help improve their academics (Cox, 2012).

Professional Learning Community: A group of educators who meet periodically with a *professional learning coach* to collaborate and develop strategies and share ideas to help improve student academics (Cox, 2012).

Rigor: Providing support for all students in order for them to learn at high levels that are challenging for students (Stack, 2014).

Strategy: Instructional plans that help to differentiate a lesson at a level at which students can understand and comprehend the concept (Jones & Henriksen, 2013).

Student Achievement: The ability for students to reach their goal in academics, making adequate progress toward learning standards (Stack, 2014).

Significance of the Study

This study is significant because it will address research-based strategies and interventions useful in helping students gain proficiency in core subjects, such as reading and math. At XYZ elementary, a Title 1 school there is a high population of urban

students who struggle to perform at grade- level on the state assessment test. The study will also help to provide teachers with an insight into the importance of making sure all their students show growth as measured by the TNReady TCAP test as well as provide support on how to help their students build on the knowledge and skills needed to become successful with taking the test. This sought to find which instructional strategies are more beneficial for improving academic achievement levels of urban students who perform low on assessments.

Teachers in XYZ school district already have been instructed to differentiate their instruction and implement small group instruction with fidelity to ensure the success of all students. However, it is important to find out if there are other strategies that teachers feel are beneficial and determine how successful small group and differentiated instruction is for teachers.

Guiding Research Questions

The purpose behind this study was to examine and discover teachers' perceptions on the strategies that work best for their struggling reading and math students. Guiding this research study are the following questions:

RQ1: What are teachers' perceptions of effective instructional strategies for increasing student proficiency levels in math and reading?

RQ 2: What are teachers' perceptions of the use of PLC to increase student achievement levels?

RQ 3: What are teachers' perceptions of the effectiveness of PD in increasing students' proficiency levels in math and reading?

Conceptual Framework

The conceptual framework for this study derives from Vygotsky's (1978) zone of proximal development (ZPD) and Tomlinson's theory of differentiation.

Vygotsky's (1978), ZPD has been defined as "the distance between what the learner can do with or without help" (p.86). Vygotsky (1978), stated that students develop better when they receive help from their peers. When students are taught according to their readiness levels, they are more engaged, more responsive to the lesson, and they become more successful students. There is a connection between development of learning and instruction.

According to Vygotsky (1978), the instructional strategies based on the ZPD allow teachers the opportunity to teach students in their own zone. These strategies also allow an increased level of achievement to take place so that the students can become more academically successful. Teachers must know the immediate needs of their learners as well as their learning styles to increase their cognitive learning abilities. By scaffolding their lessons, teachers can provide support to students until they are able to work independently on a skill or task (Vygotsky, 1978). Fernandez et al. (2015) stated that "scaffolding is an intellectual support to which a teacher offers in order to draw the learner up towards a higher level of understanding" (p. 56). In applying ZPD as it relates to SES students, teachers have to meet students where they are academically in an effort to grow them to their maximum learning potential. Allowing students support in scaffolding lessons will help them reach higher levels of learning.

When teaching lessons, educators should remember that students have different learning styles, and teachers should differentiate their instruction to accommodate those learning styles. The differentiated instruction approach requires an educator to focus on the central ideas of the curriculum, relate the material to the students, instruct according to the needs of learners, and assess growth individually (Tomlinson, 2005). According to Tomlinson (2005),

> Differentiating instruction is to offer students a range of tasks of varying difficulty. The whole class may be reading the same novel, play, or article but individual students can respond to different writing prompts. Teachers have the responsibility to ensure that all students are working in what Lev Vygotsky called their Zone of Proximal Development. In this ZPD students must stretch intellectually in order to complete the task at hand (p. 186).

When developing and delivering lessons, educators should provide differentiated instruction in the area of content, process, and product (Bender, 2012). By differentiating content, educators can determine the level of complexity based on the students' levels. Differentiating the process allows teachers to incorporate the learning styles of students, and differentiating the product, gives students the opportunity to choose how they demonstrate what they have learned in the lesson. For example, students might construct a model or write a paper (Taylor, 2015). Goddard, Goodard and Kim (2015) suggested that when teachers differentiate their lessons it allows students to have varied opportunities to process and demonstrate their learning. Teachers should assess student learning to monitor their progress and make necessary adjustments so that students can

continue with academic success. Differentiated instruction provides an opportunity for students to be met at their academic needs or levels. When educators use differentiated instruction, they begin to help increase the knowledge of their students, allowing them to reach higher levels of achievement at or above grade level (Conderman, Bresnahan, & Hedin, 2015). SES students' lessons should be tailored to fit their learning styles and needs. Differentiated instruction allows for diverse learning situations and successful learning for all students.

Review of the Literature

The sources cited in this literature review were chosen to provide context related to determining which strategies for reading and math are most effective, and the reasons low SES students struggle to perform well on annual state standardized tests. I reviewed literature that addressed causes of low academic achievement and strategies to help improve academic achievement. I organized the literature review into themes: (a)factors that prevent students from being proficient, (b)strategies to help raise academic achievement levels in both reading and math, and (c)teacher quality. I conducted the literature review Walden's University library database and found peer- reviewed articles using ERIC and Education from SAGE. Search terms included *Professional Learning Communities, professional development, conceptual and procedural knowledge, reading & math strategies, teacher quality*, *parental involvement*, small *group instruction, effects of poverty on SES students, differentiated instruction, and peer tutoring.* I also reviewed information from the Tennessee Department of Education website.

Student Proficiency on State Assessments

Several key factors that prevent urban students in Tennessee from scoring proficient on standardized TCAP tests. Some of these key influences are a lack of parental involvement, poverty, poor school attendance, student mobility, and intergenerational illiteracy.

Lack of parental involvement. Parental involvement is one of the most important factors that determine student success. In economically disadvantaged communities, parental involvement is at an all-time low. Morales (2016) stated that parents are not involved due to not having the time available. When parents are not academically involved in their child's education, it can cause students to fail. Parents are their child's first teacher, but many parents of urban students do not know how to teach their children, and the formal educator is left to do all the teaching.

Parental involvement is a key factor in students performing their best while in school. Morales (2016) conducted a qualitative research study of 62 teachers who were surveyed in determining the educational achievement gap among students from low SES backgrounds and non-SES backgrounds. From the survey results, Morales developed themes that consisted of roles of parents and home language versus school language. Of the 62 participants, 54 agreed that parents should be doing more to help their children succeed in school. Participants felt that parents can help their children at home by reading to them, being more accountable with their homework, attending parent events at their child's school, and providing an environment that is more stable at home and conducive to reinforcing skills learned at school. According to the respondents, many

students were exposed to slang and rap that caused them to not speak the standard English language correctly. Language barriers such as these affect their public- speaking abilities. The study concluded with these participants agreeing that lack of parental involvement was an ongoing achievement gap for low SES students. Parents want to be involved, but they do not have the time to be actively involved.

Students need more parental involvement so they know that their parents have a sincere concern about their academics. Durisic and Bunijevac (2017) stated that parents play vital roles in the success of their children and there should be a positive bond between home and school for all students whether they are low SES or not low SES. This partnership between school and parents allows students to be successful in school. When parents are involved, students have successful academic outcomes. Hornby and Blackwell (2018) stated that there are four barriers of effective parental involvement: (a) individual parents (b) child factors (c) parent -teacher factors and (d) societal factors. Their study results indicated that parents struggle to be supportive in their child's education based on the listed factors, and not receiving support from other family members. The study revealed that schools need to determine and develop ways to overcome these barriers and develop a better home -school connection that will involve parents in their child's education to eventually close the gap between home and school.

There is a difference of parental involvement among parents of non-SES students and parents of SES students. Benner, Boyle, and Sadler (2016) examined the involvement between parent and student academic success with a focus on three aspects: (a)parental involvement at home, (b) parental involvement at school, and (c)academic

socialization. They found that although parental involvement tends to decline as students go through the K-12 system parents of non-SES students are more involved with their child's home and school activities. They have a connection with their child's school and attend parent conferences, parent teacher organization meetings, and are active members of those organizations. They work closely with their child teachers to find out what is needed to improve their academic success in school. They also find the time to build a partnership where they can be actively involved in their child's education. They have a connection at home where they make sure homework is completed and if there is difficulty with homework they contact the teacher. Parents of non- SES students take all the steps to ensure that their child is successful in school. Poor parental involvement for SES students places them at a disadvantage. The study revealed that SES students would have a better academic advantage if parental involvement was more active. This study also revealed that academic strategies are helpful in increasing the successes of SES students.

Parental involvement is one of the most effective ways that can help students become academically successful whether non-SES or SES. Gulevska (2017) examined ways to determine benefits of creating a partnership between home and school and how to overcome barriers so teachers can work together with families for the benefit of student success. The results showed that teachers have a perception that when there is successful parental involvement, students are more successful academically. The study also revealed that schools have to develop an intervention with parents to promote better home- school involvement. Suggested interventions were home visits, allowing parents

to have a voice in some of the school decisions, and encouraging parents of gifted students to be more actively involved. As a result, teachers realized that they have to use a strategy to involve parents in their child's education. According to Durisic and Bunijevac (2017), schools are great when they establish a partnership with parents. To help teachers increasing parental involvement, principals make sure that such involvement is being implemented in their schools. Principals should develop a partnership with parents by implementing programs or activities to include parents in their child's success. One such implementation is having a parental tutoring night in which parents and students learn together so that parents are able to help their child at home. Also, principals could find out what times are most suitable for parents and arrange several parent and teacher meetings to accommodate parents' schedules. Administrators and educators need to develop close partnerships with parents to establish and build relationships that encourage them to be actively involved in their children's education. When schools develop a plan to work closely with parents and develop a partnership student achievement is likely to increase.

School attendance. Another factor that contributes to student proficiency levels is low to poor school attendance. Gottfried (2013) stated that attendance is a key performance indicator in schools. When students miss several days of school at the primary level, they are missing the most crucial building blocks of knowledge. Students lose considerable amount of instruction when they have excessive absences. Parke and Kanyongo (2012) found that there is a correlation between low test scores and student attendance, particularly among students in urban and low socioeconomic areas. Their study results

showed that nonattendance-mobility negatively impacted mathematics and reading achievement as measured by the state's assessment (Kanyongo, 2012). They also found that students in grades 1 through 12 were more mobile than students who were absent from frequently. Students attend school more but just move often. The percentage of mobility increases as students' progress through grade levels. Kanyongo (2012) made the connection that high mobility is related to low income and parents with poor education. The percentage rate of mobility was higher among ethnic groups of color than other ethnic groups. Low SES families move for various reasons these reasons including homelessness, crime, job loss, job relocation, or a change in residency. These moves happen more than three to four times in a school year. Welsh (2017) stated that moves cause poor attendance among SES students, but students in SES families are often experiencing many unstable conditions that cause them to move frequently. Student mobility has tremendous effects on urban schools and is a worldwide issue. Rumberger (2016) stated that teachers feel that frequent mobility of students causes them to not be successful in school. Teachers become frustrated when teaching mobile students because they never know how many mobile students they will receive during the school year, and how many will leave before the school year ends. Mobile students typically score lower than proficient on the state standardized tests. Most schools that have a high mobility rate among students are the schools in urban areas where students that live in poverty (Rumberger,2016).

Mobile students typically score basic or below basic when it comes to taking the state standardized test. According to Pavlakis (2014), educators will need to be prepared

to teach putting forth their best effort making sure students receive the best first teaching because educators will never know when a student will leave, and how many students will transfer in or out of their classroom. Students who move frequently suffer academically and have a difficult time developing an attachment with their school as well as their school's community According to Gottfried (2013), students who move frequently develop behavior problems which cause them to be placed on a behavior plan. When students move frequently and transfer from school to school they miss valuable learning opportunities. Although schools should be on the same pace in curriculum there is still an academic gap when students move a lot. The more that a student moves in a school year the further behind he/she becomes academically. According to Welsh (2017) poor school attendance and student mobility are closely related. When students move a lot they tend to miss a lot of school. Crime, job loss, and homelessness are a few factors that are unpredictable in urban communities and are some of the causes that urban students are transient. Teachers will need be on the same page with strategies so that students who continuously miss school can stay on pace, and are familiar with the strategies used at their previous school when they arrive at their new school.

Teachers know how frustrating it is to teach students who move so frequently. Pavlakis (2015) stated that teachers have a difficult time trying to build positive relationships with families of students that are homeless and move frequently. Although teachers find it a challenge to help improve their academics, they have realized that they need to work with other teachers, administration staff, and community stakeholders will have to build a partnership that will help increase student's academics despite their

situations of moving a lot. Teachers discussed a few solutions to the problem such as, "providing assess to parenting and content knowledge classes, connecting families to community resources, creating a nurturing school climate, and encouraging a coordinated action between schools and communities" (Pavlakis, 2015, p. 1047). Teachers discussed that this may not completely solve the problem, but it is a start to begin a solution to the problem.

Poverty. Student academic achievement has a correlation with socioeconomic background. Socioeconomic status of students is a contextual variable that is used in determining a student's success or failure in school. Kornbluh, Pykett, Flanagan (2019) examined the relationship between student's academics and their socioeconomic status. There are a number of factors that are suggested to explain low academic success of students such as families living in low income households, parents not have adequate education and living in poverty neighborhoods. The socioeconomic status of students causes the academic achievement gap to widen.

Many students in low socioeconomic status live in poverty. Poverty is a factor that contributes to low TNReady TCAP scores of urban students. This is one of the greatest challenges that appears to have consequences that educators face when it comes to teaching students that live in urban areas.

Students who live in poverty bring their conditions with them when they attend school. These conditions consist of being hungry, homelessness, not getting proper rest at night, and not having the proper clothing. Chandler (2014) performed a qualitative study to examine the relationship of students with learning difficulties and poverty. This study

had eleven participants, many of the participants felt that poverty can be a situation that students can overcome with hard work. On the other hand, some participants felt that students living in poverty are not focused on how hard to work to overcome the situation. Teachers understand that their beliefs about poverty do not compare to what students are really experience. An assumption made in this study is teachers felt that the school can fix the problem. Schools can provide necessities for students needing clothes, shoes, and food. Schools can also fix the problem by meeting the needs of their students by using differentiated instruction response to intervention. This study revealed that students living in poverty have low IQs and they need support to improve their academic achievement levels. This study also revealed that teachers have a caring and nurturing disposition when it comes to teaching students in poverty. They want to help poor students succeed by providing educational support.

Students in poverty are connected to having attention deficit disorder. Students with this diagnosis are usually placed in special education programs, not only are their academics low but students also develop more significant behavior issues than students who are not from poverty homes (Khavenson, 2018). There is an achievement gap between students in poverty and students from non-poverty homes.

Poor academic achievement has a correlation with low family income. Morrissey, Hutchinson, and Winsler (2014), conducted a study that showed that there is a relation among students who receive free and reduced lunch and low academic achievement. Students with poor attendance that have parents with low income usually have low grades in their academics. Although this study makes a connection with poor academics of

students from low income families, the study concluded with needing more research to provide ways to increase the academic proficiency levels of students from low income families.

Students living in poverty create difficult situations for any educator. Olawolu and Onyije (2012) stated that students who live in poverty face more problems than those students who do not. They struggle academically with reading, writing, math, and the ability to apply what they have learned with authentic situations. Researchers Conradi, Amendum, and Liebfreund (2016) stated that educators work diligently to apply many teaching strategies, but sometimes it is hard to teach a child who has not gotten the proper rest, eaten nutritious meal, and battle various adverse home situations. These home situations consist of parents being unavailable to attend open house at their child's school, parent teacher conferences, and curriculum nights. Parents miss these important activities at school due to working long hours or even working more than one job which keeps parents from being more involved in their child's education.

Students who live in poverty situations are struggling to succeed academically; therefore, effective educators help students to become successful despite the obstacles they face. Kubilius and Corwith (2017) study examined how poverty affects the academic achievement levels of students as they progress through school. They determined that there are significant differences among the academic levels of students who live in rural and non-rural areas. Students in non-rural areas excel better in reading and math than those students from rural areas. Poverty affects a lot of aspects of student's lives which has a negative result on their academic achievement levels. For

example, they usually attend Title 1 schools which are schools with backgrounds of students from poor neighborhoods, their neighborhoods do not have a community of rich academic resources for them to use. Students in poor neighborhoods do not have access to libraries or museums which would help provide educational resources to build on the academics that students learn at school. Their study resulted in schools having to provide different avenues to partner with the community to develop ways to give students from poverty situations an opportunity to achieve academically.

Poverty affects the NCLB requirements that measures the AYP of schools. NCLB sets high standards for schools; however, schools have indicators which influence their AYP. The indicators are students who need more academic intervention, due to not being academically successful. Poverty has caused students to not make annual benchmarks on state assessments. When students consecutively fail to meet benchmark on assessments after three years schools are placed on a failure list, and the school becomes taken over by the State Department of Education (Mitani, 2018). Poverty of students increases the chances of schools being taken over by the department of education.

Students from low poverty homes struggle to read and comprehend what they have read. Students also have low comprehension reading levels. Conradi et al. (2016) study examined the reading comprehension levels of students. There were 52 participants in this study from one elementary school. These students were tested on decoding skills, fluency and reading comprehension. The National Assessment of Educational Progress (NAEP) revealed the data from these skills. The data revealed that

over one third of fourth grade students are not reaching proficient levels in reading due to severe problems of poverty. The level of poverty for a student typically predicts their student achievement outcome better than their family's annual income. However, poverty does not only affect reading skills but also math skills. Battey (2012) stated that teachers of mathematics students from poverty situations have low math scores as measured by annual state tests. She examined a qualitative case study to determine the types of instruction that are used when teaching Latino and African American elementary students from low SES backgrounds. The participants in this study consisted of 25 fourth grade students. Out of the 25 students there were 2 African Americans and 23 Latinos. These students were taught with different teaching strategies in math to determine which approach was better for the students. Students were more successful when the math lesson connected with other subjects, used student strategy, and connected with higher order thinking and questioning. However, students were less successful when less instructional strategies were used, no differentiation, and no questioning that allowed students to think deeper in the content being taught. This study revealed that students learned more and were more successful when teachers used a variety of pedagogical strategies. Therefore, according to the study is it is highly important that teachers use effective instructional practices to promote student learning among SES students.

Students who attend Title 1 schools and receive Title 1 funding are students who come from low income poverty homes. These students are at risk of failing academically. Hirn, Hollo, and Scott (2018), stated that students from low income families usually do not respond to instruction as those students who are not from poverty

homes. There is an achievement gap among students in low poverty situations. Their study stated that teachers provide different academic strategies to help students from low income families succeed. One strategy that they suggest is active student engagement. This strategy continues to keep students engaged in the lesson, and teachers are not wasting time. Students are more focused because they are actively participating in the lesson. The study also suggested that teachers will need more ongoing PD to ensure active engagement strategies are executed properly in the classroom.

According to Ullucci and Howard (2015), students from poverty homes struggle in both academic areas of reading and math. Schools that have a high population of students who live in poverty stricken homes face the obstacles of students TNReady TCAP scores being low which causes the school to be placed on an academic failing, risk being closed, and/or taken over by the state. According to Chandler (2014), teachers invest their time in students that are from poverty homes. Although students are faced with difficult circumstances teachers have developed positive relationships with students to assure them that it takes hard work to be successful. One way that teachers are working together to help fix the problem related to poverty and academics is to work afterschool to provide additional assistance with their schoolwork, volunteering to have study sessions on Saturdays, and even eating lunch with students during the school day. Having a supportive school community to help students meet their basic needs also allows for students to boost self-esteem and increase their learning opportunities. A supportive school community consists of providing clothes in a clothes closet, a snack when a child is hungry, and reaching out to a community organization. These are just

some of the factors that can help a child in poverty overcome the obstacles and have a desire to succeed while in school. Walsh et al. (2014) suggested that poverty limits students' academic growth, and their cognitive functioning. Their research shows that poverty also plays a role in high mobility rates. Poverty also limits parent's ability to spend time, money, and their energy in their children.

Poverty among urban students has an impact on the success rate of a school. Teachers need come together to decide how to help students in poverty situations. It is definitely a difficult task, but students will work hard to achieve success when they feel as if they have someone to help them overcome their obstacles to becoming successful students.

Intergenerational Illiteracy. Another factor that appears to be influential is intergenerational illiteracy and lack of reading comprehension skills. According to Perkins and Cooter (2013), "intergenerational illiteracy is a sociocultural phenomenon whereby parents who are illiterate inadvertently sponsor home conditions that may seriously hinder their children's reading and writing development, therefore, causing a cycle of illiteracy" (p. 698). Many students who attend urban schools and live in urban neighborhoods come from homes where their parents or other family members are illiterate and they also have difficulty reading and comprehending what they have read. When parents suffer from being illiterate the child usually has the same academic problems (Nitri, 2013). According to Post (2015), literacy is not valued in many urban communities because being able to read and write is not a part of certain cultures. It is a difficult task to expect a parent to assist students with reading when they themselves

cannot read. Communities, schools, and families will need to find ways to come together to build and embrace a community of literacy to combat illiteracy.

Reading difficulties of urban students are often associated with their parents. In many urban schools the parents cannot read or they do not have a high school diploma making it difficult for their children to learn the fundamentals of reading. Perkins and Cooter (2013) stated that reading difficulty is often associated with a student not reading at their current grade level. Students living in situations where their parents are illiterate struggle with reading fluently and reading comprehension; therefore, when it comes time to take the standardized test they score below proficient because of a lack of reading skills.

Illiterate parents are not able to comprehend basic reading, math and vocabulary skills that their children will need to be able to improve academically at school. According to Esra and Kayabasi (2017), students need to be exposed to a variety of vocabulary to be successful on state standardized tests. Students also need to receive practice with reading passages this will allow students to develop an understanding of what the reading passages are about. Gallaher and Anderson (2016) stated that teachers should hold frequent parent teacher conferences so that parents can receive the help they need to gradually be able to help their child succeed. Many urban parents are faced with a difficulty of not being able to help their child due to reading difficulties of their own. Reading is a fundamental skill that all students need to be successful; therefore, it is important for the success of students that teachers implement reading strategies with fidelity.

Effective Strategies to Help Students

As discussed earlier most urban students fail to score proficient on the state standardized TNReady TCAP test. One of the reasons is lack of being able to read fluently and comprehend what was read. On all parts of the TNReady TCAP test students need read as well as write. If students struggle to read, the likelihood is that their score will be below basic or basic. However, there are several strategies that educators can use to help their students to become better readers and receive a score of proficiency or higher on the test.

Small Group Instruction. One strategy that teachers can use is small group instruction. Teaching students in small groups is an effective reading and math strategy to help students that struggle academically. According to Weiss (2013), "Small group instruction is designed to teach students how to read, it also provides an opportunity to develop student's learning related behaviors to be able to work independently" (p. 295). When educators conduct lessons in small group settings it allows them to be able to meet the needs of their students and gain a better understanding of what skills their students are struggling with. It also allows them to be able to have more one on one teaching experience with their students. Beard and Marrapodi (2013) stated that when teachers provide instruction in small groups they can differentiate the instruction solely based on the students' learning abilities. Students who receive small group instruction as well as whole group instruction have an opportunity to improve their academic levels.

According to Begeny, Levy, and Field (2017), fourth- grade students have inadequate fluency skills. As part of their intervention fourth grade teachers use small

group instruction for those students that are struggling with reading. Small group instruction allows teachers to target the learning needs of all struggling readers. Teachers provide instruction to a group of no more than six students. This allows teachers to give corrective feedback, more teacher attention, and opportunities for students to respond more. As a result, teachers can monitor their progress better and scaffold the skills to allow students to learn at their current grade level.

Small group instruction allows teachers to develop mini lessons that fit the learning needs of their students. It also allows teachers to develop better relationships with their students. Jones and Heriksen (2013) stated that if teachers know their students' academic levels they become more attuned to helping their students reach their academic goals. Their study was an investigation in a first-grade classroom where students received small group instruction the entire school year. Before students can be placed in a small group, they were assessed on their reading skills to determine the best placement for them. Based on students assessed skills, six groups were formed. The groups that students tested into based on their needs were as follows: (a) Group 1 reading and writing (b)initial and final sounds in words (c) Group 2 reading and writing vowel digraphs in words (d) Group 3 building fluency (e) Group 4 decoding multisyllabic words & building vocabulary (f) Group 5 monitoring comprehension and fix- up (g) Group 6 comprehension, asking and answering questions.

Students received a lesson in each group based on their identified skill of need. Instruction in each group consisted of read aloud tasks, teacher modeling, think-pair-share, vocabulary, and questioning and answering. After being in a small group for

overtime with students, students were reassessed to determine if there was growth. If growth was made students moved to a higher group, if students were still on the same level they remained in the group, and if they made little to no growth they were moved to a lower group. In this study, research shows that there are benefits from small group instruction. Small group instruction allows teachers to meet students at their need. Teachers are better able to focus on a specific skill that students need improvements with; therefore, students are in the group that fits their academic achievement level. This study revealed that student's achievement levels increased in literacy due to working with students in a small group setting. Teachers take into consideration student's individual needs. Small group instruction allows students to move their academic levels from Below Basic to Basic to Proficient, to Advanced. Small group instruction should be meaning based and implemented with fidelity to see student achievement growths.

Small group instruction provides an opportunity for teachers to use various instructional strategies in small groups. According to Park and Datnow (2017), teachers also set goals for different small groups of students based on their academic abilities and skill deficiencies. One teacher describes how she monitors and adjusts her small group instruction.

> I'm meeting with groups that have similar goal area. The group I met with the other day, they need to work on informational text, so we talked about what does that mean, what in informational text do you need to work on, so cause and effect, main idea? Then we set goals on how we are going to improve our benchmark scores and that goal area. The kids make goals for themselves and then at the

> trimester we go back to those goals. Then they take the benchmark again. Students find out if their score went up in that area. Then student's goal areas might change, and it becomes student's highest score because they have worked on the skill, now students work on another skill. (p. 291)

Teachers described the importance of setting goals with students during small group instruction and taking benchmark assessments to determine whether the small group instruction is benefitting the students and how to maintain academic growth of students. Teachers also discussed that the reading and math curriculums have a lot of information to teach students during whole group instruction. Therefore, small group instruction provides the benefit of being able to re-teach skills taught during whole group instruction but to a smaller setting of students.

Differentiated Instruction. Although small group instruction is an effective strategy in helping students achieve academic success, teachers can also implement differentiated instruction as a strategy to improve student's academics as well. Differentiated instruction creates several learning advantages such as meeting students' learning styles, providing accommodations for students with learning disabilities, and allowing students to achieve higher levels of thinking (Taylor, 2015). According to Fitzgerald (2016) students with diverse learning abilities exist in every classroom. Students are successful when teachers expose students to effective instructional practices to meet their individual learning needs. Differentiated instruction is effective when teachers have taken the time to plan for student's different learning styles and needs. Teachers must be proactive in how they plan to deliver different effective research-based

practices to their students. DeJesus (2012) stated differentiated instruction focuses on multiple ways teachers can plan effective instruction for their students for them to master learning targets. Teachers provide a variety of ways to engage students in the content of their lessons for students to be successful with the skills being taught.

Differentiated instruction should contain such methods as effective teaching and learning, a wide variety of instructional strategies, a thorough and thought out lesson plan, a conducive learning environment, and assessments. Coubergs et al. (2017) identified district wide steps that ensured that educators were implementing differentiated instructional strategies with fidelity and making sure that they were meeting the academic needs of all students. Teachers' perceptions on differentiated instruction was misinterpreted; therefore, a plan had to be developed to allow educators to ensure the success of their students. To prepare educators to implement differentiated instruction properly in their classrooms PD was provided with the use of modeling strategies, one on one peer learning, and cohort group opportunities. The purpose of this PD was to allow educators to perceive the fact that differentiated instruction is necessary to be able to reach students at their learning capabilities. As a result, educators had an opportunity to reflect on their own teaching practices and align it with the instructional practices learned during their PD. This allowed them to embrace the concept of different learning opportunities for their students.

Teachers need be adequately prepared to teach lessons with differentiated instruction. Prast, Weijer-Bergsma, Kroesbergen, and Van Luit (2018) conducted a large-scale study that examined the effects of a PD program using differentiated

instruction. This study involved teachers learning how to plan differentiated instruction with mixed ability groups of learners in math. During the PD teachers learned how to effectively plan their lessons to accommodate all student's academic needs. This was a 3-year study, the first year that the study was conducted there was an improvement in math scores. During year two and three of the study the math scores increased but not at much as the first year. The results of this study showed teachers attending differentiation PD in mathematics has the potential to raise the achievement of all students. Valiandes and Neophytou (2018) performed a study that investigated characteristics of a PD program for teachers. This PD was designed to support teachers to help them provide differentiation in their instruction. The PD included collaborative participation, active learning, and teachers using their curriculums to prepare lessons for students. The program was designed to promote change in teacher practices for teachers. As a result, teachers' perceptions of used differentiated instruction changed, and student's achievement scores began to improve. This study proved that PD program is beneficial for instructional practices and improvement of student academics. PD will support teachers that struggle with planning differentiation in their lessons.

Differentiation is a process by which teachers modify student's content or assessment to meet their learning needs. Teachers need to effectively plan to create a differentiated environment in their classrooms. Goodard et al. (2015), stated that differentiation should be based on process, content, or products. Teachers should also consider student's strengths, weaknesses, and learning readiness to determine the correct differentiated instructional strategy for their students. Dixon, Yassel, McConnell, and

Harding (2014) suggested that teachers that provide differentiation in their instruction can better respond to their student's learning needs in a way that the content is presented, learned, and how students respond to the content. Adapting the lesson to meet the individual learners need allows students to gain more from the lesson that is being taught. According to Nyberg (2014) differentiated lessons based on content, process and product requires thoughtful planning. He provides key questions to attain this goal of thoughtful planning. These questions are (a) What are your students learning (b) What are your goals for what you want your students to learn? (c) Where will the learning happen? (d) What is the final product for the learning? Thinking through these questions allow teachers to begin to effectively plan for differentiated instruction.

Peer Tutoring. Another effective strategy is peer tutoring which allows students to be able to work closely with their peers and learn from each other. Peer tutoring allows students to take responsibility of their own learning and hold the learning of their peers accountable. Students enjoy the opportunity to learn from each other; therefore, they begin to gain better knowledge with the skills that they struggle with when working with a peer (McMaster et al., 2014). According to Naresh and Worley (2014), students are grouped according to mixed ability levels during peer tutoring. This allows a student who is academically at or above grade level to peer tutor a student that is academically below grade level. When students are engaged in peer tutoring it allows them to become more engaged in the learning process. Students are more responsive to the learning process, and more engaged in learning because they are learning from a peer which becomes more enjoyable to students.

The role of the teacher is important when selecting peer tutoring as a strategy for students. According to Baiduri (2017), "peer tutoring enables students who have mastered all of the material to help their peers in dealing with difficulties of a skill" (p. 146). Peer tutoring is based on Vygotsky's theory of ZPD which allows students to increase academic levels through the social interaction with peers. When students learn from a peer their motivation in learning increases, they take better ownership of learning with an increase confidence and they gain an increase in better communication skills. Students achievement levels can improve when they are communicating and working with their peers. Students are also more comfortable when they begin to help each other learn.

Peer tutoring is more effective when the student that is providing the tutoring has a mastery level of understanding of the skill that should be tutored. Russo (2018), stated that teachers should still monitor the sessions of peer tutoring to make sure that the skills are not tutored incorrectly. His study suggested seven steps to ensure that peer tutoring is effective. These steps are as follows: "Move to a quiet place in room, work together on the tutees assignment, the tutor should not just hint but tell, tutee practice the skill, tutor provides a hint but do not tell, tutor shows and tells, and tutee teaches the tutor" (p. 618). Teachers that have used this framework have improved the quality of their peer tutoring in their classrooms.

Gradual Release of Responsibility

Another effective strategy is gradual release of responsibility. According to Donnelly and Linn (2014), "gradual release provides a critical stage in the guided

practice stage in which the teacher gradually releases the task or responsibility to the student" (p.42). According to Gallagher and Anderson (2016), gradual release contains four components. These components *are I do, we do, they do, and You do*. Gradual release of responsibility allows teachers to model and work with students on new skills, and then release them to work on their own as the teacher facilitates and corrects misconceptions of the lesson. This process allows students to become better thinkers of how to solve problems or work through answering question from text. Collet (2012), stated that the gradual release method is most effective when teachers modeling process is exceptional. Gradual release of responsibility is an instructional tool that allows conceptual learning to be shifted to the students. Once students have been released on their own it allows them to construct their own knowledge.

The gradual release model provides an opportunity for teachers to scaffold their lessons and build on from their previous learning. Teaching becomes effective when the teachers provide an opportunity to build from the background knowledge that students have. Clark (2014) stated that the gradual release model provides an opportunity for teachers to teach students in a way that provides guidance and practice of a skill. With guidance teachers can release the responsibility of leaning to the student. Excellent modeling is an effective key to gradual release of responsibility. Teachers model the learning based on the outcomes that they want to see from the lesson. Allington, McCuiston and Billen (2014) stated that the gradual release model allows teachers to demonstrate how students should think when they are released to work on their own. Effective modeling of thinking through tasks of a lesson allows teachers to close the gap

for students that do not have prior background knowledge of the skill being taught. When teachers implement the gradual release model in their lessons, students will begin to make a connection of how to build their own background knowledge and understanding of the concepts taught. This allows students to be able to work on their own as well as become lifelong learners in reading and math.

Conceptual Understanding. Not only do students from low SES backgrounds struggle with reading they also struggle with math. The TNReady Test is designed where students must think about their answers; therefore, students build their understanding based on a conceptual knowledge. "Conceptual understanding is recognizing and understanding core underlying ideas of a subject such as the relationship and reasons that underlie the math problems in a certain area" (Burns, 2016, p.52). Conceptual understanding provides the basics for procedural understanding.

A student who can a solve a math problem conceptually and understand the concepts to solving the problem should be able to solve the problem procedurally as well. Burns (2016) explained that the Piagetian theory suggest that students should master basic facts before applying math to a more conceptual understanding, and the Vygotskian theory suggests that students should learn math conceptually by understanding the why behind the math and using higher order problem solving skills with reasoning. According to Heatly, Bachman, and Votruba-Drzal (2015) teachers lack the understanding of being able to support struggling student's cognitive levels. Many teachers currently use small group instruction, whole group class discussions, and guided practice. While these are

good strategies, it does not allow students to think and understand the concept before applying the procedural knowledge.

Teachers need know how to provide support to students when they have misconceptions about the math. Krawec et al. (2013) discussed that teachers gradually move students from a procedural understanding which allows them to focus on rote memorization of solving problems to move to a higher level of learning which is analyzing problems and developing a conceptual understanding about the math. "Procedural understanding are skills that are taught more fluency based, and when taught, enhance a student's skills without teaching the concepts" (Burns, 2016, p.54). Students should be taught the concepts with any skill that they are learning.

Providing math instruction to low SES students goes beyond just procedural knowledge and extend to higher levels of thinking to allow students to build from their prior knowledge and extend to higher levels of thinking to analyze math problems and apply the skill of critical thinking. A study conducted by Burns (2016) determined if students learned skills effectively by teachers teaching them conceptual understanding or procedural understanding. Although students learned both conceptual and procedural knowledge the students that gained the most growth were those students that were taught with conceptual understanding in math. The conceptual understanding provided a more critical thinking process and students explain or determine why math was being solved in the content. Procedural understanding only provided memorization but not the ability to apply the knowledge being taught.

Teacher Pedagogy. Many schools and school systems were faced with meeting the expectations of No Child Left Behind (NCLB) where students had to have academic success in both reading and math. In doing so, educators had to have adequate content knowledge in preparing students to be successful at their grade levels. Teacher effectiveness is just one of the many qualities that educators need to push students to academic success (Green & Allen, 2015). Without having pertinent content knowledge teachers cannot effectively gain student success.

Even though urban students face difficulties when it comes to learning, educators still need be prepared to teach urban students that come to their classrooms. An effective teacher has successful outcomes on student achievement (Perkins &Cooter, 2013). According to Hines, Lunenburg, and West (2014) "Teacher quality is defined as being good teachers who receive the largest gains in student achievement" (p.40). Although most effective teachers have high expectations for their students and teachers show growth on their annual value added from test results, Pharis (2018) study examined the relationship between teacher observation scores and (TVASS) results. The value-added scores could not provide a valuable result that proved what teachers did to receive the scores that would consider them effective teachers. Teacher effectiveness is usually defined as a teacher who is able to produce a significant amount of gains in student achievement scores. Ngoh (2018) stated that teacher effectiveness is not only measured by student gains on academic achievement tests. Although stakeholders have a notion that teachers are effective when they are able to improve test scores of students; however, there are multiple factors that constitutes an effective teacher. According to Dharamshi

(2018), there are several components that educators must have to have quality in their teaching and be effective. They must have knowledge in their content area, teacher certification and degree, experience, speaking abilities, training and pedagogical knowledge.

It takes quality training and professional learning to gain efficient knowledge to stand before a class of students to deliver content to them. In a case study conducted by Kolman (2017), she examined how pedagogy practices of an experienced teacher are the same for those teachers teaching in high accountability charter schools. This study examined the teaching practices of four teachers. One teacher has a National Board Certification and has taught in two urban charter schools. The other teachers have taught in urban schools; however, they moved to different schools frequently. These teachers have taught for more than three years, and they are considered highly qualified teachers. Themes discussed in this study were (a) what contextual factors shape the teaching practices of an experienced teacher and(b) how do practices in the teacher's ability meet the needs of students. Although the teachers in this study were at different schools, effective teacher practices consisted of planning, time usage, and curriculum flexibility.

The study revealed that the teachers effective use of planning time allowed them to be fully prepared to deliver lessons to their students. These teachers described that lessons were planned a week before the lesson was supposed to be taught. Effective planning allows teachers to have all materials ready for the lesson, anticipate struggles that students might possibly encounter and determine how to clear up anticipated struggles. Teachers also explained that planning allows for differentiation in the lesson,

scaffolding, and where to allow students to think through certain concepts versus just providing an answer. One of the most important planning documents that these teachers felt was beneficial was their curriculum map. Curriculum maps provide the standards and objectives that are to be taught to ensure that the skills students need to master for the current grade are being covered. Teachers use the curriculum maps to determine which standards are to be taught for each grading period. Teaching the standards allows teachers to meet the needs of their students in a systematic way. Although this study consisted of four teachers from different schools, they used the same teacher practices to ensure effective teaching for their lessons. As a result, students from each of the teacher's classes made academic gains because their teachers were prepared for the lessons.

Pharis, Sullivan, and Moore (2019) conducted a study in a high impact school. This school had students that were significantly struggling to be academically successful. Teachers in this school had high academic expectations for their students regardless of prior academic performance. This study revealed that teachers use a significant amount of time to work with students to help improve their academics, they challenged students to perform at their best, and there was ongoing communication between teachers and students. As a result, Pharis, Sullivan and Moore determined that highly effective teaching improves student learning and improves student academic achievement levels which results in an improvement of test scores.

Teachers can teach at different schools, use the same teacher practices, and students can still achieve academic success. Samuels, Samuels, and Cook (2017) stated that teacher quality unfolds when teacher's effectively plan and align their planning with

their curriculum maps to make sure they are teaching what needs to be taught to students in a systematic way. Student achievement levels increase when teachers have thoroughly planned a lesson and used effective tools to understand where students will struggle and how to address those anticipated struggles. According to Sardabi, Biria, and Golestan (2018), teachers must have the background knowledge and know how to deliver the content to students for students to understand and retain the information that is taught. When teachers have knowledge of their content area they can produce successful students with high achievement levels. Quality teachers must have degree and certification. As teachers are taking their core classes it allows them to become more engulfed in their content area; therefore, having content knowledge and a profound educational coursework yields teacher effectiveness. When teachers have gained proper certification it proves that their teaching qualities are enhanced. "the most significant forecaster of student achievement is the state's quantity of certified teachers" (p. 9). Along with being a quality teacher one must have experience.

Teachers with more experience are better equipped to prepare students for successful academic outcomes. Student's test scores usually get better as teachers continue to teach their content because they gain more knowledge each school year therefore, being able to produce successful student's outcomes.

Professional Development. Teachers should receive adequate training. According to Hines, Lunenburg, and West, (2014) "Adequate teacher training allows teachers to understand how leaners construct knowledge, use instructional strategies appropriately, learn about students' academic interests, become more sociocultural

conscientious, and advocate for all students" (p. 45). According to Perkins and Cooter (2013), it takes several steps to ensure that all students master the academic content being taught. Teachers should have "effective new materials, tools, strategies, meaningful learning, and ongoing professional development opportunities" (Perkins & Cooter, 2013, p. 3). "Professional development is characterized as an essential dynamic in improving teaching and learning" (Green & Allen, 2015, p. 54). When teachers are exposed to high quality PD they have an opportunity to gain effective classroom practices and school leaders (principals and administrators) benefit from teacher's professional growth (Green & Allen, 2015) According to Green and Allen, "national studies identify effective professional learning as a critical component of school success" (p. 54).

PD is an essential tool for improving teacher effectiveness. Zion & Sobel (2014) discussed that PD should focus on a content area, there should be a certain number of hours of training, teachers should be involved in active participation, it should be aligned with standards, and provide teachers with an opportunity to be able to practice what was learned during the PD in their classrooms while teaching a lesson. Parsons, Ankrum, and Morewood (2016) stated that teachers should have ongoing supportive learning opportunities to be able to meet the learning objectives of students and provide appropriate differentiated instruction for all students. Learning opportunities are best supported with PD. Effective PD includes analyzing student data to drive instruction, tasks that align with the learning goals of students, practices that will support student learning, and an environment that provides for collaboration.

> To improve reading and math achievement through professional development, we must start with the reality that the task is difficult and then create a proactive agenda of what must be done, how to get started doing it, and how to master the will and resources to sustain it. (Parsons et al. 2016, p.252)

Factors of effective PD that enhance teacher quality to improve academic levels of students are content and pedagogical knowledge. This knowledge allows teachers to be able to apply instructional teaching practices effectively. Effective instruction of teachers can only happen when they attend on going PD (Parsons, et al., 2016). Yoo (2016) stated that teachers who have participated in ongoing PD should be equipped to have high quality teaching practices and produce high levels of academic achievement among students in urban schools. Although PD provides a great opportunity for teachers to continue to develop their teaching quality, there is also another tool for promoting effective teacher quality which is professional learning communities.

Professional Learning Communities. PLCs are defined as "a strategy for promoting intense teamwork, includes groups that learn and practice collectively to make improvements in instruction and achievement" (Green & Allen, 2015, p. 59). During PLC meetings teachers have an opportunity to engage in collaborative discussions and activities. An administrator meets with a team of teachers and together they plan lessons, units plans, learn about different strategies to use in the classroom and they learn strategies from each other. For example, a teacher might be using a technique that produces great outcomes for his/her students, this teacher can share with the team so they all can have the same successful outcomes. During PLCs teachers can also reflect on

any PD that they have attended and share with the team how they plan to implement what was covered during the PD sessions (Cooter & Perkins, 2013). According to Allen and Green (2015), "studies conducted in successful schools revealed teachers reported functioning PLCs in their schools, whereas teachers in unsuccessful schools reported that such collaborative practices remained absent in their schools" (p.60). PLCs allow teachers to gain better teacher quality because they can collaborate and learn content knowledge from each other. It allows them to come together to provide academic strategies for their students. It allows them to develop formative assessments and action plans for struggling students. PLCs allow for an improvement of teacher's instructional practices and allow for higher levels of student success. Teacher quality can only be improved if PLCs are an ongoing process throughout the school year (Antinluoma, Ilomaki, & Toom, 2018).

Effective PLCs produce successful student achievement. Voelkel and Chrispeels (2017), conducted a study that contained 310 teachers from 16 schools. The purpose of their study was to determine how effective PLCs were in improving teacher collaboration that results in academic achievement of students. PLCs should help teachers increase student learning by examining student data, developing common assessments, and helping teachers improve instructional practices that improves student learning. Teachers that were surveyed in this study agreed that their teacher efficacy has a correlation with attending effective PLC meetings. They also receive information in PLCs which allowed their instructional practices to guide their teaching abilities to improve the academic levels of students. Teachers that analyzed student data in PLCs provided intervention for

students that struggle with skills taught as whole group. Choosing the right intervention allowed students to master the learning targets. This study revealed that effective PLCs help teachers improve their instructional strategies to improve learning goals of students. Providing teachers with PD and productive PLC meetings will allow teachers to develop better in their content area and improve their teacher quality to be able to produce successful academic students.

PLCs provide a time for teachers to collaborate about their instructional strategies, assessments, reflect on test results, and to discuss how to make improvements from student's misconceptions. According to Ning, Lee, and Lee (2015), PLCs are important because they enhance teacher pedagogy. PLCs focuses on helping teachers to improve their teacher practices and instruction to help students achieve academic success. Teacher quality is an important factor in improving the academic success of urban students that are from low SES backgrounds. Effective teacher collaboration in PLCs allows teachers to analyze student data to drive their instruction. To improve teacher pedagogy knowledge teachers must have effective PLC's and ongoing PD. PD allows teachers to have supportive learning opportunities.

Implications

The expected research findings will lead to implications for effective instructional practices that educators can use while teaching. Many educators will need to use instructional practices that work best for their students that are struggling with reading and math. Educators need PD and the use of their PLCs to prepare them for educating students that come to their classrooms performing below grade level. Educators should

be trained on ways to increase their students' achievement levels so they can be able to perform at or above grade level. The purpose of this research is to identify effective instructional strategies to help students perform at grade level and equip educators with the necessary knowledge they need to help their struggling students perform at grade level or increase their academic achievement levels.

Summary

As the research stated, students from low SES backgrounds struggle with reading and math due to lack of parental involvement, poverty, excessive absences, and mobility in which students transfer from school to school often. Identifying effective strategies for low SES students are beneficial to their overall academic achievement levels. Small group instruction, differentiating instruction, and utilizing gradual release of responsibility are a few strategies that are beneficial in helping students become successful. Teachers also play an important role in the academic success of students. It is important that they have the content knowledge to deliver educational content to students in an effective way that is beneficial to the learning needs of students.

Section 2: The Methodology

Research Design and Approach

Analyzing teachers' views on how they use instructional practices to support struggling low SES students aligned with the characteristics of a qualitative research approach. A qualitative research approach allows a researcher to (a) experience situations from the participants' point of view, (b) record discussions (c)study documents that have already been written, and (d) get an in depth understanding of the situation being studied (Corbin & Strauss, 2008). I gained a deeper understanding of the teachers' perspectives of how they support their struggling SES students and the types of instructional strategies they use to help improve their struggling students' academic levels. I asked teachers to share their experiences of the training they received during district- mandated PD, and grade-level PLCs.

The type of qualitative research design used was an instrumental case study. An instrumental case study involves gaining knowledge from a particular issue (Creswell, 2012). In this qualitative case study design approach, I examined how teachers supported their struggling reading and math students by asking them what best instructional practices they used and how they felt about their struggling students being supported by these practices. A case study allowed me to ask interview questions and gain better insight for the issue at hand (Creswell, 2012).

Other qualitative research designs I considered were grounded theory and phenomenology research. A grounded theory allows a researcher to make comparisons and collect data to develop a theory. (Creswell, 2012). Grounded theory was not the best

choice because the purpose of this research was to not develop a new theory from collecting an extensive amount of data. A phenomenology study uses a phenomenological approach based on the research problem. The study is usually developed from clusters of meanings and describes lived experiences of individuals immersed in a phenomenon (Creswell, 2012). A phenomenological approach was not feasible for this study because this study did not involve being able to describe lived experiences from individuals based on a phenomenon.

Participants

The participants in this study were general education educators who worked in a Title I Southeastern Tennessee urban school district, XYZ elementary. The participants were nine teachers in Grades 3 through 5 and the reading and math adviser; they selected from a population of 12 teachers at those grade levels. Nine people volunteered for the study.

I conducted nine individual interviews with three teachers who have taught grade 3, three teachers who have taught Grade 4, and three teachers who have taught Grade 5, to discover the experiences of each participant. I used the teacher e-mail database to send an e-mail to potential participants explaining the study, its purpose, and the voluntary nature of participation. Purposefully selecting apprentice and veteran teachers from each grade level gave me a better opportunity to understand teacher perceptions of their current instructional practices in reading and mathematics. Participants in this study were literacy and math teachers in Grades 3 through 5 as well as the reading and math adviser

a public school district in Southeast Tennessee. I invited teachers with at least 5 years of teaching experience to volunteer as participants.

Before I submitted my Institutional Review Board (IRB) application, I obtained a certificate to work with human participants from for the National Institutes of Health. In the study site district, I obtained permission from the superintendent of the district to conduct research. To conduct research, I followed the required guidelines and procedures for the district. After the request and proposal had been reviewed and approved by the research department, I sent a request to the study site principal requesting that she send a letter of permission for me to conduct research. Once the principal gave me permission to interview teachers, I invited teachers who met the criteria to participate in the study. Participants were informed that participation was voluntary. Participants contacted me by e-mail if there were any problems or concerns.

I used e-mail to contact participants. To provide ethical protection for the participants I submitted a formal request to Walden's IRB for approval. Once IRB approved the study (07-25-18-0179731) I e-mailed participants the information concerning the ethical considerations of this study. The ethical considerations for the study consisted of a formal consent form that included ensuring confidentiality of each individual and protection against any harm. I gave the participants the choice to decline to answer questions or withdraw from the study at any time to ensure confidentiality.

Participation in this study was voluntary, participants had the opportunity to withdraw at any time. The risks to participants participating in a job interview was minimal. The participants were identified by Numbers 1-9, and the district code was

Southeast. I kept all information locked in a file cabinet. I will destroy the data 5 years after the conclusion of the project study. All PLC notes and handwritten notes will be shredded after 5 years, and audio recordings will be deleted after 5 years after completion of this study. I conducted the interviews in a conference room on nine different days to avoid any interruption of instructional time. I conducted one interview daily with each interview lasting 45 minutes.

Researcher-Participant Working Relationship

I have a professional relationship with the teachers and administrative staff at the school where I conducted this study. This professional relationship consists of serving on a leadership team. I have taught the same grade as participants, and I have served as a content lead with them together, and worked together to present a PD. I communicated with the administration team through email asking for cooperation in this research study. I assured the participants that my role as the researcher was not to judge their responses and that the information they shared would remain confidential. After the interview session, I gave each participant the opportunity to ask questions related to the interview questions for clarity.

Data Collection

The purpose of this qualitative study was to examine teachers' perceptions of the usefulness of strategies, instructional practices, PLCs, and PD that support low SES students in reading and math. Examining teachers' views on instructional practices, PLCs, and PD provided me with a closer look and better understanding of the instructional practices that teachers are implementing with their students. This study

incorporated interviews with elementary teachers, and a review of archival student data of common assessments from teachers' data notebooks, and PLC minutes.

According to Creswell (2012), when conducting interviews, a researcher is able to gain a clearer understanding of a participant's perception by collecting narrative data from the participant. Reading and math teachers in Grades 3-5 were invited to participate in the study. After receiving consent from the participants, I scheduled a time for the interview that was convenient for the participants. The interviews were conducted in a conference room after school hours. I began interviews by providing participants with information as it related to the consent form they signed. I informed them about the purpose of the study, their confidentiality and being able to withdraw from the study if they felt uncomfortable at any time. I asked open-ended questions, to allow participants to be able to freely express her thoughts when it came to teaching low SES students that struggle with reading and math. The questions to the interviews can be found in the interview in Appendix B. This type of interview data was appropriate because it allowed me to be able to deeply gather descriptions of participants' related to their instructional practices when teaching students who struggle with reading and math (Creswell, 2012).

I obtained consent prior to the interviews to audiotape the interviews using a recorder. The interviews each lasted 45 minutes. I used a journal for note-taking during the interviews. After each participant was interviewed, I transcribed the data into a document and e-mailed their responses to them for member checking.

In addition to interview data, I collected PLC meeting minutes. I obtained consent via e-mail from the administrator to collect PLC meeting minutes. I obtained the

notebook from the PLC meeting room that contained all the PLC meeting minutes for August 2018 through October 2018. I looked for PLC meeting minutes for Grades 3-5 with agenda topics that related to my research questions and interview questions about PLC meetings. When I discovered the minutes related to my interview questions about using strategies gained from PLCs and PDs I made copies of the meeting minutes. I read all the meeting minutes related to my interview questions to gain clarity of what was discussed during the meeting. I wrote down the topics that I noticed that occurred often during PLCs and created a list of these topics. I created a PLC Meeting Observation Template to analyze the PLC meeting minutes (Appendix E). I retrieved 10 PLC meeting minutes from the notebook that related to my research.

In addition to collecting PLC meeting minutes, I also analyzed the teachers' data notebooks. Before I analyzed teacher's data notebooks, I received consent from the school administrator in the form of an e-mail. I assured the participants that when I analyzed the data notebooks I would use them as artifacts to relate their answers to the interview questions of how they track their students' data to implement instructional strategies to improve student learning. Participants allowed me to keep their data notebooks for 1 week, which allowed me the opportunity to look through the data notebook carefully to determine the kinds of data participants were using for their students. I created a list of the types of data I saw in their notebooks.

From this list, I created a table in Microsoft Word (Appendix F) to code how teachers use the student data. The table columns were titled (a)student data tracker, (b)anecdotal records, (c) common assessment data, (d) formative assessment data, (e)

weekly common assessment, and (f) student instructional strategy log. Each column had a different color to quickly determine which items were used the most by participants. Yellow represented the item that all participants used, green represented the item that mostly all participants used, red represented the item that some participants used, and pink represented the item that was rarely used by participants. Participants pseudonyms name were placed beside the column. A checkmark was used for each participant who had the items in their data notebooks. Participants had narratives in their notebooks that explained the results of the data and how they would use the results to determine the next instructional steps. The bottom part of the table was a report I included to collect reflective notes about participants' data notebooks. This allowed me to align the responses to the participants' interview question responses.

Data Analysis

Through interviews, I collected teachers' narratives regarding their effective teaching strategies to increase student achievement in reading and math. I interviewed each participant who signed the consent form. Before the interview, I notified each participant that I would record the responses, transcribe them, and give them the chance to check the accuracy of the transcript. I used the interview guidelines to interview each participant face-to-face in a disclosed place. Participants were given enough time to respond to each question. All the interviews were recorded using an audiotape recorder and typed verbatim into a Word document. I immediately transcribed the data after each interview and e-mailed a copy of the transcribed interview to the participants to verify accuracy.

In analyzing the interviews, I looked for evidence that the strategies the teachers used during their instructional time helped to increase their academic achievement levels and if their perceptions of PLCs and PDs allowed them to help with instructional practices. Themes were determined once the interview data were analyzed.

I used the NVivo program to code the data and to determine themes from my interviews. Before uploading to NVivo, I prearranged transcripts in a text document to outline the start and end of each participant's response from the interview questions. I began by reading the transcribed interviews and began the process of identifying patterns. I sorted the codes by the research questions and typed codes into tables in the Word document by each participant pseudonym. I loaded the transcripts into NVivo for extra coding and analysis and created structured nodes in NVivo. The NVivo program allowed me to code the data, test the development for dominant themes from the interview data, determine the validity of emergent themes, and categorize codes. The NVivo process labeled the data and sorted the information into different categories. From there, I categorized each participant's response as it related to my interview questions. I completed several checks of the data to check for the accurateness of the software information. I reread the transcripts multiple times to locate any new perceptions that emerged until the final categorized themes were produced. The last round of grouping codes provided the major themes that were produced from the categories. From these categories, the final themes emerged. This process of coding allowed me to examine and read words and sentences that showed patterns in data that produced emergent themes. The identified themes from the NVivo process were(a) instructional strategies, (b) a

collaboration of PLC meetings, and (c) PD that would benefit teachers when delivering effective instructional strategies.

I collected PLC meeting minutes after receiving consent from my administrator. I reviewed all PLC meetings with agenda topics related to instructional strategies in Grades 3-5. In reviewing archival records relating to Grades 3- 5, PLC meeting minutes I noticed that there were minutes that pertained to instructional strategies, analyzing data, teaching strategies, and goals of improving students' academic achievement levels. I was also analyzing this form of data collection to provide insight to the research questions as they relate to teachers' perceptions as members of PLC meetings and further exploration for the interview questions.

In using the PLC meeting observation template, (Appendix E). I created a color-coded checklist for how often teachers received guidance in their PLC meetings about different kinds of instructional strategies to help teachers with instructional practices. This template included several instructional strategies. I used checkmarks to determine how often these strategies were discussed in PLC meetings and color- coded the kind of information provided for a strategy. For example, color codes were used if the PLC coach modeled the strategy, gave a handout, or the reading/adviser provided PD. The highlighted color was used to determine how often the strategy was implemented or a topic was discussed in a PLC meeting.

Once the data from the PLC meetings were analyzed, I was able to check the coded responses and the checkmarks in my PLC meeting template to determine how often teachers received support around instructional strategies, PD, assessment data, and

ability grouping. This allowed me to determine if the data helped to answer the research question concerning teachers' perceptions of the use of PLCs to increase student achievement levels.

I collected teacher's data notebooks after receiving the consent of the school administrator. After obtaining consent, I requested that participating teachers provide me with their data notebooks as another source of data. Teachers sent me their data notebooks with information of student's data during the months of August 2018 through October 2018. I analyzed nine data notebooks from the participants of this study. In my analysis, I noticed that the notebooks contained documents that the participants mentioned using during their interviews to track their students' progress of skill. Many of the participants' notebooks contained a data tracking form, student grouping log, formative assessment data, and a student instructional strategy log. I took the information from my interviews and created a table of what participants said they used to track their students' data and how they analyze their students' data to improve their academic achievements. As I looked through the data notebooks I made checkmarks if I found the item in the data notebook that matched what participants s-aid during the interviews.

I was analyzing the data notebooks to support the research question related to instructional strategies and the interview question related to tracking student's data. I was looking for patterns that related back to instructional strategies used from results of students' data.

Quality and Credibility

I used member checks to ensure the dependability and reliability of my study. According to Creswell (2009), "Member checks involve taking the "data analysis, interpretations, and conclusions back to the participants so they can determine the accuracy and credibility of the account" (p. 191). I set an appointment time with the participants so they could read their interviews that were typed in a Word document. Participants were asked to reread their responses to the questions, to make sure their intended meaning was conveyed in their responses. The questions were worded with the intention that participants would have clear understanding of what was being asked of them. This allowed them to make sure that the responses from their interviews were valid. Participants signed the document stating that they agree with what they have read.

Creswell (2007) explained that integrity and credibility is also based on the role of the researcher. The steps I took ensured that participants felt comfortable in answering the questions during my interviews and that they did not feel coerced to participate in the study which would have lessened the credibility of the study. I have worked closely with the participants that I invited to participate in my study. Therefore, I collected data using interviews. Through these interviews participants were assigned a pseudonym name which allowed them to remain anonymous. This helped to alleviate any stress that participants might have had as an obligation of a friend or coworker, and any doubts of risk to their employment.

Another method I used to determine credibility of my study was to gain an understanding of what is already known about the topic in order to understand the results

from the data (Glesne, 2011). Research gathered from my literature review helped me to develop questions to ask my participants. Research from the literature review allowed me to better understand the participant's responses to the questions asked.

Dependability of the study was addressed by ensuring all procedures and processes used to analyze and collect data were done with detailed explanations (Lodico, 2010). To protect against any personal bias, I ensured that I did not discuss the questions with the participants. I asked open-ended questions and phrased the questions without biases. If participants felt that there were any known biases, they were asked to state the concerns of the particular question. Using these methods allowed me to gain credibility of my study.

Triangulation

To ensure credibility of data I used triangulation. I used three data sources: interviews, student achievement data from teacher's data notebook, and PLC meeting minutes. After reviewing the documents, I triangulated the findings from the interview data, student's data from teacher's notebooks and PLC meetings to assess the effective instructional strategies in reading and math.

After I compared the transcripts of the interviews and the documents, I checked for consistency and inconsistency in the data collected by comparing the interviews and PLC meeting notes with my research questions. I used the charts that were created from the data notebooks, PLC meeting notes and NVivo. All three charts were compared with my research questions to determine if there were similar results.

Discrepant Cases

A discrepant case in my research would be a situation where a participant believed that the PD or PLCs were not helpful in providing strategies and support in increasing urban student academic achievement.

Planning the project study from the results of the data collection and analysis helped to clarify some of the beliefs and assumptions that I had concerning teachers' perceptions of the district reading and math instructional practices that teachers have been using to help close the achievement gap in reading and math in Grades 3 through 5. One participant's responses could have changed the interpretation of the data. This participant felt that all PD in math provided by the district was useful in preparing her to deliver effective instructional practices in math for Grades 3-5, but the other participants felt they were not prepared to deliver effective instructional practice in math. I met with Participant 8 again in the conference room after school, and I asked more questions to get clarity. I probed and continued to ask questions until I understood her response. Participant 8 and I reviewed the transcript carefully for discrepancies. Some discrepancies were noted and revised, and I immediately transcribed the new data.

Data Analysis Results

The purpose of this qualitative study was to examine teacher's perceptions of PLC meetings, PD, and teaching strategies that help improve the academic achievement levels of students.

The findings from the data analysis phase are linked to each research question, which guided the study. The interview questions were constructed to examine

participant's approaches to improve student's academic achievement levels. These questions related to the instructional strategies that work best to support their students, strategies have they gained from attending PD and their PLC meetings, and the perceptions of PD and PLC meetings that have helped to prepare them to ensure academic success of their students.

I interviewed nine participants at the study site to gain their perceptions of how the use of instructional strategies, PLCs, and PDs increase student academic achievement levels. According to participants' responses they perceive that various instructional strategies are successful in improving student's academic levels when the strategy tailors to fit student's academic needs. Participants also perceived that small group instruction, differentiated instruction, and gradual release are beneficial strategies that are used in their daily instructional practices and has helped to improve academics of their students. Their perceptions of the math strategies are that it provides an opportunity for students to develop better critical thinking skills and a better number sense which improves student's math scores. Participants expressed a need for ongoing PD during their weekly PLC meetings.

As it relates to PLCs, participants' perceptions are it allows them to collaborate about instructional practices, their PLC coach is supportive in providing resources that they need to improve student's academic achievements. Their PLC coach models lessons, assist with instructional strategies, and she helps them with interpreting student data scores. Based on the findings of participants interviews their perceptions of their PLC

meetings are beneficial when it comes to improving student academic achievements because their meetings relate to improving student success.

Findings related to PD were that teachers perceive the PD that they receive to be beneficial in with helping them to implement instructional strategies effectively, helping them with learning new curriculum materials, and various ways to improve their teacher practices to help benefit the increased achievement of their students. Participants expressed the need for more ongoing PD to ensure that their teacher practices continue to align with the district mandates.

I analyzed 10 PLC meeting notes. Findings revealed that there were consistent discussions of using strategies to help improve student academic achievement levels. Findings also revealed that the PLC coach plays an important role in helping teachers to continuously improve the academic achievement levels of students. In doing so, she models lessons, provides needed PD, and communicates often with the math and reading advisor to further assist teachers with their teaching practices in reading and math. Appendix E shows the 10 observation checklists that I used when analyzing the PLC meeting notes. This checklist offered insight into how often teachers spent their PLC meetings discussing instructional strategies, teacher practices, analyzing assessments, and receiving PD. Using these checklists allowed me to determine an alignment between participant's statements about effectiveness of PLC meetings, instructional strategies, and support provided during PLCs. Teachers of Grades 3-5 met on the same day each week at different times. Grade levels had the same topics discussed each week. I placed a mark next to each type of topic that was discussed during the meeting. I also highlighted

the topic discussed. The use of highlighting allowed me to quickly determine the frequency that teachers spent their PLC meetings discussing topics pertaining to improving student academics. As I compared all 10 of the PLC meeting observation checklists, I noticed that there were more categories that appeared more often than the others. The categories that appeared more often were instructional strategies, PD, small group, data analysis, differentiation strategies, reading and math advisor, and PLC coach modeling. As it relates to participants' responses and the observation checklist, PLC meetings are an effective tool for improving the academic achievement levels of students.

I analyzed nine data notebooks containing student's data. Findings revealed that participants use various methods of data to track student's academic improvements over time. Appendix F shows the data notebook observation checklist that I used in analyzing the participants' data notebooks. According to the checklist, all participants use a student data tracker, anecdotal records of strategies to determine student's improvements from the strategies used, and weekly common assessments with a narrative of next steps for students. Six participants use a student instructional strategy log and a student grouping log per strategy. Five participants use a common assessment log. Three participants use a formative assessment data to track their student's progress. Of the nine participants, only two participants use all the tools in the observation checklist. The data notebook observation checklist allowed me to search for an alignment between participant's statements of how effective tracking student data is with showing student growth. Based on the data notebook checklist, participants use various ways to determine if instructional strategies are helpful in determining student's academic growth. According to

participant's narratives from the common assessment data, they adjust the types of instructional strategies for each student to provide continuous improvements of their academic achievement levels. For example, students that are still struggling with a skill receive extra time with small group instruction or another strategy that will benefit them. Students that are progressing receive less small group instruction and move towards enrichment of the skill. Using this checklist allowed me to determine which documents participants use in analyzing their own student data, and how the documents from the notebook aligned with the research and interview questions. Two participants use all the documents listed from the observation checklist. Based on these two participant's narratives their students showed more growth than the other seven participants due to using more documents to track their student's data. Therefore, the use of tracking student's data has benefits in showing the growth of student's academic levels.

Themes from Data Analysis

Based on the analyzed data four themes became apparent from the data analysis of the interviews, PLC meeting notes, and student data. These themes were: (a)instructional Strategies (b)PD (c)PLC meetings, and (d) data driven informed instruction. I explain these themes in detail below. Throughout the data, I noted that participants articulated the need for PD to help in the steps of reviewing, learning, understanding, and implementing effective instructional strategies in reading and math. Participants expressed that they wanted to gain a clearer and more profound understanding of how to deliver effective instruction in reading and math. Participants agreed that reading and math strategies should be researched based and support the

rigorous requirements of TN State Standards. These points are evident in the themes, which are supported with quotes from participants to provide validity and clarity.

Theme 1: Instructional Strategies

All the participants in this study stated that they use various instructional strategies based on the academic needs of their students. They use results from their data to determine which instructional strategy benefits each student. Four out of nine participants agreed that teachers should be using effective instructional strategies in reading and math with fidelity. They believe that implementing instructional strategies within and across grade levels helps to improve student academic levels. Similarly, all nine participants believe that teachers should use effective district mandated instructional strategies for each grade level and/or across grade levels. They believe if students are exposed to the same kinds of instructional strategies there will be a consistency in improving instructional levels of students. There was also a concern if instructional strategies were being delivered correctly as it relates to TN State Standards. Participants 2, 7 and 8 were mainly concerned if they were using district mandated instructional strategies and they were interested in attending PD that provided strategies that work for their low performing students. All of the participants stated that they allow the district mandated observation rubrics to guide their instruction, and they believe these documents provide them with an opportunity to differentiate their lessons, provide students with better higher order thinking skills, and prepare lessons that are more academically rigorous.

All participants use small group instruction in both reading and math. Participants 1, 2, 3, 5, 7, and 9 believe that small group instruction was effective because it allowed time for them to work with students on specific skills in a much smaller setting. Participants stated that they track their students' improvements and progress in the small group setting. Participants also stated that students stay more focused during small group instruction and the use of manipulatives are more easily managed in a small group setting. They also realized that even after good first teaching small group instruction helps to provide a clearer understanding of what has been taught.

Participant 3 stated, "Small group instruction is very significant for those students that come from SES backgrounds. They benefit more than those students from non SES backgrounds." Participant 4 stated, "There is a higher need to implement small group instruction daily with students of SES backgrounds they need more intentional academic strategies and closer attention from me as their teacher."

All participants agree that instructional strategies should be implemented for all students regardless of their socioeconomic backgrounds because all students have at least one deficit area regardless of their backgrounds. Participant 2 stated, "I modify my lessons for those students that struggle to be academically successful and I provide accommodations for them."

Participants 4 and 6 wants to attend PD to implement small group instruction effectively. Although they know the importance of implementing small group instruction they need more support to implement it more effectively to improve student academics.

All participants use Expeditionary Learning (EL) and Journey's Foundational components for reading instruction and reading strategies, and Eureka Math for math instruction and math strategies. All participants stated that these resources that are district mandated provide differentiated instruction and scaffolding for each lesson. Two participants stated that they believe that one of the strategies was not beneficial for their students. They realize that when students individually read aloud it hinders the progress of the lesson and uses too much time.

Participants 6 and 8 explained that although both curriculums provide differentiated instruction, they realized that they need a better understanding of how to differentiate the lessons according to the curriculum, because EL is very new to them, however, participants say that they continue to use small group instruction to help reinforce skills needed to help their students. Participants 1 and 2 use the curriculum guides for great examples of differentiating instruction during their lessons.

All participants stated how the math curriculum is new and they are still trying to get accustomed to teaching it and adapt to the new strategies this math curriculum has them teaching their students. Participants 2, 3, 6, and 7 discussed that the scaffolding strategies with Eureka Math is phenomenal. Participant 2 stated, "Most of the lessons are conceptual and students have to explain their reasoning in detail which allows me as a teacher to determine any misconceptions that students may have as they explain their thinking process for solving their problems." Participants 3, 4, and 5 like how the math curriculum spirals for a review of skills for students to master.

Read, Draw, and Write process is a strategy that all participants use with fidelity because it is emphasized in the math curriculum. Students read problems, draw a representation, and write their answers. Participants understand that this strategy has allowed students to build and exhibit better mathematical practices. Students also identify whole part relationships to identify missing parts which represent flexible thinking among students.

Participants 1, 2, and 3 explained how students are presented with a variety of models and strategies such as the chip model, place value chart, and tape diagrams before students solve the problem using the standard algorithm. Participants 4 and 5 also stated that the math strategies help increase their students' critical thinking skills. They mentioned that number bonds help students break numbers into smaller parts so that students can recognize number relationships with a visual model which shows a representation of numbers. They also noted that students add numbers better with new groups below addition strategy, this allows students to easily add a number regrouped from a previous place value column.

Gradual release is a strategy that all participants use in their reading and math classes. This is a technique where the responsibility of the learning eventually gets released to the responsibility of the students (Brown, 2016).

Participants 1 and 8 believe that teachers are constantly modeling to demonstrate desired outcomes of the lesson by explaining the lesson content concisely and correctly. Teachers develop a classroom culture where students are comfortable with discussing right and wrong answers with their peers as well as a culture where they are not afraid to

debate with their classmates. They think that gradual release allows a balance of teacher-directed and student-centered lessons. In their classroom, it allows students to better demonstrate mastery of the lesson.

All participants understand that implementing gradual release allows them to execute lessons that are appropriately paced. Participant 2 and 3 explained how gradual release allows them to better scaffold their lessons where the lessons allow movement from abstract to concrete ideas in their lessons. Participants 4, 5, 6, and 7 stated that gradual release of responsibility has allowed them to better pace their lessons while shifting the responsibility of learning to the student. All participants stated that their guided practice routine has allowed an increased mastery of skills from using gradual release. Participant 2 and 9 observed their peers implementing gradual release in their classrooms, and this has helped them tremendously to make sure they are implementing it correctly. All nine participants would like a PD opportunity on implementing gradual release.

Participants realize the benefits of using instructional strategies for the improvement of their student's academics. Participants use a variety of instructional strategies such as small group instruction; differentiation; gradual release; read, draw, write; and scaffolding. Their concerns consisted of the fact that all teachers should use instructional strategies with fidelity as well as in every grade level to allow students a better opportunity to succeed academically. Although instructional strategies are put in place for low performing students, participants believe that all students can benefit from

instructional strategies regardless of their academic status. Some participants feel that they need more support with small group instruction and gradual release.

Theme 2: Professional Development

Participants at the study site discussed when teachers attend PD it is effective because it helps produce successful outcomes for student achievement. Participants 2, 3, 5 and 7 believe that most of their best teaching practices that they have gained from a PD session has been from the PD delivered at the study site from their own colleagues, and Instructional Leadership Team (ILT) members.

Participants 1 and 6 realized that collaborative PD was more beneficial because the setting was smaller. Collaborative PD provided an opportunity for them to really discuss what they felt they needed the most help with which allowed them to get a response immediately in real time. They were also able to get an immediate suggestion to help them with a strategy versus having to post a statement or question on the parking lot.

All participants agreed that attending Eureka Math module studies PD helped with being able to teach the various strategies that the curriculum requires them to teach. Participant 1 stated, "I really had no clue how to present the lessons to my students because there was just so much information to teach and not enough time to get it all done." However, after attending several professional developments it allowed her to learn about pacing, teaching strategies, curriculum, and resources. She is now more confident that she is an effective math teacher since attending the PD trainings.

Participants 2, 3, and 9 explained that the teach Eureka video series has been a tremendous help with allowing them to learn new math strategies and concepts for their students. It has allowed them to develop best practices in math. Their students are learning vocabulary and building skills on new lessons from their background knowledge from previous lessons. Participant 5 stated, "One of the biggest takeaways received from Eureka Math PD was to learn to be patient, be sure to teach the curriculum with fidelity, give students and parents the support they need with implementing the curriculum." For participant 5 she's learned that having these concepts in mind, teaching the curriculum has gotten better with learning new concepts.

All nine participants believe that the PD allowed them to understand the Read Draw Write process, and how students provide a pictorial representation of their thinking process as well as shedding light on the curriculum's various problem-solving strategies and models. Participants have been able to better understand the coherence of the math curriculum.

Participants 1 and 6 explained that PD has allowed them to become better at the Gradual Release strategy. Participant 6 came from a school district where many strategies that are used in this school district was not used in her school district that she left; therefore, she feels like a first-year teacher having to become accustomed to new teaching strategies and methods.

> She stated, "Professional development has helped me to save my career since moving to a new school district. I have learned new effective researched based strategies to improve my student's learning outcomes. I have also learned how an

> effective lesson versus an ineffective lesson looks like based on the observation rubrics which I have learned from attending professional development."

Participants 5, 6, 7, and 8 explained how their teacher practices began to strengthen when the district implemented a new reading program called EL. They were clueless when this curriculum began to be implemented in the 2nd quarter of last school year. They all felt as if they were scrambling all over the place. Finally, the district began to provide PD for them to learn how to implement the curriculum correctly. They explained that overtime it was a struggle but with having staff developments, and collaborative planning sessions at the study site helped.

All nine participants believe that PD should have happened before the implementation of the new EL curriculum, but overtime implementing the strategies and being able to provide differentiated instruction has gotten better with the ongoing PD and collaborative planning. Participant 1 stated:

> The documents within the curriculum map also helped me to be able to implement the EL curriculum as well as being offered with webinars because sometimes professional development can occur during awkward times and the webinars are more convenient when I cannot attend an actual professional development site.

In addition to participants receiving PD with two new curriculums being implemented for reading and math, they have also received PD with other contents that have helped them enhance their teaching practices from being more effective with implementing differentiated lessons, to staying abreast with various curriculum changes,

scaffolding lessons, checking for understanding, providing appropriate wait time for students, and implementing an appropriate lesson that produces successful outcomes for students.

According to participants, PD has been beneficial in improving their teacher practices. They have learned different instructional strategies to use in their reading and math lessons. Participants benefit more from collaborative PD because the setting is smaller and not a lot of time is wasted due to having a big crowd. Therefore, allowing them to learn a lot more when the setting is smaller. Participants emphasized that attending ongoing PD allowed them to stay abreast of any curriculum changes as well as allow them to continue to learn more ways to enhance their teacher practices.

Theme 3: Professional Learning Community Meetings

At the study site PLC meetings allow teachers to collaborate about their students' success as well as ways to increase student achievement. Teachers meet in PLC meetings once a week during their planning time. The PLC coach leads the meeting and she provides resources and recommendations for teachers.

Participant 1 stated, "PLC meetings have allowed me to gain ideas, new insights, and strategies for my struggling students." Participant 2 also stated, "PLCs have helped me with my struggling students as well especially with learning how to align students' tasks with the standards."

On October 1, 2018, minutes of PLC meetings also reflected skills and targeted standards that needed to be addressed to assist struggling students in both reading and math. The PLC coach gave teachers a list of standards that are called the major work of

the grade. These standards are the major focus for teachers to teach to determine if students are prepared for the next grade level. During this meeting teachers discussed the standards that they have already taught and the skills that relate to those standards. Teachers explained to the PLC coach the targeted standards that students have struggled with. The PLC coach provided support in explaining some useful strategies that would help teachers.

Participants 3, 4, and 5 all agree that PLC meetings is a time for them to not only receive strategies for struggling students, but also a time to explore new concepts and share expressions and insights from other educators.

In analyzing the PLC meeting minutes, of September 10, 2018, the minutes reflected that the PLC coach modeled the gradual release process for a reading lesson and provided documentation to support her modeling process.

The following week, September 17, 2018, the PLC coach provided a model lesson on how to use effective questioning in the classroom to help improve student's higher order thinking skills when teachers are engaged in small groups with their students.

All nine participants would prefer to be planning for upcoming lessons, grading papers, calling parents, and even having a moment to themselves during their scheduled weekly PLC meetings, but they know the meetings are so beneficial that it is worth the time to collaborate and build teacher competency.

Participant 8 stated:

> PLC meetings have helped to improve not only academic outcomes for students but social and behavioral outcomes. My teacher pedagogy knowledge has

become better developed in a way that I am able to discuss how to modify a lesson to achieve a better desired outcome. PLC meetings address questions that are related to student learning, assessment tools to utilize, analyzing student achievement data, and a continued look at different kinds of instructional strategies. Throughout PLC meetings the focus always relates back to student academic success, and student improvements.

Participant 9 stated, "My teacher practices began to improve when my PLC coach suggested gallery walks of observing my peers teach lessons." She has gained various strategies that she began to implement with her own students. During a PLC meeting, she shared how this has helped her tremendously even with her own teacher observations.

Five out of nine participants stated that PLC meetings have allowed them to be able to analyze their student's data better. Participants have had specific PLC meetings where teachers discuss data from common assessments. Participants stated that analyzing data together in their grade levels has allowed them to perfect their teaching practices as well as become better aware of instructional practices that will improve student's data when they take common assessments.

October 8, 2018, PLC meeting minutes notated that the PLC coach provided a data tracking form for teachers to complete to track student's data to determine if students were mastering targeted skills and standards. The notes stated that she explained how to use the form and how to determine if students demonstrated mastery or non-mastery of the standards.

On October 22, 2018, PLC meeting notes explained that teachers collaborated about data and used the information from their data notebooks to have their collaborative discussions. The PLC coach helped to provide support around teacher's next steps to help those students with non-mastery obtain mastery. During this PLC meeting the PLC coach and teachers developed a re-teaching calendar based on students with non-mastery of skills. The PLC notes explained that at the end of the re-teaching calendar, students will be retested to determine mastery/non-mastery of skills.

Two of the nine participants stated that they need assistance with explaining the data to parents this will help parents understand reports that are sent home. Some parents do not understand the correlation between their child making good grades on report cards and students performing one grade level below their current grade on some common assessments. Participants feel that this should be addressed in PLC meetings to help close the gap between home and school.

All nine participants agreed that their PLC meetings allowed a time for them to collaborate about their PD opportunities that they have attended and discuss how they can implement what they have learned into their own classrooms as well as the academic achievements of their students.

Three of the nine participants stated that they ask their PLC coach for PD in reading and math to continuously help their students to grow academically.

Participants enjoy attending their weekly PLC meetings because the meetings are beneficial to them. Their PLC coach provides them with helpful resources and tools to better prepare their students for academic success. Their PLC coach also helps them to

determine different instructional strategies to use with their students during their small group and helps with showing them how to analyze their student's data to determine growth, and how to adjust their instruction based on data. Participants stated that having PLC meetings is vital to improving student's academic achievement levels.

Theme 4: Data Driven Informed Instruction

All nine participants at the study site explained that they use their student data to drive their instruction. Participant 2 stated,

> During collaborative planning and PLC meetings I learned that data driven assessments do not have to be results of common assessments, Fall Winter and Spring assessments, or the annual state assessment. I learned that there are other ways I can collect student data or use student data to inform my instruction. During a recent PLC meeting, I learned that the practices I use each day are used to drive my instruction. Such as exit tickets, teacher observations, and utilizing thumbs and up thumbs down allows me to determine if students are learning the content which gives me the opportunity to make an informed decision about the next academic steps for my students.

In analyzing participants' data notebooks, I noticed that participants used a variety of data to inform their instruction. They grouped their students according to Tiers. They each have 3 Tiers. Tier 1 is the highest tier, tier 3 is the lowest tier, and tier 2 is the middle tier. In their classrooms, the students rotate tiers based on how they perform on the Northwest Evaluation Association test. This test is given three times a school year. They take the data from this assessment to determine their students' needs as it relates to

the skills that their students are not proficient in. From analyzing the data notebooks, participants tailor their instruction and lessons to improve all students' scores regardless of the tier they are in. They believe that all students can achieve academic growth. While the Northwest Evaluation Association test serves as a benchmark test because it is given 3 times in a school year, these teachers also use common assessments to help determine how close a student is to reaching proficiency in both reading and math. Participants 4, 5, and 6 stated that the weekly common assessments have skills and standards that align more to the grade level and helps them make an informed decision about their small group lessons, review lessons, differentiation, and scaffolding their lesson. It also allows them to best determine what skills students are still struggling with and determine ways to help them be successful. Participant 1 stated,

> The use of data allowed me to group my students into categories of below basic, basic, proficient, or advanced. I utilize these groups of students to help differentiate my lessons so that students can learn on their ability levels but continue to learn the skill at grade level. I also give students immediate feedback from test results. Students make better academic gains when they get feedback. With this feedback students set attainable goals and are held accountable for their own learning.

Participant 8 not only uses exit tickets, common assessments, and daily tasks to drive her instruction she allows students to track their own data. They set their goals based on the data from the beginning of the school year and strive to reach them. Students in her class have made great gains from doing their own data tracking.

Participants used weekly common assessments to drive their instruction leading up to the annual spring assessment. The data were tracked on a data tracker form inside their notebook. Students made gains from the first test to the last test. As a result, tracking data and using results from the data to drive their instruction, the study site school became a Level 5 reward school for making the most student academic gains. Teachers use data to inform their instruction in determining what instructional strategies they should use to help students gain mastery of a skill. Teachers also use data from their notebooks to determine what strategies benefit certain groups of students. Teacher's data notebooks contained common assessment data, a data tracker, weekly data, and results from formative assessments. Teachers use their data notebook to monitor student's progress of mastering skills taught, and next steps for students that have not mastered the skill. Teachers complete a form at the end of every week after they have given a weekly assessment. This form lists the number of students tested, the percentage of students with mastery and non-mastery of skills, next steps for students with non-mastery, and the date for re-teaching. Teachers transfer this information into a data tracking sheet that lists all students. Teachers place a plus beside the student's name for mastery and a minus beside the student's name for non-mastery. Teachers use these documents to make informed decisions about their instructional practices, and strategies to implement to help students master the skills that have been taught.

Tracking student's data allow participants to focus on student's strengths and weaknesses of grade level skills. Participants make informed decisions about their instructional practices as they are tracking their student's data. These decisions consist of

changing a student's small group instruction time, changing their skill in small group, or providing enrichment for their students. Participants monitor their student's academic growth when they track their data.

Interpretation of Findings

In this section, I interpreted the findings of this qualitative case study for the research questions and the findings for each theme: Instructional Strategies, PD, PLC meetings, and Data driven informed instruction. These themes addressed the research questions concerning teacher's perceptions about PLC's and PD's as well as their perceptions of their experiences to help increase student academic achievements.

Theme 1: Instructional Strategies.

Teachers who plan effective lessons and implement differentiated instruction provide an opportunity for students to attain and practice skills that have been taught. Taylor (2015) conducted research on differentiated instruction in elementary schools. Her study revealed that differentiation allows teachers to be able to accommodate all student's learning styles as well as promote higher thinking skills. The teachers in this study discussed the benefits of using differentiated instruction in their lessons. It has allowed them to focus on student's specific learning styles. Teachers stated that differentiated instruction allows students to receive instructional support at their current levels of learning. Teachers have seen the difference in their student's academics in using differentiation in their instruction because it provides an opportunity for all students to be highly engaged in the learning process. Differentiation is beneficial to most teachers, but there are some teachers that find differentiating instruction to be challenging. According

to Prast, Van de Weijer-Bergsma, Kroesbergen, and Van Luit (2018) differentiated instruction can have downfalls because teachers do not like to dedicate the time, effort, and ability that it takes to plan for students that are on a several different learning levels. Investing the time to differentiate instruction for students is a challenge. Due to this challenge for teachers there is a lack of differentiated instruction in their classrooms. Differentiated instruction is not a successful strategy if teachers are not willing to invest the time planning the strategy for their students.

Although teachers in this study find differentiated instruction beneficial as an instructional strategy, they also discussed how beneficial small group instruction is in improving their student's academics. Jones and Heriksen (2013) showed that small group instruction allows teachers to focus more on a specific deficit that students have, and work on their specific academic need for students to succeed academically. Their study revealed that teachers can address all student's academic needs in a smaller group setting. In other research, DeJesus (2012) stated that small group allows students an opportunity to develop a better understanding of the concept that was taught, it also allows teachers to provide differentiation in their small group instruction. Teachers can adjust their small group lesson according to a student's academic need allowing students to master the skill that they are struggling with. The teachers in the current study realize that there are challenges when teaching students with various academic learning levels. Small group instruction has allowed them to be able to focus solely on a specific skill or standard that their students struggle with. Teachers discussed that they can address the

different learning levels and learning styles that students have when they are in a small group setting.

Wall (2014) found that teachers that use homogenous small grouping did not receive effective student growth in academics as the teachers that use flexible grouping. Teachers that used flexible grouping had better standardized test scores than those teachers that used homogenous grouping. Teachers will need to use careful planning when determining which small group is more beneficial to their student's academic needs.

The findings from theme one revealed participant's perceptions about effective instructional strategies used to help improve student academic achievement in reading and math. Participants have used instructional strategies in their classrooms to enhance their teacher practices when delivering lessons to their students. Instructional strategies that participants have found to be beneficial in increasing student's academics were differentiated instruction, small group instruction, and gradual release of responsibility. Participants indicated that these strategies have been implemented with fidelity for the last four years at the study site and according to participants they are expected to increase academic achievement levels of students in grades 3 through 5.

Theme 2: Professional Development.

PD can support teachers in delivering effective reading and math content in the classroom. Ongoing PD allows teachers to stay abreast on current teaching strategies in education. Jacob, Hill, and Corey (2017) suggested that teachers receive ongoing adequate training to continue to increase the knowledge of their students and improve

their own efficacy. The findings from the cited study proved that teachers that attend ongoing PD that is aligned with district standards learn ways to improve their student's achievement levels. In other research, Zion and Sobel (2014) stated that PD should allow teachers to collaborate, have active participation, and teachers should create artifacts in PD that will be useful for them to use in their classrooms. According to Kolman (2017) teacher's quality of instruction increased when they receive continuous learning opportunities. In this study teachers felt that an ongoing PD was helpful in improving student performance. As it relates to current studies on PD and theme two, teachers in the current study stated that they benefit more from PD when they have an opportunity to collaborate during the PD sessions. Collaborating allows them to learn more from their colleagues as well as use strategies that other teachers are using in their classrooms. Teachers also stated that they benefit when the PD is content related and focused on district standards that allow them to deliver and implement effective instructional strategies that will improve student academics. Teachers also discussed that receiving ongoing PD is beneficial in helping to improve the academic achievement levels of their students.

Teachers in the study stated that professional development has been proven to improve their teacher efficacy and their pedagogy knowledge; however, Dixon, et.al. (2014) investigated that professional development truly enhances teacher efficacy and pedagogy knowledge when the professional development is differentiated to meet the needs of the teacher. According to Dixon et al.'s study teachers benefit more when they attend workshops that are beneficial to their teaching needs. Teachers attending

professional development in an area that they are deficient allows the professional development to have better outcomes. Teachers attending a professional development in an area that does not benefit them is not proven to provide beneficial results. Therefore, professional development works best when it is differentiated according to what the teacher needs.

The findings from theme two revealed participant's perceptions about the benefits of professional development that they have received to improve their teacher practices. Participants shared how professional development has enhanced their teacher pedagogy knowledge. They collaborate with other teachers and share various instructional strategies that have been very beneficial to participants. Attending professional development has allowed most participants to improve their teacher observation scores and determine strategies to help their students.

Theme 3: Professional Learning Community Meetings.

PLC meetings are important for teachers because PLCs help teachers reflect on how to improve their instruction and enhance student learning. According to Green and Allen (2015), stated that having PLC meetings allow teachers an opportunity to collaborate and share ideas. Their study revealed that PLC meetings allow teachers to develop strategic plans to improve student academics using different kinds of instructional strategies. Burns (2016), also proved that when schools have ongoing PLC meetings that monitor student data and provide adjustments to current teacher practices it provides better opportunities for student academic growth. In other research, Voelkel and Chrispeels (2017), stated that PLC meetings help teachers examine student data and

improve instructional practices based on the results of their data. Their study proved that improved teacher efficacy has a correlation with attending effective PLC meetings. The teachers in the current study found PLCs to be beneficial in improving their teacher competency, analyzing data, and determining instructional strategies that are beneficial for their students. PLCs have allowed teachers at the study site to collaborate more to implement effective instruction daily in their classrooms.

PLCs include the admin team developing an effective plan to engage teachers in a shared vision that will help to increase student learning levels. Ning, Lee, and Lee (2015) determined that if PLC meetings are not functional they will not produce effective student outcomes. If the PLC meetings do not have an environment established which includes everyone having a shared vision, principals communicating expectations, and coaching to guide the conversations PLCs are not effective.

The findings from theme three revealed the participant's perceptions about their experience with PLC meetings. Participants shared the benefits of how their PLC coach is very supportive with assisting them with improving student's academics. According to participant's responses their PLC coach provides opportunities for them to collaborate during meetings, provides support to help assist with their struggling students, and she assist with how to effectively deliver instructional strategies.

Theme 4: Data -Driven informed instruction.

Teachers use student data as a monitoring tool to determine what students need to know to master learning outcomes. Wardrip and Herman (2017) conducted a study that proved that students showed an increased level of academic growth when teachers use

data from several assessments to determine useful strategies for students. Sims and Penny (2014) conducted a qualitative case study to examine teachers' perceptions of attending data team meetings in their PLC meetings. The findings suggested that teaches want effective data meetings that allow them to address ways to improve student academic performance by implementing effective instruction. The teachers in the current study discussed that tracking their student's data allowed them to provide accommodations for student's learning styles, identify learning goals, and plan instructional needs for their students. Tracking student's data allowed participants to become more aware of the goals that students have met as well as ways to help them achieve their goals. Participants shared that during data team meetings they monitor their student's progress and respond to assessment results by adjusting instruction, regrouping students, and re-teaching as needed.

According to Datnow and Hubbard (2015) data driven instruction can have a downfall if teachers are only using data for their struggling students. In a case such as this, teachers will not be able to determine strengths and weaknesses of students that are performing successfully academically, this creates a problem of equitable practices. Another problem that arises with using data are teachers using one type of assessment to determine their student's academic achievement levels this also creates equitable practices. It is suggested that teachers track data on all students and use multiple sources of data to track achievement levels of students in order for data driven assessments to be successful in achieving student goals.

The findings from Theme 4 revealed participant's perceptions about data driven informed instruction. Participants discussed how they use their teacher data notebook to make informed decisions about student's academic needs. They make decisions such as students needing more time for small group instruction, whether students will need another instructional strategy to increase their academic levels, or if they should continue the same strategy. Participants have determined that monitoring student data is an effective tool for showing academic growth of students.

Relationship of Findings to Conceptual Framework

The conceptual frameworks used to guide this study were Vygotsky's (1978) (ZPD) and Tomlinson theory of differentiation and was used in the present study to examine factors that influenced teacher's perceptions on how to effectively plan and deliver reading instructional strategies to increase students' academic achievement levels.

Participants deliver explicit research- based strategies that can help students to develop higher order thinking skills. Teachers expressed that they needed more PD on how to deliver the district's reading and math instructional practices and strategies to keep the students involved and engaged in the learning. Teachers can implement and deliver instruction above students' levels, the levels which students can strive to achieve a task without support from their teacher. Participants stressed that differentiated instruction is grounded in children's readiness, interests, and ability levels, and they modify the curriculum according to the emotional and social needs of students in order to make the greatest impact on learning. Participants explained that differentiated instruction benefits all children.

ZPD is "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined under adult guidance or in collaboration with peers" (Vygotsky, 1978, p36). Teachers can provide scaffolding and collaboration through modeling, delivering, and implementing practices and strategies that will help students to master concepts or skills. All participants stated that regardless of all the different PD trainings and resources available in the district, learning how to implement effective research -based strategies, collaborating as a team to use student's data to plan reading and math lessons during PLC meetings, and staying abreast on current research-based strategies is an ongoing challenge. The participants' perceptions were that students in Grades 3-5 can make adequate improvements in reading and math when the instruction is implemented and aligned with the curriculum and TN State Standards.

Tomlinson's (2005) theory of differentiation, "offers students a range of tasks of varying difficulty" (Tomlinson, 2005, p. 12). Teachers in the present study use and are familiar with differentiated instruction. They realize the academic deficiencies of their students. Participants stated that learning more about differentiated instruction occurs during collaborative planning, PD and PLC meetings. However, participants have a concern with a need for ongoing PD because the academic needs and deficiencies of students are becoming greater. They also expressed a need for more scaffolding techniques and support from the district to help them plan and implement effective reading and math instruction for students.

Conclusion

RQ1: What are teachers' perceptions of effective instructional strategies for increasing students' proficiency levels in reading and math? Teachers use instructional strategies according to student's needs of their students have allowed them to help close the achievement gap in reading and math for Grades 3 through 5. Participants have noticed that their students have acquired better higher order thinking skills and providing small group instruction allows participants to be more intentional about student's learning levels. Overall, the participant's perceptions are if they continue to use good quality instructional teaching strategies student's academic achievements will improve. Some participants voiced a concern of wanting more help in implementing instructional teaching practices during instruction. They believe that more PD and observing colleagues will provide the help they need to continue to improve their teacher pedagogy.

Instructional strategies were theme one is connected to research question one because participants voiced the types of instructional strategies that they utilize to increase academic levels of their students. Teacher's perceptions of instructional strategies are they have allowed their students to make academic gains. Teachers need to use different instructional strategies that fit the needs of their students.

RQ2: What are teachers' perceptions of the use of PLCs to increase student achievement levels? Teachers believe that PLCs have allowed them to collaboratively plan with each other. Collaboratively planning gives teachers an opportunity to discuss how to improve their teacher practices and discuss ways to improve the academic success of their students. During this collaboration, teachers learn insights about strategies from

their colleagues and how those strategies have helped with their students. Overall, participants perceive PLC meetings to be helpful in increasing their teacher pedagogy knowledge, becoming more aware of student's academic deficits, how to address them, and use student data to better inform their instruction.

PLC meetings which is theme three connects to research question two because teachers voiced their concerns about how PLC meetings have helped them improve their academic achievement levels of their students.

RQ3: What are teachers' perceptions of the effectiveness of PD in increasing students' proficiency levels in reading and math? Teachers believe that professional development has allowed them to focus more on implementing strategies that will best fit their student's academic deficit, and it has helped teachers with pacing lessons where students can still learn at an appropriate pace. Professional development has allowed teachers to use resources from the district's curriculum home page to help make lessons more effective for student growth. Overall, teachers view professional development as an opportunity to increase their pedagogy knowledge; therefore, resulting in an increase in their student's academic achievements in both reading and math.

Professional development which was theme two is connected to research question three because teachers voiced their understandings of the benefits of professional development, and how important it is to be trained in improving the academic achievement levels of students.

Section 3: The Project

Introduction

The purpose of this qualitative study was to explore elementary teachers' perceptions of effective strategies to increase student academic achievement. The findings determined that teachers are seeking ongoing PD to effectively implement teacher strategies such as small group instruction, gradual release, and differentiated instruction. Teachers are also seeking to learn more on using data effectively to drive their instruction.

At the study site, participants have weekly collaborative planning in lieu of a faculty meeting twice a month. These collaborative planning sessions are designed for teachers to gain more insight on the curriculum, strategies, and effective reading and math practices. Based on the findings, participants suggested that they could benefit more from additional PD that provides an intensive focus on strategies to help improve student' academic achievement in Grades 3-5. Therefore, after listening to participants' concerns, I designed a 3-day PD series to address how to effectively implement strategies teachers can use to improve academic achievements of students in Grades 3-5. The PD will also address important documents that teachers can use to help support their planning and their instruction.

Rationale

This project was selected as a result of the findings in which teachers demonstrated a concern to receive more support in delivering effective instructional strategies in reading and math. Among the teachers in Grades 3-5, there was a need for

more PD to help close the achievement gaps in reading and math instruction for students. The lack of continuous training in research-based strategies has hindered teachers in achieving maximum levels of growth in their students reading and math levels. Furthermore, a lack of content knowledge regarding implementing effective reading and math strategies has impeded teachers' ability to effectively help students to achieve high levels of success.

Teachers need to participate in PD that will allow them to stay abreast of current instructional practices. Attending PD specifically geared to teachers' deficits will help to improve their pedagogy knowledge and provide instructional support for them. The interview responses indicated that teachers need more training to enable them to teach math and reading more effectively and achieve better academic success with their students.

Previous PD sessions provided by the district were limited in space and were held after school hours; therefore, the delivery of new knowledge lacked consistency among teachers. The reading and math advisers provided zone PD for Grades 3-5 teachers after school hours, but some teachers were not able to attend.

A presenter will share effective research-based strategies that should be implemented during teachers' reading and math blocks, as well as some small group techniques that should be beneficial to teachers. Teachers said that having a lesson where gradual release and small group instruction were demonstrated would be helpful for their own personal growth as teachers. The use of differentiation in lessons and

effective modeling on how to implement strategies would be integrated into the PD as well.

I believe that this PD series would provide teachers with enough training to understand how to implement effective research-based strategies in reading and math so that student academic performance can improve. PD can provide teachers with the ability to target skills and goals needed for their grade level while also enhancing their own pedagogy knowledge. Teachers will benefit from this PD because they will receive takeaways on effective strategies, gradual release, small group instruction, and differentiated instruction.

Review of the Literature

The literature in this study presented the need for effective research-based strategies in reading and math to continuously improve student academic achievement levels. In this literature review, I focused on how PD was helpful in improving teacher efficacy and knowledge to increase student academic levels. I also validated why PD would help provide better opportunities for teachers to implement effective reading and math strategies for students in Grades 3-5. I searched Google Scholar and the research databases EBSCOHost, ProQuest, and Sage for significant literature. The literature was used to define key terms including, *professional development, student achievement, teacher efficacy, teacher pedagogy, and teacher collaboration.*

Significance of Professional Development

The knowledge of a teacher is ultimately connected to student learning outcomes. PD allows teachers to improve their teaching abilities and exemplify growth in their

content area. “High-quality, evidence-based PD is essential to ensure that teachers obtain the knowledge, strategies, and skills necessary to positively impact student learning” (Erickson, Noonan, Brussow & Carter, 2017, p. 685). According to Makovec (2018) providing PD for teachers enhances their teacher pedagogy knowledge and teachers develop positive attitudes about their student’s learning. School districts support teachers by providing PD opportunities to enhance targeted areas that teachers need more support in to enhance their teacher practices. Without effective PD, teachers cannot stay abreast of different learning strategies and tools used to help their students learn effectively. When teachers attend PD it strengthens their quality of teaching and raises student achievement levels. Evens, Elen, Larmuseau, and Depaepe (2018) stated, “Teacher professional knowledge is assumed to be central to student learning. Empirical studies have shown the importance of teacher’s professional knowledge and more specifically their pedagogical content knowledge for educational quality and student outcomes” (p. 244). According to Moghatadaie, and Taji, (2018), teachers are faced with so many daily challenges, such as behavior management, dealing with parents, curriculums, test preparation, and administration demands, that they need support around learning effective teaching practices to continue to ensure student success.

Professional development is effective for teachers because it enables them to learn how to analyze data, recognize student learning misconceptions, and adapt their lessons according to their students’ misconceptions. Teachers learn how to identify students’ abilities and use resources that can better assist students with their learning needs. Effective PD allows teachers to use what they learn from the sessions to implement it in

their classrooms while teaching. Teachers and administrators realize the effects that PD has on students' academics as they continue to attend professional meetings and learn effective teaching strategies to improve their teaching practices. (Bradsahw, 2015). Increasing student academic achievement should be the goal of every teacher. The academics of students will only continue to increase when teachers attend ongoing PD.

Kalinowski, Gronostaj, and Vock (2019) conducted a study to determine if PD programs were beneficial to teachers during their in-service week. They discussed that PD helps to prepare teachers to teach students effectively. Their goal was to prove that effective PD for teachers has key features that support teachers in their content areas. The focus of their research was, "What structural, content-related, and didactic features characterize teacher PD programs that are suitable for fostering students' reading language proficiency across the curriculum" (p. 3). Their PD evaluated the effectiveness of teachers receiving PD in the areas of syntax, academic language, subject area vocabulary, and integrating language skills across the content areas. Teachers in the study attended a different PD based on language skills for a week. After attending the PD, it was expected that teachers use what they learned in their upcoming lessons. As a result, the PD helped to change teachers' instructional practices to benefit the academic levels of their students.

Professional Development and Student Academic Achievement

One of the most effective ways to improve and raise student achievement is through professional development. According to Martin, Polly, Mraz, and Algozzine (2018), the need for professional development is becoming more prevalent because

student populations are increasing with more students who have diverse learning needs. When teachers participate in collaborative PD, there is a difference among students from high performing schools and low performing schools. Professional development serves several functions for teachers. These functions include helping teachers implement new initiatives, provide strategies to improve school and student performance levels, and improve the quality of classroom instruction. Professional development is an ongoing approach for teachers with an effort to increase student academic achievement.

Professional development is designed to help teachers improve their skills and demonstrate growth in their content areas. Teachers use professional development as a learning tool to increase their teaching practices and student achievement levels (Gusky, 2014). Kindall, Crowe, and Elass (2018), conducted a study on the benefits of ongoing professional development. This professional development was provided by the schools' principal for novice teachers to improve literacy instruction. Kindall et al. (2018) used a survey to determine the impact that professional development had on novice teachers' ability to teach literacy instruction to their students. Seventy-six novice teachers were surveyed teaching Grades K-6. Themes included the impact that professional development has on improving teacher self- efficacy and delivering effective literacy instruction. Novice teachers believe they should have ownership in their professional growth plans so that students can benefit more from the professional development that is delivered to teachers. They believe that if they are not struggling in a content area, they should not receive professional development on that topic. Novice teachers only want professional development in areas where they need the most growth. Novice teachers

also believe that their professional development should be planned according to the data results of students. Findings from this study concluded that there is a need for high quality professional development from the principal which will help novice teachers with content knowledge. Findings also revealed that if the principal is knowledgeable in literacy instruction they will be able to have an impact on novice teacher's delivery of instruction, whereas student achievement will increase in literacy.

Professional development is effective when it is more connected to what teachers need to be able to apply what they have learned to their daily teaching practices. Green and Allen (2015) stated that PD can increase teacher practices and enhance student achievement if it focuses on "how students learn a particular subject-matter, instructional practices that are specifically related to the subject matter and how students understand it, and strengthening teachers' knowledge of specific subject-matter content" (p. 56). According to Cheng and Wu (2015), to see an increase in student academics, teachers need to be proactive in attending a variety of PD relevant to their content area.

After PD training, teachers implement their new knowledge and skills, align it to the standards in the curriculum and implement the new knowledge when teaching lessons to their students. Jacob, Hill, and Corey (2017) conducted a study to determine if mathematics instruction improved from the efforts of teachers attending professional development to increase students' mathematical reasoning during instruction. Their study was conducted in a Title 1 school district, and 18 elementary schools participated. Fourth- and fifth- grade math teachers participated from the 18 elementary schools. Fourth- and fifth- grade students were assessed at the beginning and end of the study to

determine the effects of professional development on student learning. Teachers attended a Math Solutions professional development training during a summer institute for 4 days. The PD objectives consisted of teachers working through a mathematical task, discussion of different solution paths that students might take, looking at examples of student work samples, modeling instruction using best practices with anticipating student misconceptions, and addressing misconceptions during the lesson. Teachers were given materials to help with math instruction. After the 3-day math PD teachers implemented their training into their classrooms with their students. Teachers implemented the strategies from the Math Solutions PD with fidelity during the first year of the study. Attending the PD had a positive impact on teachers' mathematical content knowledge. Students' achievement in math showed a marginal increase, and teachers demonstrated an improvement with their instructional practices.

According to Ferreira (2015), when PD focuses on increasing student achievement and developing teachers' pedagogical knowledge, there is usually a positive effect on teacher practices and an increase in student learning. PD is effective in improving student learning and teacher instructional practices when it is a part of the curriculum, materials that teachers use, standards that teachers teach, and the evaluation criteria are used to monitor academic success. Valiandes and Neophytou, (2017), suggested that teachers' PD program is essential in helping them use differentiated instruction to improve students' learning abilities. Teachers who participate in professional development with fidelity deliver effective differentiated instruction to their students. Teachers who participated in the study were highly satisfied with the PD, and

believed it allowed them to deliver instruction more effectively to their students. The professional development enabled them to receive knowledge, skills, and support needed to help their students. Furthermore, the study indicated that teachers participating in well-planned professional development programs produced significant achievement gains for their students.

The more practice teachers receive from PD the better their teacher practices improve and students thinking skills and academic knowledge increases. According to Hill, Bicer and Capraro (2017), teachers that attend PD that pertains to their subject matter and places an emphasis on student academic achievement has a significant impact on student learning. Furthermore, math teachers who are afforded the opportunity to attend ongoing PD, solve actual math problems that they plan to teach, study student learning, and examine materials from the curriculum that are required teach during their PD have students that perform better conceptually and maintain basic math skills than those students whose teachers do not attend PD on an ongoing basis.

PD has been and continues to be the forefront for increasing student academic achievement. According to Erickson, Noonan, and Brussow (2016) PD helps teachers focus on how to teach students versus what to teach students. PD provides teachers with a better knowledge of using research- based teacher practices and strategies. Teachers stay abreast of changes with current teacher practices and they learn effective instructional techniques that might change due to receiving a new curriculum that gets adopted by the district.

Instructional reading and math coaches play an important role in assisting teachers with implementing effective teacher practices. Wood, Goodnight, and Bethune (2016) suggested coaching as a PD tool where teachers receive the support they need without having to leave the building. They suggested two types of coaching supervisory coaching and side by side coaching. "To support teachers in implementing practices deemed effective coaches frequently engage in observation, modeling, and feedback." Wood et al, 2016 p. 163). Supervisory coaching occurs when a reading or math coach observes a teacher teaching a new strategy. The coach observes the teacher teach the strategy and takes notes while observing the lesson and provides feedback to the teacher. The coach gives the teacher strengths and weaknesses of implementing the strategy and provides ways to improve the weaknesses. Teachers use the suggested feedback to continue to improve their teacher practices to focus on improving student academics.

Side by side coaching occurs when the reading or math coach works side by side with the teacher on the delivery of the strategy that needs to be improved. The coach intervenes during the delivery of instruction as needed. This helps teachers incorporate any new strategies that have been implemented. The coach continues to follow up with the teacher to make sure the strategy and the suggested feedback is being implemented to ensure academic success of students (Wood et al., 2016). Coaching allows teachers to receive additional support with implementing strategies and produce successful student outcomes.

Professional Development and Improved Teacher Knowledge

Enhancing teacher knowledge is beneficial in improving student academic achievement. Teacher competencies play a vital role in their teacher performance and the performance of the educational system. Patton, Parker, and Tannehill (2015), stated that teachers cannot be successful in teaching students if they do not possess the knowledge and skills needed to help students achieve academic success. "Teacher competencies are skills that they achieve in the process of education to promote the physical, intellectual, emotional, and social development of students" (Moghatadaie & Taji, 2018, p. 565). Enhancing teacher's professional knowledge consists of having a desire to achieve successful outcomes with students, as well as a desire to continuously enhance pedagogy knowledge with PD and learning new teaching strategies. Sevis, Cross, and Hudson (2017), conducted a study that involved ways to enhance teacher's teaching quality and their content knowledge. Their study involved a math PD where teachers positioned themselves as students while solving mathematical problems. The study sought to improve teacher's pedagogical content knowledge. The study sought to prove that if teachers solve the math problems that teachers require their students to do, they will become more competent in the math that they teach; therefore, teachers will be able to increase the math knowledge of their students. The study focused more on teachers gaining the knowledge that they need to improve teacher practices. The study lasted for 2- years and consisted of twenty-two elementary teachers.

The PD was held in the summer time and teachers developed a better content knowledge from doing the work that their students would do. Teacher takeaways from

the PD consisted of them learning different strategies in solving math problems and being able to persevere through the math work as they would expect their students to do. Teachers also learned that there are different approaches in solving the math problems. This strategy enabled them to learn multiple solution paths when solving math problems. The study revealed that teacher's content knowledge increased as they learned how to solve the math problems conceptually as they would expect their students to solve the problems. By teachers attending a PD where they were involved in solving the math problems allowed them to make a better connection and develop a better understanding of how to present the math tasks to students while teaching lessons. According to the study, the PD resulted in the improvement of teacher's mathematical practices.

As stated earlier, coaching is used as a PD to help improve student academic achievement levels. Instructional coaching is also used to increase content knowledge of teachers. Rodgers and Skelton (2014) stated that to continuously improve teacher knowledge some schools are using instructional coaching as an effective tool. Instructional coaching allows schools to not have to send teachers to an actual PD during or after school. When instructional coaching is used effectively teacher's content and pedagogical knowledge improves, teachers are more comfortable teaching the subject matter to their students, and teachers are exposed to ongoing learning opportunities. Desimone and Pak (2017) conducted a study using instructional coaching as a research-based tool to improve teacher knowledge to increase student academics. Their study focused on several key factors that allowed instructional coaching to be effective in improving teacher practices that resulted in better student learning. The key factors are as

follows: (a)content knowledge activities that are focused on subject matter content and how students learn the content; (b) active learning opportunities for teachers to observe, receive feedback, analyze student work, or make presentations as opposed to passively listening to lectures; (c) coherence content goals, and activities that are consistent with the school curriculum goals; (d) collective participation: groups of teachers from the same grade, and subject collaborating together (p.4).

Implementing these key factors allowed for instructional coaching to be effective for teaching and learning. Teachers that received content area coaching learned how students learn the content or skill that was taught; therefore, this allowed an increase in the teacher's content knowledge. Active learning allowed teachers to observe other teachers teach a lesson and the teacher uses the strategies that she/he observed and implement those strategies in their own lessons. This allowed teachers to become more engaged with their coach in a variety of ways. The teacher and instructional coach discuss the strategies that were observed and how the teacher can use those observed strategies in their lessons. The instructional coach continues to provide feedback from informal observations about different teaching practices that will help to improve instruction for students as well as the teacher practices that will be most beneficial for the lesson that was taught. Desimone and Pak (2017) suggested that there is strong evidence of improved teacher practices from receiving feedback. They suggested that teachers need to see the actual lesson that they would teach modeled by their instructional coach. This will allow teachers to develop a better insight about their own teacher practices and improve their teacher practices. The researchers also determined that using instructional

coaching as a form of PD in improving teacher practices is beneficial, the coaching happens consistently, and the coach uses research-based practices.

PD continues to play an important role in the future growth of teachers. PD allows teachers to collaborate and enhance their content knowledge. Teachers need PD that tailors to their personal need for their own growth. Attending PD that improves a specific teacher practice for a teacher is beneficial in enhancing teacher's knowledge and skills in their specific content area (Orrill & Kittleson, 2014). "No improvement effort in the history of education has ever succeeded without thoughtfully planned and well implemented PD activities designed to enhance educator's knowledge" (Ferreira, 2015, p. 36). PD is very critical for novice teachers who need to become familiar with the content they are going to teach. PD is just as important to veteran teachers that need to enhance their teacher practices and become familiar with any new strategies that the district develops or adds to the curriculum (Stewart, 2014). A teacher needs ongoing PD to continuously increase their content knowledge.

PD has an impact on teacher's teaching practices when the PD focuses on the content area to increase pedagogical knowledge. Ferreira (2017), conducted a study on an evaluation program to determine the impact that a PD program had on teacher knowledge and pedagogical skills. The study consisted of a partnership between a university and a local school district. Thirty elementary teachers were provided with over 100 hours of PD. Teachers participated in PD during the summer months every day for 6 hours a day. Each week teachers focused on a different topic. These topics were pedagogy, alternate forms of assessment, and constructivism and inquiry. Teachers who

participated in the program were better prepared to facilitate the learning to their students effectively, and this PD allowed them to develop a better sense of collaboration among their colleagues. The results of the study indicated that the professional development program was successful in helping teachers to improve their pedagogy knowledge. Teachers use the concepts learned during the PD and implemented them in their classrooms. Teachers noticed an improvement in their students' learning. This PD allowed teachers to improve a variety of their teacher practices and provided ways for them to use instructional strategies effectively. The results from this study revealed that PD plays a significant role in the development of professional growth and their pedagogy knowledge.

Teacher's Professional Development Expectations

PD is designed to improve teacher practices in various areas of the educational field. PD is widely accepted among almost every teacher. Teachers sign their contracts understanding that they will be required to attend a certain number of hours of PD each year. Teachers are aware that PD should provide them with the necessary training that focuses a lot on teaching and learning (Kennedy, 2016). Saclarides and Lubienski (2018), stated that there are some instances where teachers are aware that they should choose their own PD due the fact that choosing a PD will be more beneficial to them. Teachers are more likely to invest in the profession of teaching and stay educators longer if they attend a PD that benefits them. Teachers want their district to realize that they are competent enough to make their own decisions of the types of PD they should attend.

Collaboration among teachers is also an effective practice in helping teachers with their content knowledge. Garces and Granada (2015), stated that teachers would like more collaborative PD because this practice allows teachers to share and negotiate more. Teachers can reflect together and share their classroom experiences with one another. Teachers understand that there is more teamwork in collaborative planning because they analyze data, plan lessons, and discuss and share teacher practices. When teachers collaborate, they learn some strategies that one teacher is using that they can possibly use in their own lessons.

Although teachers may seek more collaborative PD where they have an opportunity to engage with their colleagues, teachers are also seeking more PD that is engaging. According to Matherson and Windle (2016), teachers have several expectations from their professional development that they would like to receive. Teachers want PD opportunities that are "interactive, engaging, and relevant for their students that show them a more practical way to deliver content, it is teacher-driven, and the learning opportunities are sustained over time" (p. 30). Teachers prefer not to attend PD that wastes their time, they want a PD session that is engaging where they are actively practicing skills that their students will benefit the most from.

Teachers want to be able to leave their PD with immediate takeaways to use in their classrooms with their students. They want PD that focuses on skills, strategies, and techniques that not only prepare them to teach, but also help them to prepare their students to be successful. Teachers also want to attend PD that allows them to become better at their profession overtime. Teachers need time to develop and receive PD as a

steady progress of growth for them. Teachers want to receive a set number of hours of PD per semester and school year. This will allow them to develop their professional growth over time (Martin & Gonzalez, 2017). "Effective PD is intensive, ongoing, connected to practice, focused on the teaching and learning of a specific academic content, and builds strong collaboration among teachers" (Matherson & Windle, 2016, p. 31). Teachers want to be more involved in the types of PD that they attend, and they want PD to be more meaningful to their content area. Yurteseven (2017) stated that teacher's perceptions concerning PD is it should be ongoing where teachers are able to reflect on their teacher practices, and learn different ways to respond to their students' academic needs.

The focus of PD should be to help teachers increase their teacher practices, provide a diverse learning environment for students, and be centered around the instructional needs of teachers. Martin, Polly, and Mraz (2018) conducted a study where teachers discussed their perspectives of literacy and math PD. The study used elementary teachers each teaching Grades1-5. Teachers voiced a concern of wanting PD that focused on effective teacher practices. Teachers discussed that they would benefit more if the PD is engaging with a variety of interactive strategies, the content knowledge is beneficial, and the math focuses on work that moves the students from concrete, pictorial, and abstract. The survey from the study revealed that teachers want PD that allows them to be able to help their students think deeper about the content, apply teacher practices that they have learned, and implement them in their classroom. Teachers PD experiences

have an impact on their student's learning; therefore, teachers are only interested in attending PD that helps to increase their student's academics.

Teachers expect for their PD experiences to be relevant and led by teachers who understand the experiences of a teacher. Many teachers would like to receive more teacher led PD because veteran teachers understand and can relate more to the needs of teachers. Teachers would benefit more from having more teacher leaders leading PD to help improve their teacher practices (Jacob & McGovern, 2015). Teacher leaders have profound content knowledge that they can share with other teachers needing to develop their teacher practices, content and pedagogy knowledge.

Project Description

Potential Resources and Existing Supports

The team that will be responsible for making sure the planned PD occurs will include the principal, the PLC coach, and me, the facilitator. I will meet with the principal and the PLC coach to determine a time, date, and location for the PD. During our meeting, I will suggest that the PD is during our teacher in-service week. I will also inform them of the materials that I will need for the professional development so they can provide them. There is no cost to attend this professional development; however, teachers will be provided with an incentive for participating in the PD sessions. Attending the PD sessions will also count towards their PD hours needed for the school year. I will schedule a meeting with the principal to discuss my overall goals, expectations, and outcomes of the PD sessions. I will also discuss with the principal the existing supports that will be needed such as pens, journals, chart paper, projector, markers, copies of

session materials for participants, and document cam. Teachers will need their reading and math curriculums, reading and math teachers editions, and a laptop. My obligations to this project will be to facilitate the sessions and deliver the materials for the training.

Potential Barriers and Solutions

I do not anticipate any barriers that will keep the professional development project from taking place. One possible barrier that may affect the project is teachers in attendance. Hopefully the administrator and the PLC coach will be able to arrange this 3-day session during teacher in-service days. If so, teachers may feel that they could be planning for upcoming lessons and not have to sit during another PD. Another barrier that may also effect the project is teacher collaboration. Teachers may not feel comfortable sharing their ideas and collaborating with their peers. As the facilitator, I will ensure the participants that we are in a safe place and throughout the PD we will be doing some engaging activities where we will work in groups. We will also do a few ice-breakers so the participants can feel comfortable with each other throughout the sessions.

Proposal for Implementation and Timetable. The PD will be a three-day series offered during the teacher's in-service week. An array of tools will be used to keep participants actively engaged during the PD sessions. These will include a PowerPoint presentation, small group and whole group discussions, group activities, and collaborative planning time. Teachers will use their district curriculum map, major work of the grade standards, samples of student work, samples of annotated lessons and supporting documents that they use when planning a lesson.

A new agenda will be given each day. It will include various topics such as effective teaching strategies to use in reading and math, using curriculum maps effectively, looking at student work samples, addressing student misconceptions, and effective use of vocabulary. An introductory presentation will be presented on the first day to allow participants to learn something about me as the facilitator. I will also discuss norms and goals for the PD. Appendix A outlines the agenda and order of the PD.

Roles and Responsibilities

The role of the facilitator is to present the presentation and guide teachers in an informative session that will support the objectives of the professional development. The role of the principal is to support the facilitator, offer feedback, and provide the necessary supplies needed to ensure a successful PD. The role of the teachers is to be present and on time for all three days of the PD sessions, actively participate, be engaged, stay focused to receive takeaways, and provide feedback to the facilitator. The teacher's role is to also implement the information presented into their instructional practices in their upcoming lessons.

Project Evaluation Plan

The PD session consists of a formative evaluation that all participants will complete at the end of the professional development session. Teachers will also be provided with the evaluation of the PD to evaluate the session for the day and provide any necessary improvements that will make the next day's session better, or their overall suggestions for improvements. On the last day of the session the participants will receive a summative evaluation form to provide feedback from the 3-day session. The feedback

from this form will allow the facilitator to assess the effectiveness of the PD and ways to improve the design or flow of the PD. The results from the summative evaluation form could result in continuous bi-weekly PD, more collaborative planning, coaching teachers, or allowing teacher leaders at the school site to provide content area PD. The formative evaluation is necessary because it will allow me to improve any future PD sessions that I may facilitate. The findings will be discussed with the principal, PLC coach, and teachers during their weekly PLC meetings.

Project Implications

This project addresses the strategies teachers can use to improve the academic achievement of students in reading and math in Grades 3 through 5. Teachers using research-based strategies to improve student academics will help to close the achievement gap that students face when it comes to performing academically at grade level. High quality PD will provide teachers with effective teaching practices to implement daily in their reading and math instruction to help improve student's achievement levels. Teachers will benefit from this PD because it will allow them to learn how to effectively implement instructional strategies with their students. They will also learn which strategy will best accommodate their student's needs based on standards for the grade and looking at student work samples. Teachers will also benefit from this PD because they will get an opportunity to collaborate with other teachers and discuss strategies that work best for them. They will also be able to take the information gained from the PD sessions and apply it to their lessons. Closing the achievement gap in student academic achievement in reading and math will lead to a positive change at the

study site for Grades 3 through 5 students. When teachers deliver effective teacher practices to students that are struggling with different reading and math skills, students become more academically successful. It is anticipated that student's test scores will improve after teachers attend this PD. If student data shows improvements after this professional development has been implemented the district stakeholders may want it implemented in other schools.

Section 4: Reflections and Conclusions

Project Strengths and Limitations

The strength of this project is the PD sessions that were developed based on data from teacher interviews. I designed the PD sessions to help enhance the pedagogy knowledge of the participants. The participants communicated a need for more PD in delivering effecting reading and math strategies. Participants acknowledged and understand that students need instructional research-based strategies to improve their student's academic achievement levels. This PD would allow all participants to be actively-engaged in the PD sessions by sharing their beliefs and experiences with their peers. This project will provide participants with multiple teaching strategies to use during their reading and math lessons. Teachers will benefit from being able to collaborate with other teachers as well as discuss instructional strategies with them. Participants will leave the PD with tools and resources they can use when they teach their reading and math lessons. Participants will also have a better understanding of differentiation, small group instruction, integrating literacy and math, and planning their lessons with remediation for reading and math.

Limitations

One of the limitations to this project will consist of providing time for teachers to plan their lessons effectively using what they have learned during the PD sessions. Although during one of the PD sessions time is allotted for collaborative planning, teachers will need more time to plan to be able to implement instructional strategies that were discussed. One of the most effective tools of teaching is effective planning, and

teachers will need more time to plan their lessons to implement differentiated instruction, small group instruction, as well as the tools and materials during the lesson.

Another limitation of this project is the fact that space for stakeholder participation is limited. The district only allows a certain number of participants to attend PD sessions.

Recommendations for Alternative Approaches

One recommendation for an alternative approach to teachers not having enough planning time would be to use two staff meetings a month as collaborative planning sessions. Instead of teachers having a formal staff meeting every week they could use two of their staff meetings to plan for the lessons that they are going to teach. Teachers can use the time to discuss strategies with other teachers, determine resources they will need to use, and materials that teachers will need to teach upcoming lessons.

Some of the people who serve on the administration team work 12 months and do not get summer months off. Another recommendation would be for the administration team to ask teachers in a survey about their ideas on how to include more planning time during the day. During the summer months, the administration team can take the results from the survey to develop ways that would include extra minutes to plan during their common planning time.

Another recommendation would be the use of online Zoom meetings. This would allow groups of teachers from other schools in the district to collaborate and exchange ideas. Teachers could to discuss strategies that work and why they work. Teachers could

discuss how they implement the strategies in their classroom. This would allow teachers to save time by not having to drive to a specific location to meet.

The development of a PD curriculum, such as content cadres, would allow teachers to be placed in certain pathways of professional learning based on their pedagogy knowledge in reading and math content areas. Teachers would be placed in learning pathways to help them to increase their content knowledge.

One last alternative approach would be for the PLC coach to designate half of one PLC meeting time for teachers to plan for upcoming lessons. After teachers and the PLC coach have discussed the agenda items, the last 30 minutes of the PLC meeting could be designated as planning time for teachers.

Scholarship, Project Development, Evaluation Leadership, and Change

Several factors have helped me to gain a perspective of providing PD for teachers to enhance their pedagogy knowledge to increase their students' academic levels. These factors consisted of pursing a doctoral degree, becoming a math content lead at my school, serving as a member on my school's ILT, and attending PD to learn more about how to increase the knowledge of my students to be more successful. Teachers benefit greatly from the support of having PD. PD provides the opportunity for teachers to grow in their specific areas of weakness. As a member of an ILT, I have noticed that teachers grow stronger in their content and pedagogy knowledge when they are saturated with PD to help improve their literacy and math content. As a result, I began to focus on providing additional support for teachers to use instructional strategies to help all their students become successful.

The past few years of obtaining this doctoral degree while teaching full-time and having various teacher leader positions, has caused my role as a scholar-practitioner to intensify. The research process filled me with anxiety and stress. It was an extremely tedious process; although I did not give up, there were times I felt I would not make it. Editing and revising the drafts were long and tiresome process, but I learned and accomplished a lot about scholarly writing. Receiving constant feedback from my committee chair has allowed me to understand that doctoral writing is a rigorous and time-consuming process.

Interviewing participants and reading current research studies related to my study was a rewarding part of my doctoral experience. Through interviewing participants, I was able to understand teachers' perceptions of their instructional practices as well as make a connection with current research I was reviewing. During my data analysis, I realized how much work and effort teachers and PLC coaches put into helping their students make academic gains. Realizing this gave me a passion to develop a PD series that would continue to help support teachers to be able to support their students' academic growth.

Project Development and Evaluation

This project was created from the analysis of research I conducted. Teachers in Grades 3-5 must show that their students' academic levels are increasing over time. Maintaining a level of academic growth among students is what teachers focus on throughout the school year. Being able to show continuous growth of students' academics requires that teachers use instructional practices that are effective for their

group of students. Throughout my interviews with teachers, it became obvious that teachers have a sincere desire to teach and they have their student's best interest at heart. Teachers expressed how students need various instructional strategies to continue to be successful. Teachers also expressed that PD is beneficial in learning district-implemented strategies and being able to collaborate with other teachers who are faced with some of the same issues. Being able to share ideas was of interest to them. After focusing on participants' interview responses, it became evident that PD was needed to help support teachers with effective strategies to allow them an opportunity to collaborate with other teachers.

The feedback from my chair, committee member, and university research reviewer helped me to organize and write a well-written project. I created my project based on the themes that derived from my data analysis. In creating my PD project, I also reflected on my experiences with PD. I created a project in which teachers would be able to collaborate with teachers on their grade level and receive pertinent information that would allow them to benefit most. This included having takeaways to use with their future lessons and pertinent handouts that serve as references for their lessons. I knew that I had to plan a variety of activities to sustain teachers' focus as well as topics that related to their professional needs. Based on my data analysis and interviews with teachers, I decided there were specific instructional strategies that teachers would benefit most from. Teachers also need ongoing support with instructional strategies to help improve their students' academics. In creating this PD series, I considered how the instructional strategies would benefit teachers in a way that students would show an

increase in their instructional levels. This allowed me to connect teacher practices with student academic outcomes and solidify the meaningfulness of the PD series

Determining the benefits of PD is very important a presenter or facilitator. I created an evaluation for teachers to complete at the end of the PD sessions that will give an opportunity to determine the effectiveness of the PD and find ways to improve it. A summative evaluation will be provided to teachers to allow me to determine the overall effectiveness of the project and what teachers benefitted most from.

Leadership and Change

As an educator who is currently serving on the instructional leadership team I have learned the importance of the role that school leaders have with assisting teachers with filling in the learning gaps that their students have. While working on my project, I wanted to make sure that I support teachers in helping to close learning gaps for their students. Although many educators focus on the problems that students face or reasons that prevent students from being successful, it takes a research practitioner to support teachers with being optimistic with their student's academic achievement levels. As a result of going through this process, I have developed as a leader by being able to support teachers with my opinions as well as having research-based knowledge to support my opinions. Through this study, I have gained an insight of the struggles that teachers face with the academic achievement of their students and how teachers work to increase their best practices to support their students. This research has also allowed me to gain a deeper understanding about research-based instructional practices teachers can use that are proven to improve the academic levels of all students. This project can help promote

change by influencing teachers to use research-based instructional practices to increase student's achievement levels. As students' academic levels increase, teachers can share their best practices with other teachers that could possibly be experiencing difficulties with their students. This will allow an improvement in the types of instructional practices teachers use once student achievement levels increase.

This professional development project will provide a social change because it will provide teachers with the support and tools needed to support their students whether they are struggling or in need of enrichment. Teachers will have an opportunity to effectively plan lessons using research-based instructional practices that will allow their students to succeed. There are students that struggle with effectively learning a concept and there are students that exceed understanding a concept. This project will allow teachers to develop a balance between the two. Teachers will be able to provide instructional practices for students that are performing below grade level, on grade level or above grade level. Regardless of the academic status the instructional practices will benefit all students. Implementing collaboration with this project will allow teachers to share and develop lesson plans where all students can benefit from the same instructional strategies. As teachers consistently implement these instructional strategies, student's academic achievement levels will increase. As student's academic levels increase teacher's TVAAS levels will also increase. When teacher's TVAAS levels increase the school meets AYP goals. As a result of schools meeting AYP goals, the district benefits because schools can be removed from priority lists and they will not be listed as a failure school.

Stakeholders will be interested in knowing the cause of improved academic achievement levels at the school.

The project will contribute to a collaboration among reading and math content leads and instructional advisors to evaluate their practices in an effort to better support teachers with research based instructional practices.

Reflection on Importance of the Work

As I reflect on the importance of my research study, I can recall many moments when I felt overwhelmed, tired, and discouraged. Often times I wanted to up, but I was encouraged by my family and close friends to continue to persevere and work hard because hard work pays off in the end. I realized that to be successful with my doctoral study I would have to put in a lot of time which included sacrificing some leisure things that I enjoyed doing. As I continued to work hard, I began to realize how close I was to finishing my degree. At that point, I decided to continue to persevere and develop a time management schedule. This schedule allowed me to stay focused and not only was I working to reach semester goals but goals on my time management schedule. I began to push harder after I realized that creating a project could potentially support teachers, allow them to grow as professionals, and help support their student's success made sacrificing those leisure things worthwhile.

Over the years, I have developed more into a teacher leader based on the leadership roles that I have with my school district. I have developed effective communication skills and self- determination while working on my project. Creating this project has allowed me to gain more knowledge towards my professional growth, seek

ways to help support novice and veteran teachers, and support students in becoming life-long learners.

Implications, Applications, and Directions for Future Research

Overtime school curriculum changes, teaching requirements and technology advances, and as a result future research will lead to new information on data about effective teacher practices and instructional practices that will improve students' academic achievement levels. Some ideas for future research related to an increase in academic achievement levels include doing more research on the use of technology in classrooms to maintain and increase engagement levels of students. More use of technology will also provide intervention for students in reading and math. Administrators at schools must provide teachers with support to enhance their teacher practices in reading and math.

This study is significant to educators with students of various academic learning levels in reading and math. It provides research of various learning gaps that students have persevered through and strategies that can help close the achievement gap. This project study recommended teachers use effective instructional strategies such as differentiation, gradual release, and small group instruction to support students in their growth and academic achievement levels. A professional development series providing teachers with research-based instructional strategies was created as well as collaborative planning with peers to plan which strategies would best benefit students for the lessons taught. This study will be beneficial to school administrators because it will allow an achievement gap to be closed and schools will reach their annually AYP goals.

Future research can be developed to support students in Grades K-2. The strategies shared in the study can be used and adjusted to benefit teachers with a younger age group, when those students make it to Grade 3 they will already have an exposure or familiarity with instructional strategies and can work independently with the instructional strategy. Future research can also be applied to identify external factors that affect the academic achievement levels of students. While this study focuses on topics such reasons that students are not successful in school and effective ways to improve academic achievement levels more development can still be used with these topics. Finally, additional research can be done to compare student achievement levels in reading and math with students in Title one schools versus students that do not attend Title one schools. Differences and common trends could assist with refining math and reading instructional strategies further than the current research study.

Conclusion

Reading and math skills are necessary for students to learn and apply throughout their school years and into adulthood. Differentiating reading and math skills is a challenging job for most teachers due to having students on various learning levels; therefore, teachers need to continue to receive in-depth training on how to deliver effective instructional strategies during their reading and math blocks. Although completing this project study has not been a simple task, it has been far beyond a learning and gratifying experience. Researching this topic and interviewing participants has allowed me to understand student's factors for not being academically successful, and

ways to increase their achievement levels. As a result, I developed a PD project to support teachers with instructional strategies for their students.

The study also focused on teachers' perceptions concerning the effectiveness of their PD and PLC meetings to support their teacher practices. Teachers had great confidence in their PLC meetings and felt that it allowed them to develop more as a professional. Although teachers attended recommended PD for the school year, they felt a need to have more PD sessions because of the curriculum changes. They also wanted an opportunity to continue to provide their students with effective instructional support. After researching this topic, I feel that this project will address the problem and provide support for teachers in Grades 3-5 to enhance their current knowledge of delivering effective reading and math strategies to increase student academic achievement levels.

There is a critical need to support teachers with effective reading and math instructional practices for students to be successful in the classroom, become lifelong learners, and eventually close the achievement gap among students who struggle to be academically successful in reading and math. It is my desire that once this project has been presented that schools will continue to implement the PD project.

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Appendix A: The Project

Instructional Strategies To Benefit & Engage All Students

Demetria Smith

Walden University

Introduction

The professional development is entitled "Instructional Strategies to Benefit & Engage All Students." The purpose of this professional development training is to support teacher's development on strategies that will benefit all students and raise student's academics levels. The professional development program consists of 3 days of informational sessions and activities designed to increase teacher's awareness of research- based strategies to help close the achievement gap in reading and math. Teachers will be introduced to the various strategies utilized for differentiation and small group remediation for reading and math. The professional development sessions will begin at 8:00 a.m. and end at 3:00 p.m. on in-service days that will be scheduled by the administration team. An opening activity will begin each professional development session which will be in the form of an ice breaker. A parking lot chart will be utilized for teachers having any question or concerns during the sessions. A survey will be utilized at the end of the day for teachers to provide feedback, suggestions, and the overall effectiveness of the professional development. The survey will serve as teachers exit ticket and they will submit it upon leaving the professional development.

Goals

The goals of the professional development sessions are as follows:

- Goal 1: Teachers will learn about and implement instructional strategies so that students will meet or exceed proficiency in content area standards
- Goal 2: Teachers will incorporate instructional strategies into their daily lesson planning

Learning Outcomes

During this professional development series, teachers will,

- Design a lesson plan that encompasses one or more teaching strategies that teachers plan to implement in their classrooms.
- Identify the different types of instructional strategies and determine which ones would benefit their students the most

Audience

The primary focus audience for this professional development will be elementary teachers in grades 3 through 5 who need help supporting their students with instructional strategies.

Day 1
Agenda

Date:
Time: 8:00-3:00
Audience: Elementary Teachers Grades 3-5
Location:
Topic: Utilizing Differentiated Instruction to reach all learners

Objectives:

- Participants will demonstrate knowledge of Differentiated Instruction and implement differentiation in their lessons.
- Participants will know and understand the various ways to utilize differentiated strategies in their lessons

Content	Process	Time	Materials
Sign-In and Breakfast To greet one another		7:30-800	Sign- In Sheets
Agenda & Framing of the day	Welcome/ Review of Agenda/ Presenter Introduction	8:00-8:15	Agenda
Ice Breaker • **Grade level teams will work together to build a Marshmallow tower**	Group Activity/ Share Out Participants share the question "How did teamwork help/hinder building the "Marshmallow Tower" What did you learn from this teambuilding activity?	8:15-8:30	Marshmallow Tower Team Building Items
What is Differentiated Instruction?	Presentation Explanation of Differentiated Instruction	8:30-9:30	Power point presentation/ handout
Activity #1	Grade Level Teams will work together on the differentiated scenarios/ Teams will share out	9:30-10:00	Powerpoint/ Handout/ Chart paper markers
Break		10:00-10:10	

Content	Processes	Time	Materials
Differentiated Instructional Strategies	Presentation- Explanation of Instructional Strategies that make differentiation work	11:10-12:10	Powerpoint
Lunch		12:15-1:15	
Recap from Morning Sessions	Participants will share out some information that was beneficial to them	1:15-1:30	
Activity #2	Participants will work in teams to complete a differentiated instruction activity	1:30-1:45	Powerpoint/ Handout
Differentiated Instruction Assessments	Presentation- Different Types of Assessment to use will be presented	1:50-2:45	Powerpoint
Closing & Ticket Out the Door	Q & A	2:45-3:00	Professional Development Evaluation

Facilitator Notes
Day 1
Utilizing Differentiated Instruction to Reach All Learners
Goals

- Participants will demonstrate knowledge of differentiated instruction and implement differentiation
- Participants will know and understand various ways to differentiate their lessons

7:30-8:00- Participants will
- ✓ Sign-in
- ✓ receive agenda
- ✓ receive handout packet
- ✓ nameplate
- ✓ Danishes and juice will be available for participants

8:00-8:15- Presenter will
- ✓ Introduce herself
- ✓ Provide purpose of the presentation and the benefits
- ✓ Go over the agenda and discuss norms
- ✓ Discuss where restrooms are and any pertinent information in case of an emergency

8:30-8:15- **Ice Breaker Marshmallow Tower**

Participants will work together as a team of 3 or 4 depending on the total size of the group. Participants will have marshmallows, string, and spaghetti. Participants will be given 10 minutes to work together to build the highest marshmallow tower without it falling. The group with the highest tower wins. When the timer goes off the presenter will determine the winner. The winners will discuss their strategy with the group. Other groups will share out as well to determine what they found to be beneficial in developing the tower. We will also discuss the importance of teamwork in building the tower.

8:30-9:45- **What is Differentiated Instruction?**

Talking points
- ✓ Providing students with different ways to acquire contend and developing teaching materials to ensure all students learn effectively regardless of their different learning abilities. It is a response to student's learning needs
- ✓ As teachers, our task it to provide an education for the kinds kids we have, not the kinds of kids we want to have.

- ✓ Differentiating the instruction for a student ensures how a student learns the content, what the student learns, and how the student demonstrates mastery of the content.
- ✓ As teachers we have to provide instruction that is fair to students which means creating multiple paths where students that have different learning abilities and interests so that students can learn equally.
- ✓ Differentiation means to make sure that students get the right learning tasks at the right time making sure that the students have multiple options for taking in information and making sense of ideas and expressing what they have learned.
- ✓ Teachers have to effectively plan for what students need to learn, and how they learn it or how they will show how they have learned it. Teachers have to plan to create a reasonable number of approaches to make sure students learning needs are being met

Key Principles of a Differentiated Classroom

- ✓ The teacher is
  - Clear about the subject matter
  - Builds upon student differences
  - Adjusts the content, process, and product based on the students learning profile…. Teachers are flexible
  - Flexibility is the hallmark of a differentiated classroom

Rationale for Differentiated Instruction

- ✓ Students have different levels of readiness, different levels of interests, different ability levels and different cognitive needs
- ✓ Because of student's different levels it is important to meet the student's at their learning needs to ensure growth

Differentiation is not

- ✓ A program
- ✓ Hard tasks for some and easy for others
- ✓ A different plan for every student in the classroom
- ✓ Homogenous grouping

Differentiation is

- ✓ Student centered
- ✓ Research based practices
- ✓ Flexible grouping
- ✓ Different approaches
- ✓ A way of thinking and planning
- ✓ Multiple approaches to content, process, and product

Think- Write-Pair-Share

- ✓ Participants will briefly what may happen in each stage of differentiated instruction
  - How can you differentiate the content?
  - How can the process of how students learn be differentiated?
  - How might you differentiate the final product?

3 Stages of Differentiated Instruction

- ✓ **Content**- What you want students to learn. When differentiating the content teachers can use resource materials at varying readability levels. Audio and video recordings, highlighted vocabulary, charts, models and manipulatives
- ✓ **Process**- teachers can use leveled or tiered activities, hands on materials, allow students to work alone, with partners, triads, or small groups. Teachers can vary the pacing of the lesson according to student readiness
- ✓ **Product**- Determines how students demonstrate what they've learned. When differentiating the product. Teachers should have tiered product choices for students. Teachers should explicitly model the outcome and allow students to use technology with their products and also use presentations. Teachers can provide product choices that have a range in multiple intelligences

Discussion Question

- ✓ What are you already doing to differentiate instruction in your classroom? Allow participants 10 minutes to discuss with their elbow partner. Allow one person per table to discuss

9:45-10:15- **Activity #1**

- ✓ Participants will count off by 1, 2, and 3 Each participant will have a number whether it is 1, 2, or 3. All participants with like numbers will go to an area with a large piece of chart paper. Each chart paper will have a classroom scenario. Each group of participants will answer the question on the chart paper based on their scenario. Each group will select a writer and a reporter. Each group will work together for 15 minutes and each group will report out.

10:15- 10:30- **Break**

10:30-11:45 -**Differentiated Instructional Strategies**

- ✓ Strategies that are useful in implementing differentiated instruction
  - Tiered instruction- change the complexity or required readiness of a task or unit of study in order to meet the development needs of

the student's assignments to be tiered which is the process, content, products, assignments, these assignments can be adjusted by their level, their pacing, and students learning styles.

- Anchoring activities- activities that students do when they have completed their present assignment or when the teacher is currently working with another group of students. These activities depend on student's ability levels
- Flexible grouping- allows students to be appropriately challenged and does not allow students to be labeled due to their academic ability. Students groups change as the teacher accesses them and they show growth. Students groups can be homogenous ability and heterogenous
- Compacting Curriculum- allow teachers to assess student knowledge and skills to determine if students have or have not mastered the content and the teacher can adjust the lesson according to the assessment. Students that demonstrate mastery can move to a tiered activity.
- Graphic Organizers- allows students to visualize the content and organize information helps to establish prior knowledge, activate schema, helps students make predictions and assess students' comprehension
- Scaffolding- increases opportunities for students to meet instructional objective. Lessons/ skills build throughout the lesson for students to obtain mastery
- Assignment Choices- gives students an opportunity to choose their assignment but teachers have to have already demonstrated the skill on the assignment choice for students to continue with mastery of the skill. Students feel more comfortable when they choose an assignment that benefits their needs.

11:45-12:50- **Lunch**

12:50-1:20- **Morning Recap**

- ✓ Participants will share with other participant's information that they will incorporate in their classrooms. We will rotate 3 times choosing a different partner or group to discuss with

1:30-1:45-**Activity # 2**

- ✓ Participants will count off by 1, 2, and 3 Each participant will have a number whether it is 1, 2, or 3. All participants with like numbers will go to an area with a large piece of chart paper. Each chart paper will have a classroom scenario. Each group of participants will answer the question on the chart paper based on their scenario. Each group will select a writer

and a reporter. Each group will work together for 15 minutes and each group will report out.

- The procedure for this activity is the same as the previous activity; however, participants will apply a concept from the morning presentation to use in the scenario

1:50-2:35- **Assessments for Differentiated Instruction**

- ✓ Purpose of Assessment- Assessments are required to determine that methods of knowledge acquisition are most effective for an individual student and allows teachers to effectively group to meet the students' needs
  - Drives instruction
  - Helps teachers to identify next steps
- ✓ What Can Be Assessed
  - Readiness- skills, content knowledge, concepts
  - Interest- interest surveys, interest centers, self- selection
  - Learning profile- areas of strengths and weaknesses, work preferences, self-awareness
- ✓ Types of Assessments
  - On- going Assessment/ diagnostic continuum (student & teacher data)
    - Preassessment -Finding out
    - Formative assessment -Keeping Track and checking up
    - Summative assessment- Making sure

2:45-3:00- Closing & Ticket Out the Door

- ✓ Participants will ask any pertinent questions
- ✓ Participants will complete professional development evaluation

Differentiating Instruction

Utilizing Differentiated Instruction to Reach All Learners

Norms

- Be present and engaged
- Be respectful
- Share the stage
- Stay focused on the students

Session Objectives

- KNOW
  - Participants will demonstrate a knowledge of differentiated instruction and implement differentiation
- Understand
  - Participants will understand various ways to differentiate their lessons

Ice Breaker Activity

BUILDING A
MARSHMALLOW TOWER

Differentiated Instruction

Differentiated Instruction involves providing students with different ways to acquire content and developing teaching materials so that all students within a classroom can learn effectively, regardless of differences in ability.

Differentiated Instruction

- Plan for students we have..
  - Providing multiple learning paths
- Students demonstrate how they learned the content in multiple ways
- Teachers have to plan to create a reasonable number of approaches to make sure students learning needs are met.

Key Principles of a Differentiated Classroom

- The teacher is **clear about** what matters in **subject matter**.
- The teacher understands, appreciates, and **builds upon student differences**.
- **Assessment** and **instruction** are **inseparable**.
- The teacher adjusts **content, process, and product** in response to student **readiness, interests**, and **learning profile**.
- All students participate in **respectful work**.
- Students and teachers are **collaborators** in learning.
- Goals of a differentiated classroom are **maximum growth** and **individual success**.
- **Flexibility** is the hallmark of a differentiated classroom.

The Rationale for Differentiated Instruction

Different levels of readiness

Different Interests

The Rationale for Differentiated Instruction

Different Ability Levels

Different Cognitive Needs

What Differentiation Is Not

- One Thing
- A Program
- The Goal
- Hard questions for some and easy for others
- 35 different plans for one classroom
- A chaotic classroom
- Just homogenous grouping

What Differentiation Is …

- Student Centered
- Best practices
- Different approaches
- 3 or 4 different activities
- Multiple approaches to content, process, and product
- A way of thinking and planning
- Flexible grouping

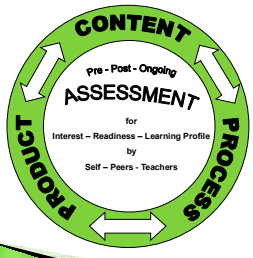
Think–Write–Pair–Share

Briefly explain what may happen in each stage of differentiated instruction.

1. *How can you differentiate the content?*
2. *How can the process of how students learn be differentiated?*
3. *How might you differentiate the final product?*

3 Stages of Differentiation

- The **content** of lessons may be differentiated based on what students already know.
- The **process** of how the material in a lesson is learned may be differentiated for students based on their learning styles, taking into account what standards of performance are required for the age level.
- The **product** is essentially what the student produces at the end of the lesson to demonstrate the mastery



Discussion Question

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

Let's Do An Activity!!!!

This activity will allow us to discover what does a student need in order to be ready to learn!!

Let's Take A Break!!!

15 minutes

Differentiated Instructional Strategies

- Tiered Instruction
- Anchoring Activities
- Flexible Grouping
- Compacting Curriculum
- Graphic Organizers
- Scaffolding
- Assignment Choices

Let's Recap

Brief Discussion from the topics before lunch

- What is differentiated Instruction?
- What is one thing you will change in your classroom regarding differentiated instruction?

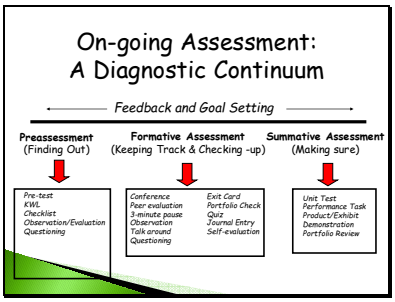
Let's Do Another Activity!!!!

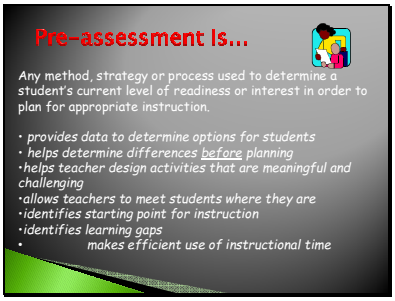
Assessments for Differentiation

- **Purpose**
  - Assessments are required to determine what methods of knowledge acquisition are most effective for an individual student and allow teachers to effectively group to meet the students' needs.

Assessment in a Differentiated Classroom

- **Assessment drives instruction. (Assessment information helps the teacher map next steps for varied learners and the class as a whole.)**
- **Assessment occurs consistently as the unit begins, throughout the unit and as the unit ends.**
- **Teachers assess student readiness, interest and learning profile.**


On-going Assessment:
A Diagnostic Continuum
Feedback and Goal Setting
Preassessment
(Finding Out)
Formative Assessment
(Keeping Track & Checking -up)
Summative Assessment
(Making sure)
Pre-test
KWL
Checklist
Observation/Evaluation
Questioning
Conference
Peer evaluation
3-minute pause
Observation
Talk around
Questioning
Exit Card
Portfolio Check
Quiz
Journal Entry
Self-evaluation
Unit Test
Performance Task
Product/Exhibit
Demonstration
Portfolio Review


Pre-assessment is...
Any method, strategy or process used to determine a student's current level of readiness or interest in order to plan for appropriate instruction.
• provides data to determine options for students
• helps determine differences before planning
•helps teacher design activities that are meaningful and challenging
•allows teachers to meet students where they are
•identifies starting point for instruction
•identifies learning gaps
• makes efficient use of instructional time

Formative Assessment Is...

A process of accumulating information about a student's progress to help make instructional decisions that will improve his/her understandings and achievement levels.

- Depicts student's life as a learner
- used to make instructional adjustments
- alerts the teacher about student misconceptions "early warning signal"
- allows students to build on previous experiences
- provides regular feedback
- provides evidence of progress
- a aligns with instructional/curricular outcomes

Summative Assessment Is...

A means to determine a student's mastery and understanding of information, skills, concepts, or processes.

- Should reflect formative assessments that precede it
- should match material taught
- may determine student's exit achievement
- may be tied to a final decision, grade or report
- should align with instructional/curricular outcomes
- may be a form of alternative assessment

Questions


Thank You for Your Participation! Please complete the professional development survey

References

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Day 2
Agenda

Date:
Time: 8:00-3:00
Audience: Elementary Teachers Grades 3-5
Location:
Topic: Implementing Literacy & Math Connections during Instruction with an emphasis on vocabulary usage
Objectives:

- Participants will know and understand how to integrate literacy and math
- Participants will engage in small group activities that utilize strategies to help support their struggling students

Content	Process	Time	Materials
Sign-In and Breakfast to greet one another		7:30-8:00	Sign- In Sheets
Agenda & Framing of the Day	Welcome / Review of Agenda/ Presenter Introduction	8:00-8:15	
Ice Breaker/ Morning Activity	Super Sleuth-	8:15-8:30	Note Cards
Integrating Literacy with Math as a strategy	Presentation Benefits of Literacy and math connections	8:30-9:30	Powerpoint
Explicit Instruction with Reading strategies that can be integrated with math	Presentation	9:30-10:30	Powerpoint
Tier Level Vocabulary	Presentation	10:30-10:45	Powerpoint
Video & Discussion	Video	10:45-11:15	
Break		11:15-11:30	
Activity	Teachers will work in grade level to format a lesson integrating reading & math	11:30-12:15	Handouts
Lunch		12:15-1:15	

Activity- Small group rotations	Frayer Model/ Foldables/ Head's Up Vocabulary	1:15-1:45	Handouts
Activity- Small group rotations	Frayer Model/ Foldables/ Head's Up Vocabulary	1:45-2:15	Handouts
Activity- Small group rotations	Frayer Model/ Foldables/ Head's Up Vocabulary	2:15-2:45	Handouts
Closing & Ticket Out the Door	Q&A	2:45-3:00	Professional Development evaluation

Facilitator Notes
Day 2
Implementing Literacy and Math Connections during Instruction with an emphasis on Vocabulary
Goals

- Participants will know and understand how to integrate literacy and math
- Participants will engage in small group activities that utilize strategies to help support their struggling students

7:30-8:00- Participants will

- ✓ Sign-in
- ✓ receive agenda
- ✓ receive handout packet
- ✓ nameplate if the participant did not attend yesterday's professional development or needs another

8:00-8:15- Presenter will

- ✓ Introduce herself
- ✓ Provide purpose of the presentation and the benefits
- ✓ Go over the agenda and discuss norms
- ✓ Discuss where restrooms are and any pertinent information in case of an emergency

8:30-8:15- **Ice Breaker Super Sleuth**

Today's icebreaker will be a review of yesterday's topic-DI. Participants will have response cards with questions. They will walk around the room to find someone to initial their question

8:30-9:30- **Connecting Math and Literacy**

- ✓ Mathematics has the same language as literacy. There is more of an overlap between language and literacy than most people think. Teachers can integrate math and literacy activities and allow students to double their learning.
- ✓ When teachers engage students in talking about mathematics it builds language skills, even when students are debating about mathematics they have to use precise language in their conversations by explaining their reasoning

- ✓ As students begin to become great mathematicians they learn how to discuss exactly what words mean they also learn great literacy skills
- ✓ When reading stories students develop a connection with math many stories have numbers, ordering numbers, and patterns. So not only are students reading (literacy) they are also developing mathematical concepts and ideas. Teachers must strategically plan to make sure they are making the connections for students.
- ✓ Teachers can read through books for the literacy component and discuss the important math concepts… discuss contents such as shapes, patterns, sizes, sorting,
- ✓ Building language is important way to also support students when learning math
- ✓ Misconceptions can be discovered- When students have to write an explanation or explain their thinking to someone else, they develop a deeper understanding of the concept. If there are any misconceptions, they can be discovered and be easily corrected
- ✓ Even in math lessons teachers can incorporate writing and speaking. Allowing students to express

How Literacy Can Promote a Deeper Understanding of Math involving writing and speaking

- ✓ Students present problems to class- Allow students to go to the board and explain their solution paths to their problems it can be homework or classwork. Allow students to ask questions about the student's problem. As a teacher you can decide to answer the question or allow the student that presented the problem to answer the question
- ✓ Have students to write down how they solved their problem- Teach students to be able to write good explanations about how they solved their problem such as step by step procedures, the why behind the problem, and how the step apply to the problem
- ✓ Have students to explain a mistake they have made- Allow students to be able to explain their mistakes after going over a set of problems. Ask students why do they think they missed it. Allow them to provide a through explanation of what they did wrong and what they should have done instead
- ✓ Student can write down how they would explain a mathematical concept to their friend. Allow student about 5-10 minutes to write down how they would explain a math concept to their friend
- ✓ Explain how a problem was Solved-Students can work in pairs to discuss how a problem was solved. After the discussion students can give each other feedback or ask questions about their explanation

- ✓ Use Exit Tickets- This allows students to write an explanation to a question which builds on their literacy skills. Students write a through explanation to a specific content question such as "Why do you need a common denominator when adding fractions?" or ask a reflective question.
- ✓ Students take Notes-Students can write down formulas to solving math problems or the steps required to get to the final answer. Taking notes allows students to concentrate better and it becomes a great resource for them to use later
- ✓ Students ask each other for help in solving a problem- This will allow the student that is giving the explanation to develop a deeper understanding

Using Literacy Strategies to Teach Math

- ✓ **Teach Math Vocabulary**-In math the task of knowing and determining the unknown vocabulary is more challenging because there are words that are specific to math and not used in everyday conversations. Teaching math vocabulary helps to build on to their comprehension in reading.
    - Word wall
    - Graphic organizers
    - Word sorts
    - Venn diagram
    - Math talks
- ✓ **Use Schema** (prior knowledge) -It's important to build onto what students already know and add on to it. By starting with something familiar, students can then make a connection from the new concept to what they already know, helping to make sense of the new ideas, as well as helping with retention. For example, focus on reinforcing and understanding repeated addition. This allows students to take something familiar which is addition and think about it in a new way which is the repeated addition and then make a connection from repeated addition to multiplication.
- ✓ **Make Connections**- When teachers help students to use their prior knowledge students are able to have something to connect to. Teachers can also use other strategies to help students learn, apply and remember new math concepts
    - Math to math- Allow students to see the connections of one math concept to another math concept
    - Math to self- Allow students to see the connection of the math that they are learning and how it connects to their life.
    - Math to world- Allow students to make connections and see math in the world around them

- ✓ **Make Predictions-** Students make predictions and use inferences in reading as a reading comprehension strategy they can also use this same strategy in math. Students can make predictions about having an idea on how to solve a problem whether it is valid method or not. Students can play around with numbers to see what happens. Students can look for patterns and generalize their observations
- ✓ **Teach Kids to Visualize**-Students visualize stories and create images in their minds they can also do the same for math. With word problems students can circle words that paint a picture and provide important information and use those words circled to draw a picture. This strategy is important because it provides kids with a mental image which will help them remember what they have learned.

10:30-10:45- Tier Level Vocabulary

- ✓ Vocabulary is used widely in literacy teachers should also incorporate vocabulary usage within their math lessons in order to reach all learners teachers should use tier vocabulary
- ✓ Tier 1 vocabulary-words and phrases with subject specific meanings that differ from meaning used in **everyday** life
  - Table, ruler, square, face, chord, digit, even, times, set, etc.
- ✓ Tier 2 Vocabulary- general academic vocabulary used across disciplines
  - Compare, analyze, evaluate, describe, sequence, classify, etc.
- ✓ Tier 3 Vocabulary – subject specific words and/or symbols defined for use in the disciplines
  - Exponent, numerator, denominator, divisor, least common multiple

10:45-11:15- **Video & Discussion**

- ✓ Participants will watch Bridging Content & Language: Strategies from a Dual Language Classroom
  https://www.teachingchannel.org/video/student-thinking-logs
  - This video focuses on utilizing literacy in the math lesson students use
    "My Thinking Logs" which is a Literacy practice for math
- ✓ After watching the video participants will discuss the following questions
  - Why is it important for students to talk it out before writing?
  - What supports are in place to help students write out their ideas?
  - Why is this an especially effective strategy for struggling students?

11:15-1:30- Break

11:30-12:15- **Activity-**

- ✓ Teachers will engage in working together to develop a small group activity that they can use to implement literacy strategies within their math lessons. Teachers will be given chart paper to use to write their small group activity on. After working for about 35 minutes each group will discuss their activity with the entire group

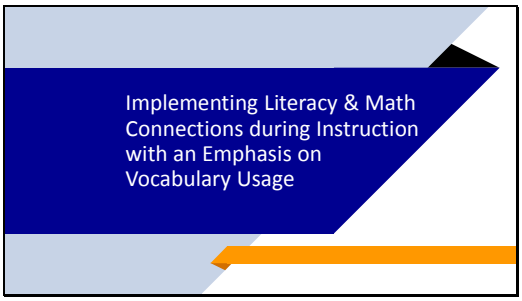
12:15-1:15- Lunch

1:15-2:45- **Activity Small group rotations**

- ✓ Participants will participate in small group rotations to help increase vocabulary usage in the classroom. There will be 3 rotations for 30 minutes each. A timer will be set some participants will start at station 1, some will start at station 2, and some will start at station 3. At the sound of the timer teachers will rotate to the next station depending on where they started. Similar to having small groups in the classroom. This activity will give participants an idea of some vocabulary strategies that they can use in their classroom to help all learners.
    - Frayer Model- in this small group teachers will learn how to use the Frayer model to increase student's vocabulary usage
    - Foldables- (make & take) in this small group teachers will use the vocabulary words provided in the group to create a graphic
    - Heads Up Vocabulary – in this small group teachers will play a vocabulary game where a person has a vocabulary word on their head (this person does not know the vocabulary word) the other participants in the group will give the person a clue to guess the vocabulary word on their head

2:45-3:00- Q & A and Ticket Out the Door

Slide 1



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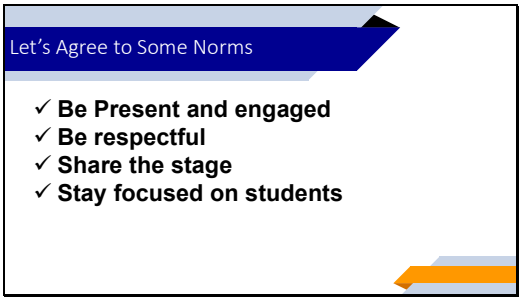

Slide 3

Session Objectives

- Participants will know and understand how to integrate literacy and math to reach all learners
- Participants will engage in small group activities that utilize strategies to help support their struggling students.

Slide 4

Ice Breaker- Super Sleuth

Directions: Walk around the room and find someone to respond to the questions on your Super Sleuth paper. After a verbal answer the person will initial the square.
Rules:
-A person can only answer and initial one square.
-The goals are to activate prior knowledge and to meet new people with new ideas.

Slide 5

Super Sleuth

What is your definition of differentiated instruction?	Give an example of when you have used DI?	What is something you would like to learn about DI?
When do you use small group instruction?	Differentiation means as many lesson plans as you have students. Agree?	How do you discover how your students learn?
What is one way you can form groups in your classroom?	What are some quick on-going assessments in your class?	Are DI and assessment related?

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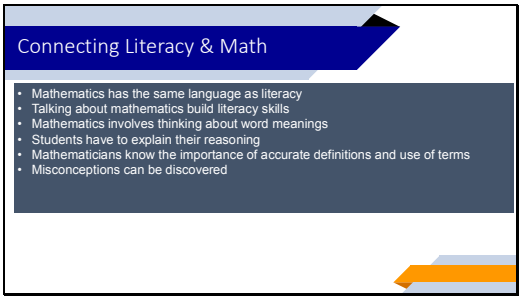

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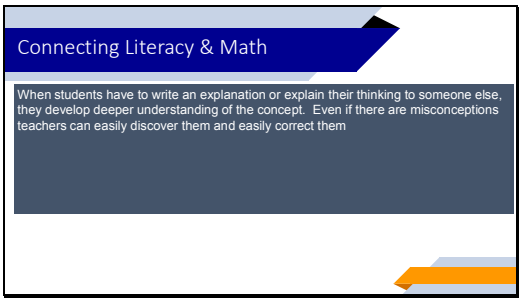

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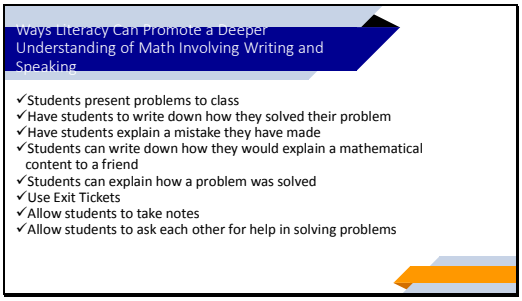

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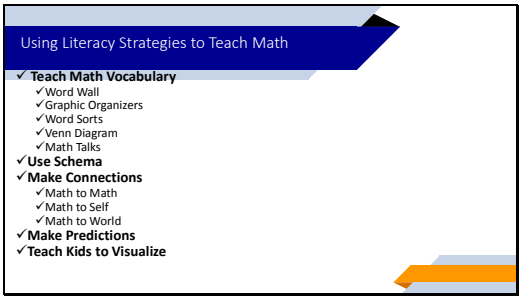

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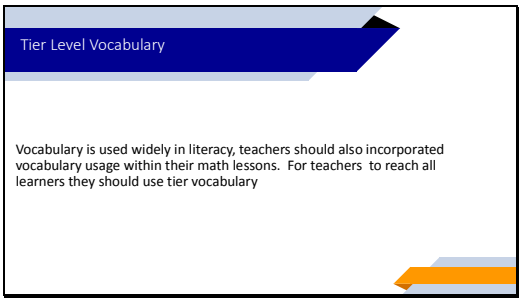

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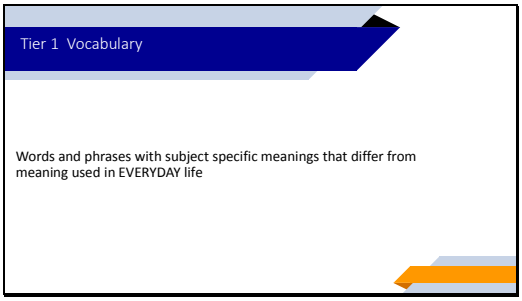

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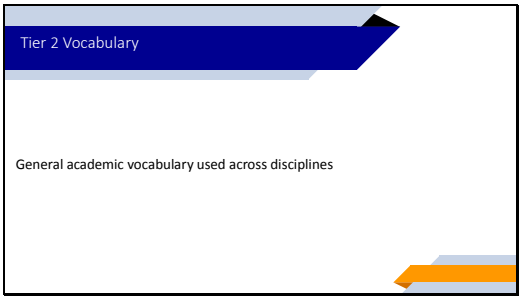

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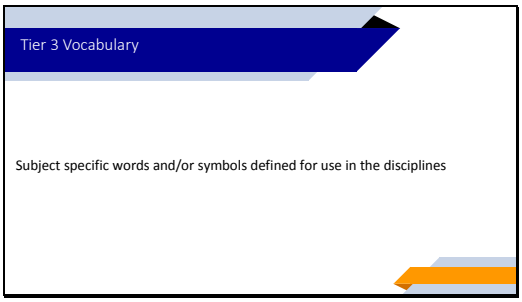

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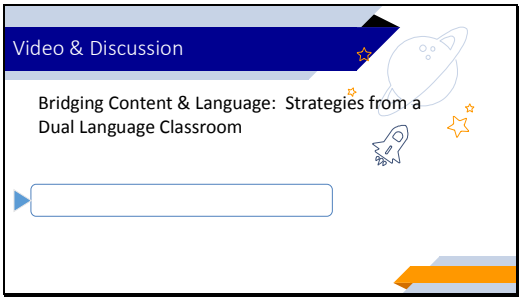

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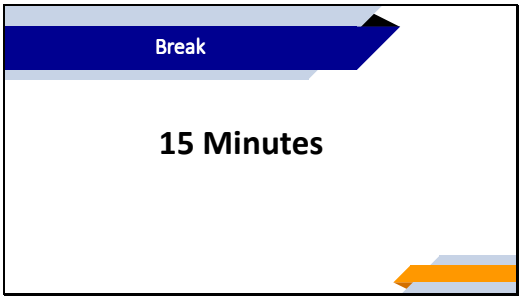

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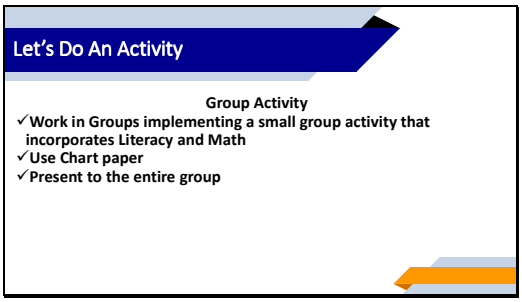

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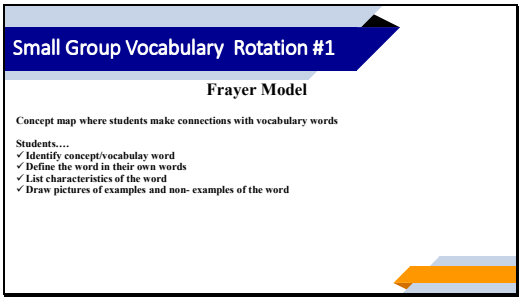

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Small Group Vocabulary Rotation #2

Foldables

Slide 19

Small Group Vocabulary Rotation #3

Heads Up Vocabulary

Slide 20

Questions

Slide 21

References

Kardamis, Linda. "10 Ways Literacy Can Promote A Deeper Understanding of Math." *Teachthought.com*, 20 Aug. 2017, www.teachthought.com/.

Geek, Bethany. "Using Literacy Strategies to Teach Math." *Mathgeekmama,* 25 May. 2016, www.mathgeekmama.com

Day 3

Agenda

Date:
Time: 8:00-3:00
Audience: Elementary Teachers Grades 3-5
Location:
Topic: Planning with Remediation in Mind for Reading and Math
Objective:

- Participants will know and understand how to plan small group remediation in Reading and Math
- Participants will plan a reading and math lesson utilizing remediation

Content	Process	Time	Materials
Sign- in		7:30-8:00	Sign- In Sheets
Agenda & Framing of the day	Welcome/ Review of Agenda/ Review of the last two days	8:00-8:15	Agenda
Ice Breaker	Collaborative Discussion…What does small group instruction look like in your reading and math block?	8:15-8:30	
Reading Focus		**8:15**	
Small Group Instruction	Presentation	8:30-9:15	Powerpoint

Scaffolding in Reading	Presentation	9:15-10:00	Powerpoint
Gradual Release	Presentation	10:00-10:45	Powerpoint/ video
Break		10:45-10:55	
Math Focus		**11:00**	
Adaptations for Learning gaps and misconceptions	Presentation	11:00-11:30	Powerpoints/ Handouts
Remediation Tools	Presentation	11:30-12:00	
Lunch		12:00-1:00	
Small group instruction re-teaching	Presentation	1:00- 2:00	
Collaborative planning	Teachers will plan a lesson	2:00- 2:50	Curriculum, standards, pacing guides
Closing & Ticket out the door	Q& A	2:50- 3:00	Professional Development Evaluation

Facilitator Notes
Day 3
Planning with Remediation in Mind for Reading and Math
Goals

- Participants will know and understand how to plan small group remediation in Reading and Math
- Participants will plan a reading and math lesson utilizing remediation

7:30-8:00- Participants will
- ✓ Sign-in
- ✓ receive agenda
- ✓ receive handout packet

8:00-8:15- Presenter will
- ✓ Introduce herself
- ✓ Provide purpose of the presentation and the benefits
- ✓ Go over the agenda and discuss norms
- ✓ Recap of the last two days and the benefits for the participants
- ✓ Discuss where restrooms are and any pertinent information in case of an emergency

8:15-8:30- **Collaborative Discussion**
- ✓ Participants will discuss what small group looks like their classroom?
  - How do participants determine their small group instruction?
  - What instructional materials do they utilize during their small group instruction

- Participants will share out

✓ Today's professional development session will focus on reading and math. Reading will be before lunch and math will be after lunch

Reading Focus

8:30-9:15- Small group instruction

✓ **What is Small group instruction?**
- Small group instruction offers an environment for teachers to provide students extensive opportunities to express what they know as well as receive feedback from other students and the teacher. Small group allows instructional conversations to be easier to conduct and support when teachers have a small group of students. Small group instruction allows teachers to help increase their student's academic levels

✓ **Organizing Small Groups –**
- Teachers utilize ongoing assessments to determine growth and deficiency of a skill
- Groups are changed according to the needs of the students and the skill being taught based on the skill deficit the teacher will rearrange the groups
  - Students that are not working in the small group with the teacher
    - Students are engaged in independent assignments, these assignments are determined by the student's academic levels

✓ **When should it occur?**
- After good first teaching- small group occurs after teachers have taught whole group. Small group allows teachers to reinforce specific skills and concepts.

✓ **Key Benefits of Small Group Instruction**
- **Teachers can Personalize Instruction-** small group instruction allows teachers to work more closely with each student. This type of instruction provides the opportunity to evaluate students' learning strengths, locate gaps in the development of their reading or math skills and tailor lesson focused on specific learning objectives. Teachers can check for understanding, reinforce skills presented in whole group instruction and if needed they can change the pacing of a lesson. In many instances good first teaching is tailored more to Tier 1 students, during small group teachers can break the lesson down where students can understand it at a lower level.

- **Provide Feedback-** Teachers are able to monitor students more closely and provide feedback more quickly in real time. They can also provide students with individualized feedback. This feedback allows students to improve their reading and math skills.
- **Reteach**- Small group instruction allows teachers to monitor student actions more closely and to provide additional teaching practice for struggling students to help students to be able to master important skills and to better understand key concepts
- **Build Confidence Through Collaboration-** Small group instruction provides a comfortable environment and can boost the confidence of students. Some students are shy and will not participate; however, in a smaller group setting students might collaborate more.

9:15-10:00- Scaffolding-

- ✓ **What is Scaffolding**? -this is a process where the teacher can support a student by building on to their fundamental skills and utilizing step by step (building of skills) of getting students to master a skill.
- ✓ **What does Scaffolding Look Like in the classroom**? -
  - Taking a complex skill (multi- step strategy) ad teaching it in manageable and logical pieces or chunks
  - Sequencing skills so that they build on each other
  - Selecting examples and problems that progress in complexity
  - Providing demonstrations and completed models of problems
  - Providing hints and prompts as students begin to practice a new skill
  - Providing aids such as cue cards and checklists to help students remember the steps and processes used to complete tasks and solve problems
- ✓ **What happens when teachers scaffold effectively**?
  - Students will learn new basic skills as well as more complex skills
  - Students maintain a high level of success as they learn more complex skills
  - Students move towards independent use of the acquired skill
- ✓ **Scaffolding Strategies for Students**
  - Show & Tell- providing a model for students is one of the major tools of scaffolding. Often times if students can see what you are explaining or modeling it allows them to be able to grasp the contents better. Teaches should use pictorial

models and them move students to more abstract models. Think alouds are a great way for teachers to model their thinking process

- Tap into student's prior knowledge- Find out what students already know about the skills that will be taught. This will allow teacher to make necessary connections about a student's learning. A graphic organizer such as a KWL chart will be beneficial in finding out student's prior knowledge
- Give students time to talk -Allow students to process their ideas that they have been presented with and allow students to verbally discuss with their peers their learning. Teachers have to develop a community of learners within their classrooms. Structured discussions work best for children regardless of their maturity level. Teachers should utilize think-pair-share as a strategy for this
- Pre-Teach Vocabulary- Teachers should front load the vocabulary. Introduce the words to students using pictures or within a context that they have already know and they are interested in
- Use Visual Aids-Teachers should provide visuals for their students such as graphic organizers, pictures, and charts which can serve as scaffolding tools. These tools are not the final product but ways to help students with their thinking. The tools are temporary to help students grasp the concept being taught and then students develop their own thinking without the graphic organizers
- Pause- Ask Question, Pause, Review- This strategy allows teachers to check for understanding. Teachers teach a new concept pause and allow students to think about the learning after the pause teachers ask a strategic question and pause again. Teachers have to make sure that they are asking guided open ended questions. Students can also have a discussion in pairs if it seems that they are not able to answer the question

10:00-10:45- **Gradual Release**-

- ✓ Why Gradual Release?
  - Recognized widely as an approach to move classroom instruction from teacher centered whole group to student- centered, collaboration, and independent practice
  - The Gradual Release model emphasizes an instructional delivery plan to demonstrate, prompt and practice

- ✓ **Gradual Release** – I Do Direct Instruction
  - **Establish a clear purpose**- establishing a clear purpose, setting learning objectives and provide feedback is a critical instructional strategy. Students are involved in the process and students should be provided with clear explanations of the purpose and the activities that are connected with the purpose. Teachers should make sure they have established a clear purpose for the lesson, including why this is important for students to learn? They should plan how they will model the skill and strategy for their students? Teachers should also plan a think aloud to make thinking visible for their students
- ✓ **Effectively modeling a strategy or skill**
  - Teachers should make sure that they are
    - Explicit in their modeling
    - Name the strategy, skill, or task
    - State the purpose of the strategy, skill or task
    - Make connections to link prior knowledge to new learning
    - Demonstrate how the skill, strategy, or task is completed alerting students about misconceptions to avoid
- ✓ **Gradual Release WE Do guided instruction**
  - The cognitive load begins to shift to the student- the teacher begins to shift from modeling the concept and works with the students as a guide, and is eventually by their side as students become more independent.
    - Teacher Modeling
    - Whole group and small group instruction occurs
    - Strategic use of cues, prompts, scaffolding, and questioning
    - Formative assessment/data helps guide grouping
    - The collaborative learning process
      - Students working together to complete specific tasks applying what they have learned in the focus lesson and guided instruction
      - Students grouped based upon performance
      - Purposeful accountable talk about the work
  - ✓ Questions for teachers to think about when planning for We DO (guided instruction
    - How will I release responsibility to students during the lesson?
      - How am I going to begin to guide students through the practice of using the focus strategy or skill?
    - How will I scaffold my instruction to meet the needs of all learners?

        - What do I want my students to do individually, in pairs, and in small groups?
        - What will I do? – listen in, teacher observations meet with small groups?
    - What types of effective questions and prompts will I need to be ready to support all learners?
    - How will I assess student understanding?
- ✓ Gradual Release- YOU do- Independent learning
    - Independent Learning of the Gradual Release Model is a time when students fully assume the cognitive load of learning by applying what they have learned in the lesson
    - The You Do process provides learning tasks that provide students with opportunities to apply what they have learned from direct instruction, guided instruction, and collaborative learning
- ✓ Comprehension Check- participants will be provided with a scenario they will read the scenario and decide if it is an example of the gradual release model or if the scenario is missing some parts to the model
    - **Scenario #1**- The teacher demonstrates how to solve multi-digit addition problems with regrouping. She works through the four example problems on the board. The teacher assigns students to work on the odd numbered problems on page 29.
        - Scenario #1 does not represent the gradual release model
    - **Scenario #2-** Using Think aloud and scientific text, the teacher models two comprehension strategies useful in understanding scientific texts. Next as a large group, students and teacher examine sections of text and are guided through the use of one strategy for understanding each section. Students then work with a partner to read the next two sections of text and write a summary sentence. They identify one strategy they used to help the text make sense. Then the students complete one sections of the text independently.
        - Scenario #2 is an example of the gradual release model
- ✓ Participants will watch a video on Gradual Release from teacher Channel https://www.teachingchannel.org/video/improving-teacher-practice

    - Questions to be discussed after viewing the video

1. How would using the, "I do it, we do it, you do it together, you do it alone," model change the way you plan your lessons?
2. How do the post-its hold students accountable and push them to think about their own cognition?
3. Beyond shifting the cognitive load, what are the benefits of structuring lessons in this way?

10:45-10:55- Break

Math Focus

11:00-11:30 **Adaptations for Learning gaps and Misconceptions**

- ✓ Teachers will be given an excerpt from an article to read. As teachers are reading this article they will highlight anything that relates to the importance of knowing the content and teaching strategies. After ten minutes we will come together as a group and discuss the part of the article that participants felt related to strategies taught.
- ✓ Participants will be given an assignment to work- this assignment is an actual assignment for students. Participants will work in pairs to complete the assignment
- ✓ Participants will look at the same assignment completed by a student to determine the student's misconceptions that are evident, prior knowledge that is evident and prior knowledge that is not evident
    - Participants should realize that the student has a place value misconception.
- ✓ Participants will be shown how to use their standards for their grade level to help students that have misconceptions with the lesson. Participants will look at foundational standards to determine how to scaffold the student learning for the current grade level.
    - Addressing misconceptions- Analyze student work daily to determine unanticipated misconceptions and gaps……Customize lessons to address misconceptions and learning gaps…Teachers have to effectively plan to determine any misconceptions that may occur and how to address those misconceptions in the lesson
- ✓ Participants will understand how to use the Standards Comparison Document to address learning gaps and misconceptions
- ✓ Participants will be shown how to crosswalk standards and use resources to adapt to the math curriculum that meets the conceptual demand of the TN Math standards, plan for gaps and misconceptions

11:30 – 2:00- **Remediation Tools/ Small Group Instruction**

- ✓ Participants will be introduced to documents that are called remediation tools to help improve student achievement levels
    - Overview
    - Diagnostic Assessment
    - Guidance for Remediation
    - Review the Assessment
  - Remediation Guides, Instructional Focus Documents and Remediation Tools will be introduced to participants how to locate them and how to implement them in their planning to better support the learning of their students

12:00-1:00- **Lunch**

1:00- 2:00- **Small group re-teaching with remediation in mind**

- Remediation Do's
  - ✓ Plan to remedy the situation
  - ✓ Small group instruction after the whole group math lesson has been taught
  - ✓ Model the work in various ways
  - ✓ Assessments to determine how student's progress
  - ✓ Give students multiple opportunities
  - ✓ Analyze student work
  - ✓ Utilize or develop review days for more small group/reteach/review of skills
  - ✓ Implement focus Fridays or reteach Fridays
- Things to ponder when planning
  - What does small group instruction look like?
  - How do you plan for small group instruction?
  - What steps will you take to identify students learning gaps
  - How will you address student's deficit (method of instruction)?
  - How does the standard relate to or previously taught standards?
- ✓ **Small Group Re-Teaching Plan**
  - Identify a standard that needs to be re-taught
    - Data Sources/ Data driven decision making
    - Exit Tickets
    - IReady
    - Mid/End Module Assessment
    - Standard Blueprint
    - Identify foundational standards that are needed to understand the grade level content?
  - **Model Explicitly at the small group teacher table**
    - Identify resources that you will need to reteach the standard

- I Ready
- I Ready Workbooks/On Line Ready Toolbox
- Fluency Activities
- What is the intended aspect of rigor?
- Identify strategies that will be used to re-teach the standard

- **Independent Practice**
  - What problems will the students work on at the teacher table?
  - Students work independently on practice problems
- **Assessment**
  - How will you assess the learning? (Daily)
    - Exit Ticket
    - Timed and Paper Assessments

2:00-2:50- **Collaborative Planning**

- ✓ Teachers will work in grade level teams using the documents that were introduced during today's PD session

2:50-3:00- Q & A and Ticket Out the Door

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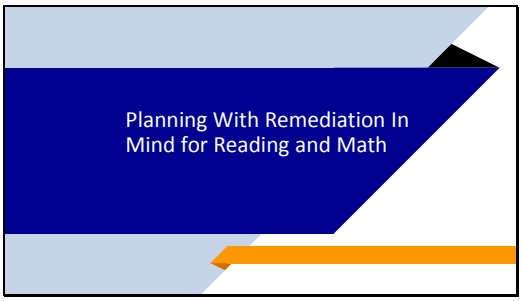

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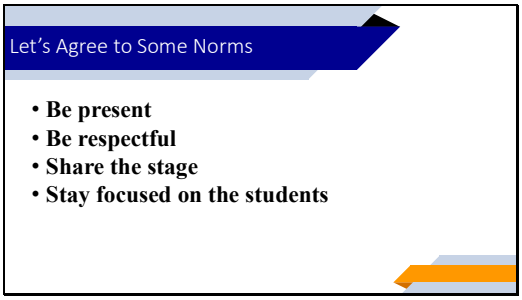

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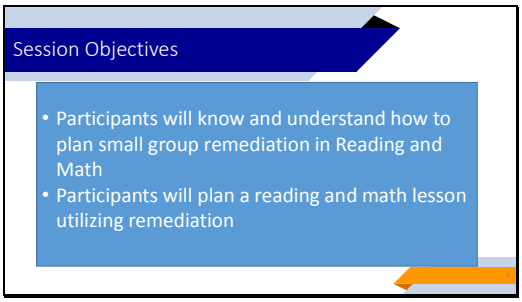

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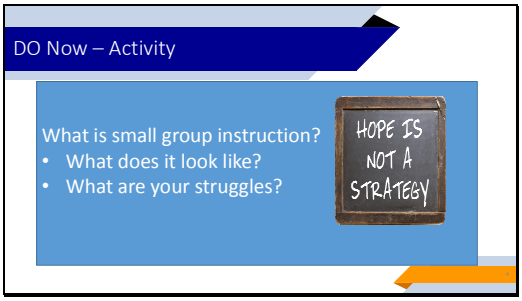

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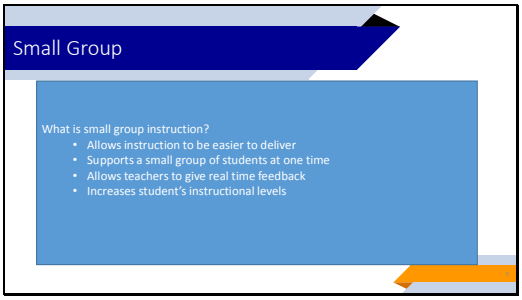

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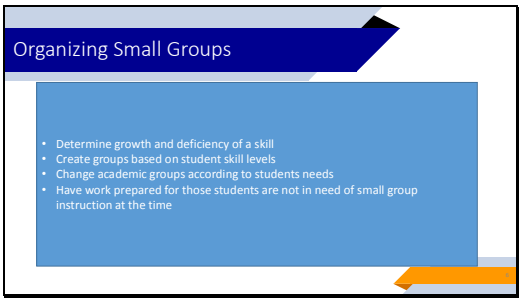

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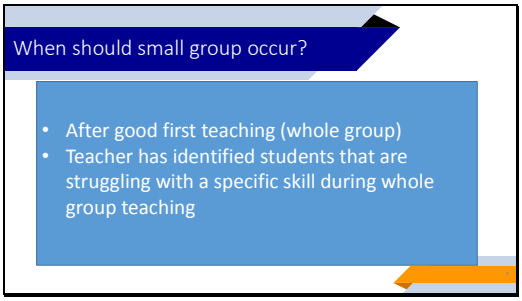

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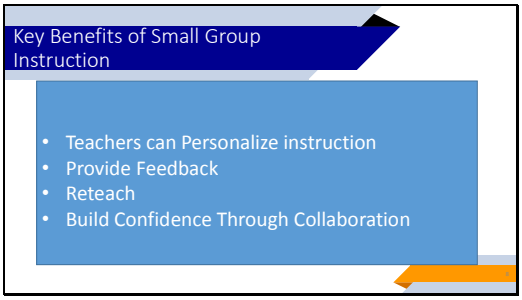

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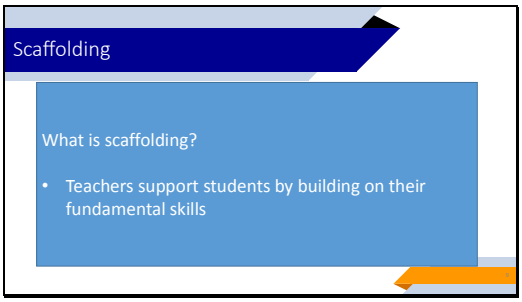

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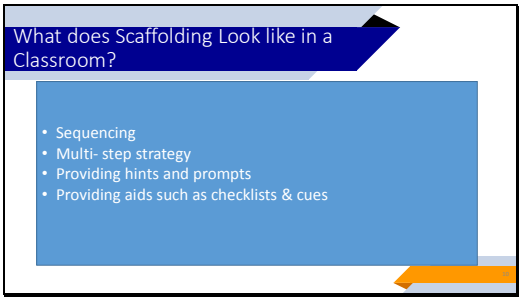

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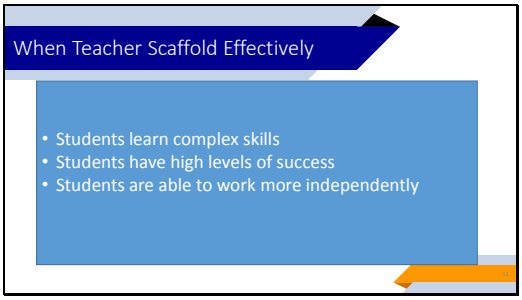

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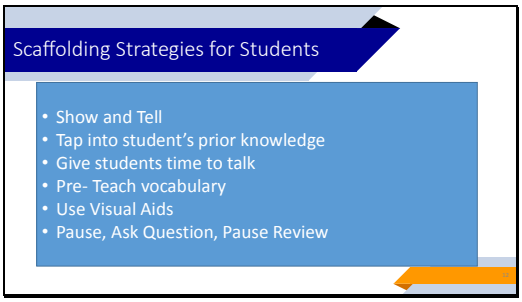

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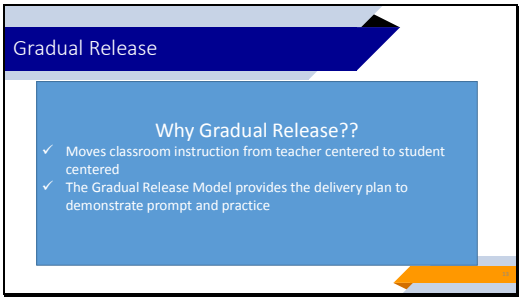

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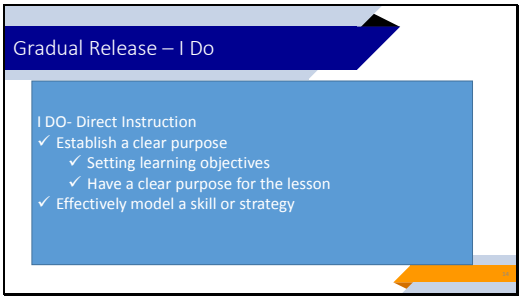

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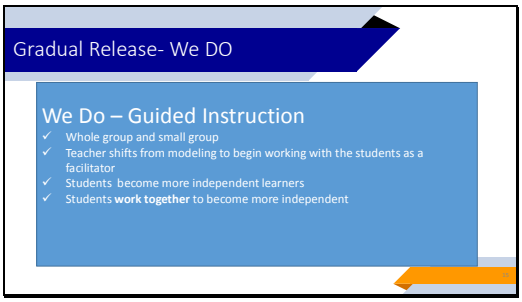

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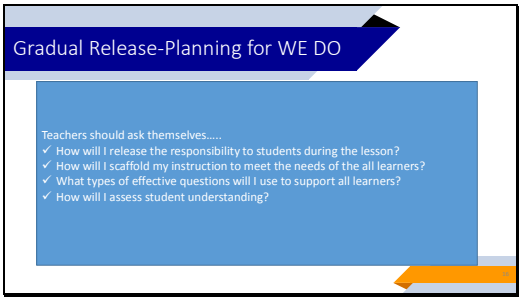

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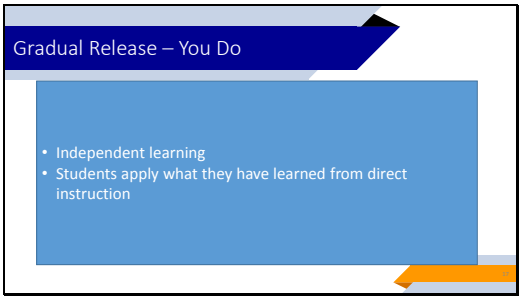

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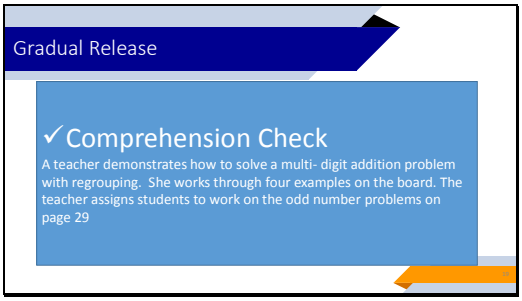

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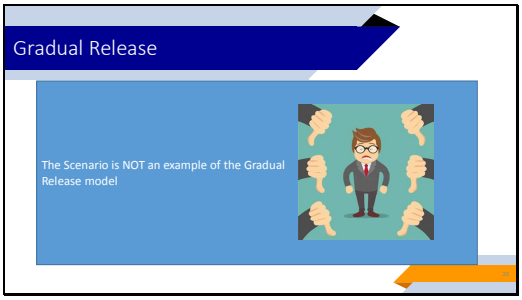

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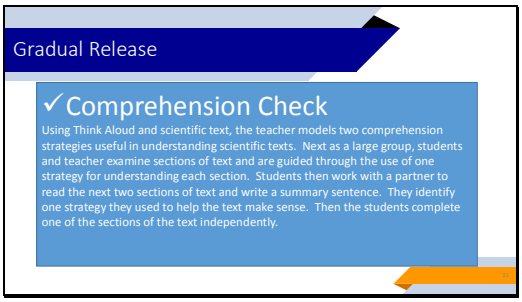

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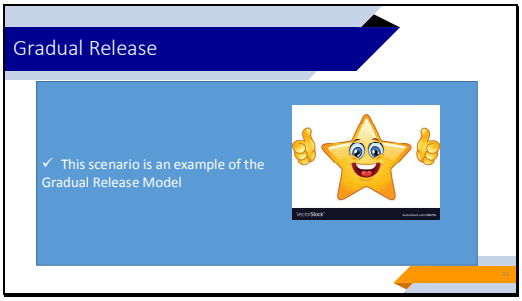

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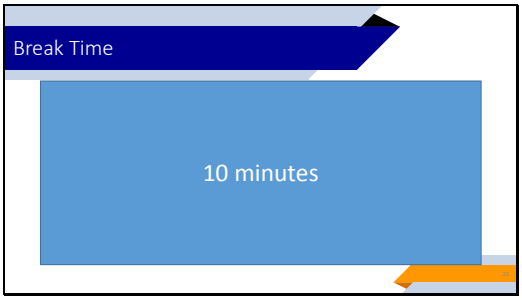

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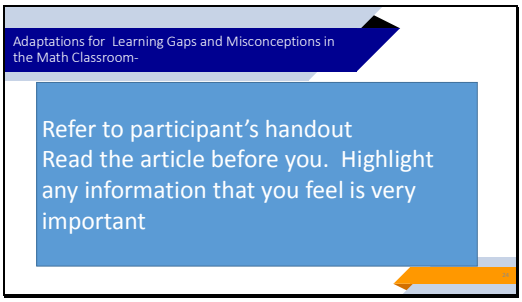

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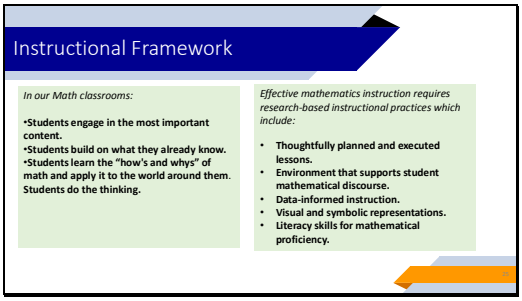

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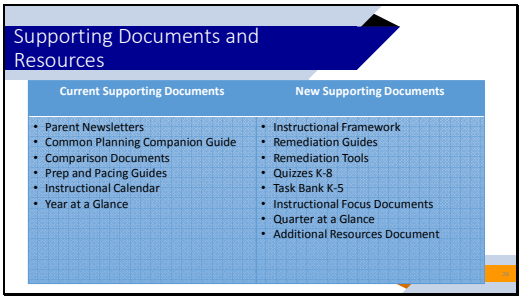

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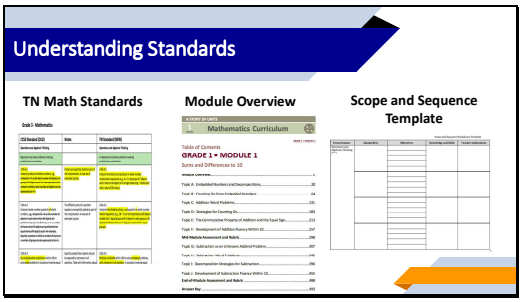

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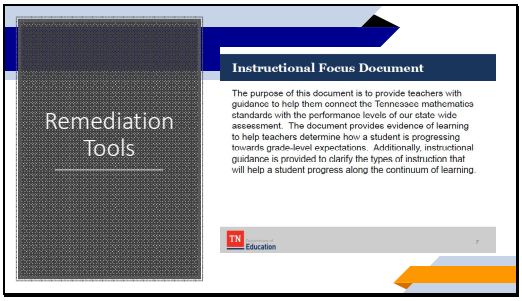

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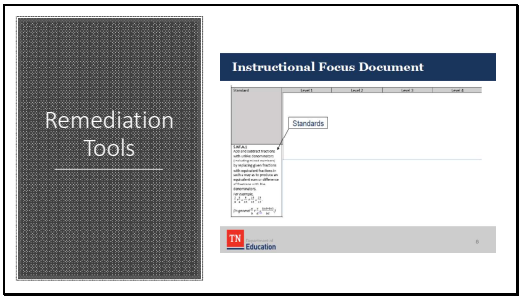

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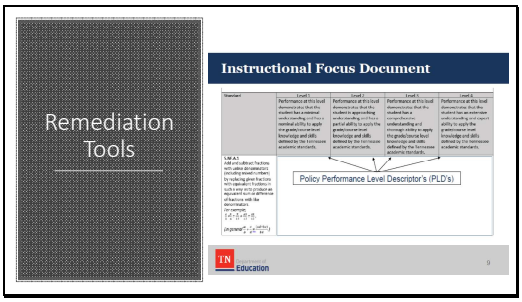

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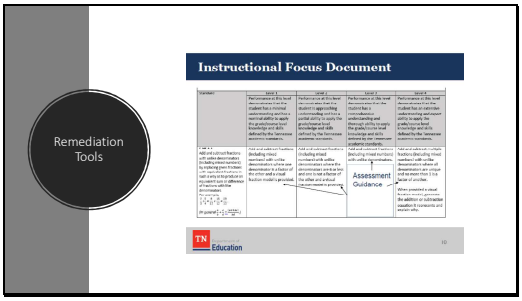

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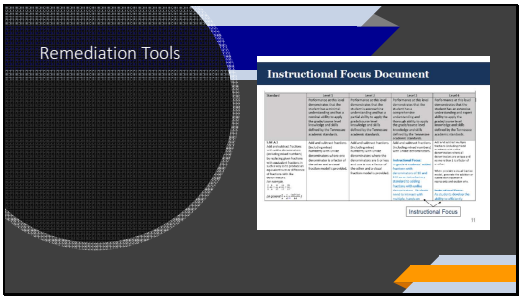

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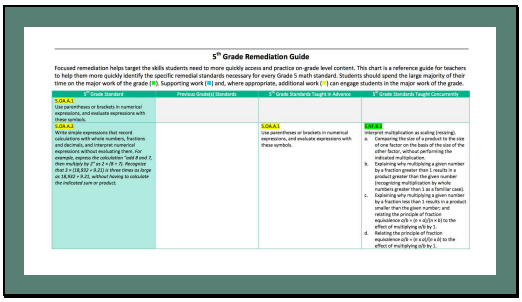

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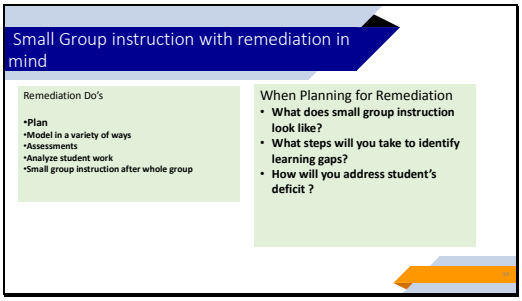

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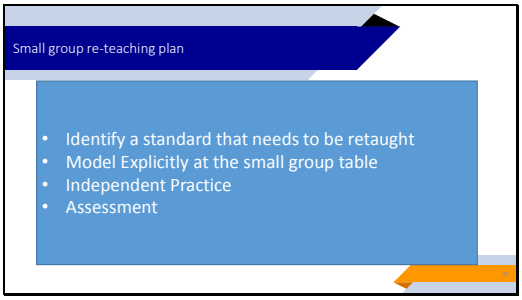

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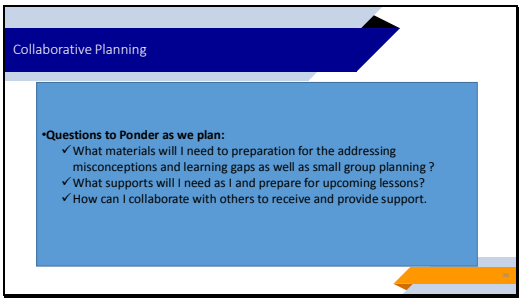

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Slide 38

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Clark, S. (2014). Avoiding the blank stare: Teacher training with the gradual release of responsibility in mind. *English Teaching Forum, 52*(2) p. 28-35.

Zakaria, Z, Esther, C., & Griffin, P. (2016). The effect of scaffolding instruction on reading comprehension skills. *Journal of Education and Practice, 7*(23) p. 144-152

PROFESSIONAL DEVELOPMENT EVALUATION CHECKLIST

School: _____ Topic: _____ Date: _____	**Strongly Agree**	**Agree**	**Neither Agree nor Disagree**	**Disagree**	**Strongly Disagree**
Content					
1. The objectives for today's session were clearly stated.	☐	☐	☐	☐	☐
2. Today's session was aligned to its stated objectives.	☐	☐	☐	☐	☐
3. Today's session was useful and practical.	☐	☐	☐	☐	☐

4. Today's session advanced the development of my leadership capacity.	☐	☐	☐	☐	☐
Process					
5. Today's activities (presentations, scenarios, group exercises, etc.) increased my capacity to use data to improve my practice.	☐	☐	☐	☐	☐
6. The facilitator of today's session effectively modeled appropriate instructional strategies.	☐	☐	☐	☐	☐
7. The facilitator of today's session incorporated our experiences into today's activities (presentations, scenarios, group exercises, etc.)	☐	☐	☐	☐	☐
8. Time was allocated effectively today to deepen my understanding of the presented material.	☐	☐	☐	☐	☐
Context					
9. There were opportunities during today's session to collaborate on shared activities.	☐	☐	☐	☐	☐
10. Today's activities (presentations, scenarios, group exercises, etc.) were relevant for my job-related needs.	☐	☐	☐	☐	☐
11. Today's sessions advanced my understanding of how to engage in a continuous improvement cycle.	☐	☐	☐	☐	☐
12. The organization of the learning environment (facilities, tools, materials, participant groupings, etc.) met my learning needs.	☐	☐	☐	☐	☐

PROFESSIONAL DEVELOPMENT QUESTIONNAIRE

Session Title: _____ Date: _____

Name/Grade _____

Instructions: Please rate each item from "Poor" to "Excellent"
If the statement is not applicable, leave it blank.

	Poor				Excellent
1. Were the objectives of the session made clear**?**	[1]	[2]	[3]	[4]	[5]
2. How effective were the leaders' instructional skills?	[1]	[2]	[3]	[4]	[5]
3. How effective was the program in holding your interest?	[1]	[2]	[3]	[4]	[5]
4. Were the facilities conducive to learning?	[1]	[2]	[3]	[4]	[5]

5. Were your questions and concerns addressed?	[1]	[2]	[3]	[4]	[5]
6. How useful will these ideas and skills be in improving student learning?	[1]	[2]	[3]	[4]	[5]
7. How would you rate the overall value of this PD?	[1]	[2]	[3]	[4]	[5]
8. The material is immediately useful.	[1]	[2]	[3]	[4]	[5]

9. What were the best aspects of this professional development or activity?

_____

_____

10. What could be done to improve this activity? _

_____

_____

11. For future sessions, what topics would be most helpful in performing your job?

_____

_____

12. Additional comments?

_____

Appendix B: Interview Protocol

Good morning/afternoon, my name is Demetria Smith. Thank-you for agreeing to participate in my study. Today I will be asking you questions as it relates to the strategies you use to help improve the academic achievement of your students. I will also be asking you questions that pertain to you attending any Professional Development and PLC meetings that have been helpful in improving your student's academics.

Before we get started I would like for you to take a moment to read and sign the consent form.

(After participants have signed the form the interview will begin)

1. What have you noticed about the academic differences between students from low SES backgrounds versus students from non- SES backgrounds? Do you use different instructional strategies for different groups of students? (RQ1)
2. What current reading and math strategies are you using to improve your struggling students' academic progress that you have gained from either attending a PD or from your PLC meetings? How have these strategies helped? (RQ 3)
3. How do you find tracking your student's data to be useful in helping your students achieve academically? What steps do you follow when tracking student's data? For example, what do you do when a student does not master a certain skill? Can you expand on the strategies that you use to help students succeed when they do not master a skill? (RQ 1)
4. What are the names of the district level professional development that you have attended has been useful in helping to improve your student's academic achievement levels? What did you specifically gain from the professional development that allowed you to improve the academic success of your students? (RQ3)

5. What specific strategies have you gained from PLC meetings that have helped you with your struggling students? What are some of your takeaways from these meetings? (RQ 2)
6. What district resources do you use to teach reading and math? Do these district resources provide differentiated instruction or scaffolding to help improve the academic success of SES students? (RQ1)
7. How do you determine what instructional strategies are beneficial for your students? Do you determine this in your PLC meetings with your PLC coach? (RQ 1 & RQ 2)
8. What factors do you think affect student academic achievement for low SES students in your classroom? What academic strategies do you use to help students who have barriers that might make it difficult for them to be successful? (RQ 1)
9. How do you follow up with your PLC coach when determining strategies for your students? What tools do you use to determine if the strategies are working? (RQ 2)
10. How do you provide differentiation in your lessons when you teach? How does differentiating your lessons help improve your student's success? (RQ1)

Thank you for participating in this interview. I appreciate your support and time. Your participation will remain confidential. Once the interview has been transcribed, you will be provided with a copy of the interview to verify validity.

Appendix C: Observation Checklist

PLC Meeting Notes Observation Checklist #1

Grade Level: 3rd / 4th/ 5th **Date: 08/22/18** **Topic: Instructional Moves looking at NWEA results**	**Instruction** **X Best Practices** **X Remediation Strategies** **__Differentiation Strategies** **X Instructional Strategies** **__Reading/Math Advisor** **__Professional Development**	**Assessment** **__Analyzing Weekly Common Assessment Data** **X Data Analysis** **X Grouping Students based on data & Assessments**	**Learning Strategies** **___Higher Level Questioning** **__Checking for Understanding** **__PLC coach modeling strategies** **X small group instruction**
Grade Level: 3rd / 4th/ 5th **Date: 08/22/18** **Topic: Instructional Moves looking at NWEA results**	**Instruction** X Best Practices X Remediation Strategies __Differentiation Strategies X Instructional Strategies __Reading/Math Advisor __Professional Development	**Assessment** __Analyzing Weekly Common Assessment Data X Data Analysis X Grouping Students based on data & Assessments	**Learning Strategies** ___Higher Level Questioning __Checking for Understanding __PLC coach modeling strategies X small group instruction
Grade Level: 3rd / 4th/ 5th **Date: 08/22/18** **Topic: Instructional Moves looking at NWEA results**	**Instruction** X Best Practices X Remediation Strategies __Differentiation Strategies X Instructional Strategies __Reading/Math Advisor __Professional Development	**Assessment** __Analyzing Weekly Common Assessment Data X Data Analysis X Grouping Students based on data & Assessments	**Learning Strategies** ___Higher Level Questioning __Checking for Understanding __PLC coach modeling strategies X small group instruction

PLC Meeting Notes Observation Checklist #2

Grade Level: 3rd / 4th/ 5th **Date: 08/29/18** **Topic: Checking for Understanding**	**Instruction** **_Best Practices** **__Remediation Strategies** **xDifferentiation Strategies** **x Instructional Strategies** **__Reading/Math Advisor** **__Professional Development**	**Assessment** **__Analyzing Weekly Common Assessment Data** **_Data Analysis** **_Grouping Students based on data & Assessments**	**Learning Strategies** **___Higher Level Questioning** **_x_Checking for Understanding** **_x_PLC coach modeling strategies** **__small group instruction**
Grade Level: 3rd / 4th/ 5th **Date: 08/29/18** **Topic: Checking for Understanding**	**Instruction** Best Practices Remediation Strategies _x_Differentiation Strategies _x_Instructional Strategies __Reading/Math Advisor __Professional Development	**Assessment** __Analyzing Weekly Common Assessment Data Data Analysis Grouping Students based on data & Assessments	**Learning Strategies** ___Higher Level Questioning _x_Checking for Understanding _x_PLC coach modeling strategies small group instruction
Grade Level: 3rd / 4th/ 5th **Date: 08/29/18** **Topic: Checking for Understanding**	**Instruction** Best Practices Remediation Strategies _x_Differentiation Strategies _x_Instructional Strategies __Reading/Math Advisor __Professional Development	**Assessment** __Analyzing Weekly Common Assessment Data Data Analysis Grouping Students based on data & Assessments	**Learning Strategies** ___Higher Level Questioning _x_Checking for Understanding _x_PLC coach modeling strategies small group instruction

PLC Meeting Notes Observation Checklist #3

Grade Level: 3rd / 4th/ 5th **Date: 09/0518** **Topic: Collaborative Planning**	**Instruction** **X Best Practices** **X Remediation Strategies** **__Differentiation Strategies** **X Instructional Strategies** **__Reading/Math Advisor** **__Professional Development**	**Assessment** **_x_Analyzing Weekly Common Assessment Data** **X Data Analysis** **X Grouping Students based on data & Assessments**	**Learning Strategies** **___Higher Level Questioning** **__Checking for Understanding** **__PLC coach modeling strategies** **X small group instruction**
Grade Level: 3rd / 4th/ 5th **Date: 09/05/18** **Topic: Collaborative Planning**	**Instruction** X Best Practices X Remediation Strategies __Differentiation Strategies X Instructional Strategies _x_Reading/Math Advisor __Professional Development	**Assessment** _x_Analyzing Weekly Common Assessment Data X Data Analysis X Grouping Students based on data & Assessments	**Learning Strategies** ___Higher Level Questioning __Checking for Understanding __PLC coach modeling strategies X small group instruction
Grade Level: 3rd / 4th/ 5th **Date: 09/05/18** **Topic: Collaborative Planning**	**Instruction** X Best Practices X Remediation Strategies __Differentiation Strategies X Instructional Strategies __Reading/Math Advisor __Professional Development	**Assessment** _x_Analyzing Weekly Common Assessment Data X Data Analysis X Grouping Students based on data & Assessments	**Learning Strategies** ___Higher Level Questioning __Checking for Understanding __PLC coach modeling strategies X small group instruction

PLC Meeting Notes Observation Checklist #4

Grade Level: 3rd / 4th/ 5th **Date: 09/10/18** **Topic: Reading Strategies/Foundational Literacy**	**Instruction** **X Best Practices** **X Remediation Strategies** **__Differentiation Strategies** **X Instructional Strategies** **__Reading/Math Advisor** **X__Professional Development**	**Assessment** **__Analyzing Weekly Common Assessment Data** **_Data Analysis** **Grouping Students based on data & Assessments**	**Learning Strategies** **___Higher Level Questioning** **__Checking for Understanding** **_x_PLC coach modeling strategies** **X small group instruction**
Grade Level: 3rd / 4th/ 5th **Date: 09/10/18** **Topic: Reading Strategies/ Foundational Literacy**	**Instruction** X Best Practices X Remediation Strategies __Differentiation Strategies X Instructional Strategies __Reading/Math Advisor X_Professional Development	**Assessment** __Analyzing Weekly Common Assessment Data Data Analysis _Grouping Students based on data & Assessments	**Learning Strategies** ___Higher Level Questioning __Checking for Understanding _x_PLC coach modeling strategies X small group instruction
Grade Level: 3rd / 4th/ 5th **Date: 09/10/18** **Topic: Reading Strategies/Foundational Literacy**	**Instruction** X Best Practices X Remediation Strategies __Differentiation Strategies X Instructional Strategies __Reading/Math Advisor XProfessional Development	**Assessment** __Analyzing Weekly Common Assessment Data __Data Analysis _Grouping Students based on data & Assessments	**Learning Strategies** ___Higher Level Questioning __Checking for Understanding x PLC coach modeling strategies X small group instruction

PLC Meeting Notes Observation Checklist #5

Grade Level: 3rd / 4th/ 5th **Date: 09/17/18** **Topic: I Ready Common Assessment Data**	**Instruction** **__Best Practices** **__Remediation Strategies** **_x_Differentiation Strategies** **X Instructional Strategies** **__Reading/Math Advisor** **__Professional Development**	**Assessment** **_x_Analyzing Weekly** **XCommon Assessment Data** **X Data Analysis** **X Grouping Students based on data & Assessments**	**Learning Strategies** **___Higher Level Questioning** **__Checking for Understanding** **__PLC coach modeling strategies** **X small group instruction**
Grade Level: 3rd / 4th/ 5th **Date: 09/17/18** **Topic: I Ready Common Assessment**	**Instruction** __Best Practices __Remediation Strategies __Differentiation Strategies X Instructional Strategies __Reading/Math Advisor __Professional Development	**Assessment** _x_Analyzing Weekly XCommon Assessment Data X Data Analysis X Grouping Students based on data & Assessments	**Learning Strategies** ___Higher Level Questioning __Checking for Understanding __PLC coach modeling strategies X small group instruction
Grade Level: 3rd / 4th/ 5th **Date: 09/17/18** **Topic: I Ready Common Assessment**	**Instruction** __Best Practices __Remediation Strategies _x_Differentiation Strategies X Instructional Strategies __Reading/Math Advisor __Professional Development	**Assessment** _xAnalyzing Weekly XCommon Assessment Data X Data Analysis X Grouping Students based on data & Assessments	**Learning Strategies** ___Higher Level Questioning __Checking for Understanding __PLC coach modeling strategies X small group instruction

PLC Meeting Notes Observation Checklist #6

Grade Level: 3rd / 4th/ 5th **Date: 09/26/18** **Topic: Tools for An Effective Lessson**	**Instruction** **X Best Practices** **X Remediation Strategies** **x_Differentiation Strategies** **X Instructional Strategies** **__Reading/Math Advisor** **_x_Professional Development**	**Assessment** **__Analyzing Weekly Common Assessment Data** **X Data Analysis** **X Grouping Students based on data & Assessments**	**Learning Strategies** **___Higher Level Questioning** **__Checking for Understanding** **_x_PLC coach modeling strategies** **X small group instruction**
Grade Level: 3rd / 4th/ 5th **Date: 09/26/18** **Topic: Tools for An Effective Lessson**	**Instruction** X Best Practices X Remediation Strategies _x_Differentiation Strategies X Instructional Strategies __Reading/Math Advisor __Professional Development	**Assessment** __Analyzing Weekly Common Assessment Data X Data Analysis X Grouping Students based on data & Assessments	**Learning Strategies** ___Higher Level Questioning __Checking for Understanding _x_PLC coach modeling strategies X small group instruction
Grade Level: 3rd / 4th/ 5th **Date: 09/26/18** **Topic: Tools for an Effective Lessson**	**Instruction** X Best Practices X Remediation Strategies _x_Differentiation Strategies X Instructional Strategies __Reading/Math Advisor _x_Professional Development	**Assessment** __Analyzing Weekly Common Assessment Data X Data Analysis X Grouping Students based on data & Assessments	**Learning Strategies** ___Higher Level Questioning __Checking for Understanding _x_PLC coach modeling strategies X small group instruction

PLC Meeting Notes Observation Checklist #7

Grade Level: 3rd / 4th/ 5th **Date: 10/08/18** **Topic: Collaborative Planning**	**Instruction** **X Best Practices** **X Remediation Strategies** **__Differentiation Strategies** **X Instructional Strategies** **_x_Reading/Math Advisor** **__Professional Development**	**Assessment** **__Analyzing Weekly Common Assessment Data** **X Data Analysis** **_Grouping Students based on data & Assessments**	**Learning Strategies** **___Higher Level Questioning** **__Checking for Understanding** **X PLC coach modeling strategies** **X small group instruction**
Grade Level: 3rd / 4th/ 5th **Date: 10/08/18** **Topic: Collaborative Planning**	**Instruction** X Best Practices X Remediation Strategies __Differentiation Strategies X Instructional Strategies X Reading/Math Advisor __Professional Development	**Assessment** __Analyzing Weekly Common Assessment Data X Data Analysis __Grouping Students based on data & Assessments	**Learning Strategies** ___Higher Level Questioning __Checking for Understanding X PLC coach modeling strategies X small group instruction
Grade Level: 3rd / 4th/ 5th **Date: 10/08/18** **Topic: Collaborative Planning**	**Instruction** X Best Practices X Remediation Strategies __Differentiation Strategies X Instructional Strategies X Reading/Math Advisor __Professional Development	**Assessment** __Analyzing Weekly Common Assessment Data X Data Analysis __Grouping Students based on data & Assessments	**Learning Strategies** ___Higher Level Questioning __Checking for Understanding X PLC coach modeling strategies X small group instruction

PLC Meeting Notes Observation Checklist #8

Grade Level: 3rd / 4th/ 5th **Date: 10/22/18** **Topic: Effective Reading and Math Strategies**	**Instruction** **X Best Practices** **X Remediation Strategies** **XDifferentiation Strategies** **X Instructional Strategies** **__Reading/Math Advisor** **_x_Professional Development**	**Assessment** **__Analyzing Weekly Common Assessment Data** **_Data Analysis** **_Grouping Students based on data & Assessments**	**Learning Strategies** **__x_Higher Level Questioning** **_x_Checking for Understanding** **__PLC coach modeling strategies** **X small group instruction**
Grade Level: 3rd / 4th/ 5th **Date: 10/22/18** **Topic: Effective Reading and Math Strategies**	**Instruction** X Best Practices X Remediation Strategies _x_Differentiation Strategies X Instructional Strategies __Reading/Math Advisor X Professional Development	**Assessment** __Analyzing Weekly Common Assessment Data Data Analysis Grouping Students based on data & Assessments	**Learning Strategies** _x__Higher Level Questioning _x_Checking for Understanding __PLC coach modeling strategies X small group instruction
Grade Level: 3rd / 4th/ 5th **Date: 10/22/18** **Topic: Effective Reading and Math Strategies**	**Instruction** X Best Practices X Remediation Strategies X Differentiation Strategies X Instructional Strategies __Reading/Math Advisor _x_Professional Development	**Assessment** __Analyzing Weekly Common Assessment Data X Data Analysis X Grouping Students based on data & Assessments	**Learning Strategies** __xHigher Level Questioning _x_Checking for Understanding __PLC coach modeling strategies X small group instruction

PLC Meeting Notes Observation Checklist #9

Grade Level: 3rd / 4th/ 5th **Date: 10/25/18** **Topic: Asking Effective Questions**	**Instruction** **X Best Practices** **X Remediation Strategies** **__Differentiation Strategies** **X Instructional Strategies** **_x_Reading/Math Advisor** **_x_Professional Development**	**Assessment** **__Analyzing Weekly Common Assessment Data** **X Data Analysis** **__Grouping Students based on data & Assessments**	**Learning Strategies** **___Higher Level Questioning** **__Checking for Understanding** **_x_PLC coach modeling strategies** **X small group instruction**
Grade Level: 3rd / 4th/ 5th **Date: 10/25/18** **Topic: Asking Effective Questions**	**Instruction** X Best Practices X Remediation Strategies _x_Differentiation Strategies X Instructional Strategies __Reading/Math Advisor __Professional Development	**Assessment** __Analyzing Weekly Common Assessment Data X Data Analysis __Grouping Students based on data & Assessments	**Learning Strategies** ___Higher Level Questioning __Checking for Understanding __PLC coach modeling strategies X small group instruction
Grade Level: 3rd / 4th/ 5th **Date: 10/25/18** **Topic: Asking Effective Questions**	**Instruction** X Best Practices X Remediation Strategies _x_Differentiation Strategies X Instructional Strategies X Reading/Math Advisor XProfessional Development	**Assessment** __Analyzing Weekly Common Assessment Data X Data Analysis __ Grouping Students based on data & Assessments	**Learning Strategies** ___Higher Level Questioning __Checking for Understanding x PLC coach modeling strategies X small group instruction

PLC Meeting Notes Observation Checklist #10

Grade Level: 3rd / 4th/ 5th **Date: 10/30/18** **Topic: Collaborative Planning**	**Instruction** **X Best Practices** **X Remediation Strategies** **_x_Differentiation Strategies** **X Instructional Strategies** **_x_Reading/Math Advisor** **__Professional Development**	**Assessment** **__Analyzing Weekly Common Assessment Data** **X Data Analysis** **X Grouping Students based on data & Assessments**	**Learning Strategies** **___Higher Level Questioning** **__Checking for Understanding** **_x_PLC coach modeling strategies** **X small group instruction**
Grade Level: 3rd / 4th/ 5th **Date: 09/26/18** **Topic: Collaborative Planning**	**Instruction** X Best Practices X Remediation Strategies _x_Differentiation Strategies X Instructional Strategies _x_Reading/Math Advisor __Professional Development	**Assessment** __Analyzing Weekly Common Assessment Data X Data Analysis X Grouping Students based on data & Assessments	**Learning Strategies** ___Higher Level Questioning __Checking for Understanding _x_PLC coach modeling strategies X small group instruction
Grade Level: 3rd / 4th/ 5th **Date: 09/26/18** **Topic: Collaborative Planning**	**Instruction** X Best Practices X Remediation Strategies _x_Differentiation Strategies X Instructional Strategies _x_Reading/Math Advisor __Professional Development	**Assessment** __Analyzing Weekly Common Assessment Data X Data Analysis X Grouping Students based on data & Assessments	**Learning Strategies** ___Higher Level Questioning __Checking for Understanding _x_PLC coach modeling strategies X small group instruction

Appendix D: Data Notebook Checklist

Teacher Data Notebook Observation Checklist

Teacher	Student Data Tracker	Anecdotal Records of Strategies Used overtime & how it has benefitted student's academic levels	Common Assessment Data	Weekly Common Assessment with a narrative of next steps for students	Student Grouping per Strategy	Formative Assessment Data	Student Instructional Strategy Log
1	✓	✓	✓	✓	✓	✓	✓
2	✓	✓	✓	✓	✓	✓	✓
3	✓	✓		✓	✓		✓
4	✓	✓	✓	✓	✓		
5	✓	✓		✓	✓		
6	✓	✓	✓	✓			✓
7	✓	✓		✓		✓	
8	✓	✓	✓	✓			✓
9	✓	✓		✓	✓		✓

Reflective Notes: All participants utilize a student data tracker, anecdotal records of strategies to determine student's improvements from the strategies used, and weekly common assessments with a narrative of next steps for students. Six participants use a student instructional strategy log and a student grouping log per strategy. Five participants utilize a common assessment log. Three participants utilize a formative assessment data to track their student's progress. Out of the nine participants, only two participants utilize

all the tools in the observation checklist. According to participant's narratives from the common assessment data they adjust the types of instructional strategies per student to provide continuous improvements of their student's academic achievement levels.