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Ability Grouping and Student Achievement in Four Rural Elementary Schools in the Southern United States

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Abstract

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Rhonda D. Kelley

MA, Jackson State University 2002

BA, Mississippi State University

Doctoral Dissertation Submitted in Partial Fulfillment

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Abstract

School personnel are concerned that reading gaps of grade 3 and grade 4 students have persisted in 4 rural elementary schools in the southern United States despite the use of ability grouping to improve student reading proficiency scores. Between the 2014-2016 school years, less than 50% of students in grades 3 and grade 4 scored at the proficient level in reading at the 4 target rural schools. The purpose of this qualitative case study was to examine the teachers' and administrators' perceptions regarding the influence of grouping on the reading performance of students in grades 3 and 4. Using Vygotsky's framework, the research investigated teachers' and administrators' perceptions of grouping and nongrouping in relation to students' reading progress, socioeconomic status, and achievement gaps between minority and non-minority students. Using purposeful sampling, interview data were collected from 4 administrators who met the criteria of working in a target site that used ability and nonability grouping. Teacher data came from focus groups, and surveys from 15 teacher participants who met the criteria of being certified in English Language Arts, and assigned to Grades 3 and/or 4 in ability or nonability grouping environments. Using emergent coding, themes supported the findings that assessment strategies are positively and negatively perceived, nonability grouping is preferred, reading achievement is perceived as higher in nonability grouping, and gaps in learning are influenced by socioeconomic status. Based on this research the use of nonability grouping may promote greater positive social change that will enhance student success in reading.

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Dedication

This Doctor of Education degree is dedicated to my late mother and father, Mrs. Helen J. Kelley and Mr. John Wesley Kelley. These former educators were dedicated to the profession of education and I truly appreciate their love for other children whom I had the privilege of sharing them with. I did not understand it then, but now I know what an honor it is to share knowledge with those who seek it; and the world is made a better place to live and to grow. I have become a lifelong learner and it is a pleasure to live, to learn, and to share.

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I would like to thank the people who understood the struggle and appreciated the journey. I will forever be grateful for your encouraging words, kind acts and enduring friendship. To Shonnette, my only sibling, to my best friends, Myra, William Charles, Kathy, Susie, and Pastor Stribling, you are the greatest. Delore, Joyce, and Sarah, I can't forget all your help and the late-night conversations and tutorials.

I would also like to thank my chairs Dr. Mohamed Tazari and Dr. Mary Lou Morton; my second committee member, Dr. Amy Gaskins for all your help and encouragement to complete this journey, with all the obstacles and heartaches, you were there for me helping me to realize my dream of academic success.

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Chapter 1: Introduction of the Study

The results of this study offer a greater understanding of ability grouping by examining the perspectives of teachers and school administrators regarding the effects of tracking or between-class ability grouping on academic achievement in two Mississippi elementary school districts. The focus of the study was on reading performance measured through test scores from students in rural central Mississippi elementary schools within two school districts. The study relied on the lived experiences of teaching and administrative personnel to compare grouping practices as an effort to improve reading achievement. An exploration of grouping as an instructional approach is needed in order to determine ways to improve student performance in reading. The study may provide awareness of how classroom and school-wide climates affect student achievement. In regard to social change, this awareness may promote the use of instructional arrangements and strategies that may provide opportunities for instruction that is engaging, age and ability appropriate, and encourages and supports understanding.

Chapter 1 contains a discussion of the study problem and purpose, the questions explored, the significance of the study, the nature of the study, and terms that are relevant to the study. Additionally, I present the conceptual framework upon which the study is based, assumptions, scope and delimitations, limitations, significance of the study, and summary.

Background

Challenges associated with students achieving success in U.S. schools have been identified through several issues presented in the literature. These issues include (a)

limited or lack of researched best instructional practices, (b) little information on implementing researched instructional best practices, and (c) insufficient data on establishing high standards and limited or lack of high expectations for student learning (Ansalone, 2010; Leithwood, Harris, & Strauss, 2010). These issues have implications for other challenges and school outcomes to include performance on standardized tests, high quality teaching, implementing instructional researched best practices, establishing high standards, school retention, and graduation rates. Furthermore, school systems are challenged to provide a common framework for every student with cognitive and social skills they need to participate responsibly in an adult society (Magner, Soulé, & Wesolowski, 2011).

These challenges to student success in school have been addressed in various ways. Attention to instructional arrangements, test preparation strategies, instructional strategies, and teacher quality are among ways school districts have addressed improving student achievement (Goldhaber & Walch, 2014; Puzio & Colby, 2010). Lessons learned from years of teaching experience provide a blue print for teachers to select and implement instructional strategies and arrangements that will likely meet the needs of diverse learners (Shaunessy-Dedrick, Evans, Ferron, & Lindo, 2015; Slavin, Lake, & Groff, 2009). National attention is currently focused on educators as they strive to promote opportunities for quality learning experiences that are designed to achieve high standards (Goldhaber & Walch, 2014; Kane, Taylor, Tyler, & Wooten, 2011).

Numerous studies have explored instructional arrangements, strategies, and standard examinations with promises that will lead to completers in U.S. schools having

the tools that match or exceed those of their counterparts in other nations (Duncan, 2012; U.S. Department of Education, National Center for Education Statistics, 2014; Woessmann, 2001). U.S. Secretary of Education Arne Duncan (2012) reported that in 2006, the performance of U.S. fourth grade students in reading lagged their counterparts in other nations, but by 2011, they had surpassed students in some of these other nations (Duncan, 2012). However, schools are striving to ensure that all students perform at or above proficiency in their grade levels to prepare them for challenges presented in an ever-changing world. U.S. student performance in math and other areas still lags that of some other nations (U.S. Department of Education, National Center for Education Statistics, 2014).

Stress on student diversity has increased recognition that students enter schools with various diversities including their cultures, interests, experiences, genders, languages, intelligences, readiness, and learning styles. Per Ballantine and Roberts (2014), the most creative and productive organizations and societies are the ones that are highly diverse because people of different backgrounds solve problems in different ways. Because of these diversities, it may be beneficial for teachers to differentiate instruction to include using various forms of grouping and modify the curriculum in order to maximize every student's potential. In a study that included various influences on school and student performance, it was suggested teachers' use of "intimate knowledge" about students results in the selection of appropriate methodology and teaching effectiveness (Woessmann, 2001, "Influence of Teachers," para. 6).

The challenge of ensuring students achieve at their optimum level has been highlighted through federal legislative actions and organizations promoting standard based curricula. No Child Left Behind (NCLB; 2002), a federal education policy enacted during the administration of President George Bush, prompted schools to evaluate their practices. NCLB required schools to identify those who were failing in terms of their students not making academic progress based on district criteria and their state's established tests. Some critics of this requirement suggested that NCLB led to the "need for teachers to teach to the test" (Turley, 2013). The Common Core Standards (CCS) is the latest federal educational program that addresses standards focused on skills required for successful participation in college and career entrance.

The National Governors Association Center for Best Practices, Council of Chief State School Officers (NGACBP/CCSSO; 2010) address standards for such literacy skills as reading, language, writing, speaking, listening, and mathematics. These standards represent a continuation of many years of work begun by states to create standards of a high-quality education (NGACBP/CCSSO, 2010) and are reflective of the most relevant international models, research, and other informational sources. These information sources include professional organizations, state departments of education, educators representing elementary through higher educational levels, and other stakeholders including scholars and assessment developers (NGACBP/CCSSO, 2010). Both NCLB and CCS were initiatives in response to the need for improving student achievement.

The NGACBP/CCSSO (2010) accomplished the challenge issued by the states to create common K-12 literacy standards to help guarantee that all students are ready to

enter college and the job market. The standards demonstrate a vision of what literacy means in the twenty-first century; thus, the necessary literacy knowledge and application of skills expected outside the classroom or workplace (NGACBP/CCSSO, 2010). To the specifications of the NGACBP and CCSSO, the standards (a) facilitate clarity in what is needed in the preparation of learners to succeed in society, college, and the world of work; (b) support equity through focusing on preparing learners to compete with their peers wherever they may reside; (c) provide practical and realistic measures for the adaptation of teaching strategies to promote student learning; and (d) provide developmentally appropriate guidance for identifying expectations of learners (NGACBP/CCSSO, 2010). The CCS emerged as better evidence of standards and the importance of mastering content associated with the standards as a means for successful entry into and participation in higher education as well as a career in a competitive society (NGACBP/CCSSO, 2010). However, according to Turley (2013), these standards continue to force testing that has not been tested.

Grouping is viewed as an appropriate methodology to address student achievement (Yee, 2013). Although grouping is among practices that have been used by teachers to manage students with diverse levels of ability and achievement, there remains disagreements in the literature regarding the appropriateness of ability grouping (Lleras & Rangel, 2009; Yee, 2013). Despite the desire to better manage instruction for a group of diverse students by grouping according to ability and using student demographics to segregate students, some researchers claim that doing so increases the gap in student achievement (Burke & Sass, 2013; Kainz & Vernon-Feagans, 2007; Sojourner, 2013).

Although opinions about the benefits of ability grouping have been controversial (Lleras & Rangel, 2009), such practices have been found to assist struggling students in specific instructional areas (Loveless, 2013; Yee, 2013). Opinions remain mixed about the benefits or detriments of ability grouping, and in this study, I sought to investigate perceptions in the local setting.

This study is needed to provide information that will assist the school districts in decisions to use ability and or nonability grouping for enhancing the reading performance of its third and fourth grade learners. These learners differ in their cultures, interests, experiences, genders, languages, intelligences, readiness, and learning styles. The perspectives of teachers and administrators can be used to strengthen the literature on the disadvantages and advantages of structuring instruction by ability. This information may lead to instructional strategies that will contribute to greater reading achievement for all students.

Problem Statement

Less than 50 % of third and fourth grade students in the rural districts included in this study consistently score at proficiency on the MCT2 (Mississippi State Department of Education Office of Student Assessment, 2014). An exploration of grouping as an instructional approach in four schools in two districts was needed for determining ways to improve student performance in reading. Trend data for these four rural schools has also shown that less than 50% of some students at these grade levels have scored at the proficiency level within the last 3 years. High-stakes standardized test scores are one measurable determinant of success or failure in meeting the goal that is indicative on a

yearly report card, the Average Yearly Progress (AYP) report. Low reading performance and failure to meet AYP have resulted in some school districts being placed under state conservatorship.

Since the AYP for students in some Mississippi school districts has not been met for several years, these schools have been placed under state conservatorship (Mississippi State Department of Education, 2014). School superintendents, principals, and teachers in some of these districts have been removed from service. Reporting student progress based on AYP is a requirement of the federal government which also indicates successful performance of schools and districts (U.S. Department of Education, 2005). Additionally, new state directives now require that third grade students pass a new test to exit to the next grade level. Ensuring that students perform at or above proficiency in their grade levels is also intended to prepare them for successfully passing a new test, the Common Core Assessment. The ability to read and comprehend is key for the successful performance of students in other content areas and is a significant factor in the overall ratings of the schools and districts. Students in the districts included in this study are expected to compete with other students in a global society; there is an urgency to reach the goal of proficiency at grade level.

In this study, I determined how instructional personnel perceived the influence of ability grouping on reading performance. Reading test scores of third and fourth graders in four rural schools in two districts provided support for the problem of poor reading performance of ability grouped and nonability grouped students. Performance data over several years has shown a pattern of the majority of about 1,400 students tested at these

grade levels often scoring below state and national proficiency levels as measured by MCT2. Data for the years 2010-2013 in Tables 1-4 represent results of the MCT2 during the initial data collection period of the study; the National Assessment of Educational Progress (NAEP) reports reading performance for fourth grade every two years. The state changed assessments twice during the period of study. In the school year 2014-2015, the Partnership for Assessment of Readiness for College and Careers (PARCC), English Language Assessment (ELA) replaced the MCT2; however, the program was discontinued after the 2015 school year and replaced with the Mississippi Academic Assessment Program (MAAP). Reading performance levels for 2015-2016 are based upon both MAAP and PARCC assessments required in the district and whose assessment results are comparative. Performance levels reported in 2017 resulted from the MAAP. Results of these measures report proficiency and advanced performance levels, described as English language learning as opposed to reading. Reading levels for nonability grouped and ability grouped schools with similar characteristics are presented in Tables 1–4.

Table 1

Non-Ability School 1-Comparison of Reading Score Percentages by Levels/State/Nation

School/Years		Minimum			Basic			Proficient			Advanced		
		LEA	ST	US	LEA	ST	US	LEA	ST	US	LEA	ST	US
2010-2011	G3	16	15		43	33		29	35		12	17	
	G4	12	13	34	39	32	34	40	35	25	10	18	7
2011-2012	G3	12	14		39	31		35	35		13	18	
	G4	12	11		33	31		41	41		14	18	
2012-2013	G3	16	13		41	28		36	39		8	19	
	G4	7	11	18	40	30	41	38	40	34	15	19	8
2013-2014	G3	22.6	17.5		38.4	31.6		28.1	34.5		11	16.4	
	G4	NR	11		NR	31.6		NR	40.6		NR	16.7	
2014-2015*	G3	NR	NR		NR	NR		11.5	28.8		NR	NR	
	G4	NR	NR		NR	NR		10.6	30.0		NR	NR	
2015-2016*	G3	NR	NR		NR	NR		20.9	32.1		NR	NR	
	G4	NR	NR		NR	NR		20.8	32.6		NR	NR	
2016-2017*	G3	NR	NR		NR	NR		24.3	35.6		NR	NR	
	G4	NR	NR		NR	NR		25.8	30.9		NR	NR	

Note. LEA = local school percentage; ST = state percentage; US = national percentage indicating at or above level; G3 = third grade; G4 = fourth grade; NR = not reported. Adapted from "Mississippi District and School Information, Reports: Mississippi District and School Level Data,"2009-2013. Retrieved from http://www.mde.k12.ms.us.*Data from MAAP/PARCC = only proficiency data reported

The percentages of students scoring at the proficiency level in the district are equal to those of the state for the 2011-2012 school term. However, district scores are below the state's percentage for the following school term. Performance shows a variation in students' reading scores from year to year in the district. On average, less than 76% of student scores in both grades showed proficiency from 2014 onward, which is indicative of a continuing performance trend. Table 2 contains the percentages of a second non-ability school compared with those of the state and the nation.

Table 2

Non-Ability School 2- Comparison of Reading Score Percentages by Levels/State/Nation

School/Years		Minimum			Basic			Proficient			Advanced		
		LEA	ST	US	LEA	ST	US	LEA	ST	US	LEA	ST	US
2010-2011	G3	13	15		15	33		55	35		18	17	
	G4	10	13	34	31	32	34	46	35	25	14	18	7
2011-2012	G3	18	14		32	31		35	35		16	18	
	G4	2	11		34	31		30	41		34	18	
2012-2013	G3	6	13		28	28		48	39		19	19	
	G4	8	11	18	24	30	41	48	40	34	21	19	8
2013-2014	G3	12	18		23	32		39	35		26	16	
	G4	10	11		21	32		49	41		19	17	
2014-2015*	G3	NR	NR		NR	NR		27.1	NR		NR	NR	
	G4	NR	NR		NR	NR		25.5	NR		NR	NR	
2015-2016*	G3	NR	NR		NR	22.4		35.4	32.1		NR	6.5	
	G4	NR	NR		NR	NR		35.3	32.6		NR	NR	
2016-2017*	G3	NR	NR		NR	NR		40.3	NR		NR	NR	
	G4	NR	NR		NR	NR		43.2	NR		NR	NR	

Note. LEA = local school percentage; ST = state percentage; US = national percentage indicating at or above level; G3 = third grade; G4 = fourth grade; NR = not reported. Adapted from "Mississippi District and School Information, Reports: Mississippi District and School Level Data," 2009-2013. Retrieved from http://www.mde.k12.ms.us. *Data from MAAP/PARCC = only proficiency data reported; state proficiency levels based on all students tested in the state for all grade levels.

Non-ability school two, with the exception of the 2011-2012 school term, has a higher percentage of students scoring at the proficient level than the state and the nation. Additionally, on average, this school has a higher percentage of students scoring at the advanced level. Table 3 contains reading performance data for the third and last non-ability school in the study.

Table 3

Non-Ability School 3- Comparison of Reading Score Percentages by Levels/State/Nation

School/Years		Minimum			Basic			Proficient			Advanced		
		LEA	ST	US	LEA	ST	US	LEA	ST	US	LEA	ST	US
2010-2011	G3	16	15		43	33		29	35		12	17	
	G4	12	13	34	39	32	34	40	35	25	10	18	7
2011-2012	G3	12	14		39	31		35	35		13	18	
	G4	12	11		33	31		41	41		14	18	
2012-2013	G3	16	13		41	28		36	39		8	19	
	G4	7	11	18	40	30	41	38	40	34	15	19	8
2013-2014	G3	22.6	17.5		38.4	31.6		28.1	34.5		11	16.4	
	G4	NR	11		NR	31.6		NR	40.6		NR	16.7	
2014-2015*	G3	NR	NR		NR	NR		11.5	28.8		NR	NR	
	G4	NR	NR		NR	NR		10.6	30.0		NR	NR	
2015-2016*	G3	NR	NR		NR	NR		20.9	32.1		NR	NR	
	G4	NR	NR		NR	NR		20.8	32.6		NR	NR	
2016-2017*	G3	NR	NR		NR	NR		24.3	35.6		NR	NR	
	G4	NR	NR		NR	NR		25.8	30.9		NR	NR	

Note. LEA = local school percentage; ST = state percentage; US = national percentage indicating at or above level; G3 = third grade; G4 = fourth grade; NR = not reported. Adapted from "Mississippi District and School Information, Reports: Mississippi District and School Level Data," 2009-2013. Retrieved from http://www.mde.k12.ms.us. *Data from MAAP/PARCC = only proficiency data reported; state proficiency levels based on all students tested in the state for all grade levels.

Similarities exist in the percentages of scores at the proficient level for School 1 and School 2. There is variation in percentages exceeding the state's scores based on third or fourth grade for each of the years represented. Percentages for the state at the proficiency level exceed those of the district for third grade for two years. Table 4 contains a comparison of reading percentages for the ability grouped school.

Table 4

Ability Group School 4- Comparison of Reading Score Percentages by Levels/State/Nation

School/Years		Minimum			Basic			Proficient			Advanced		
		LEA	ST	US	LEA	ST	US	LEA	ST	US	LEA	ST	US
2010-2011	G3	26	15		33	33		23	35		18	17	
	G4	29	13	34	29	32	34	30	35	25	12	18	7
2011-2012	G3	24	14		31	31		24	35		21	18	
	G4	27	11		34	31		24	41		15	18	
2012-2013	G3	26	13		37	28		22	39		15	19	
	G4	18	11	18	29	30	41	33	40	34	20	19	8
2013-2014	G3	23	NR		36	NR		32	NR		9	NR	
	G4	24	NR		41	NR		22	NR		13	NR	
2014-2015*	G3	NR	NR		NR	NR		10.6	NR		NR	NR	
	G4	NR	NR		NR	NR		20.3	NR		NR	NR	
2015-2016*	G3	NR	NR		NR	NR		18.1	NR		NR	NR	
	G4	NR	NR		NR	NR		21.4	NR		NR	NR	
2016-2017*	G3	NR	NR		NR	NR		15.8	NR		NR	NR	
	G4	NR	NR		NR	NR		22.1	NR		NR	NR	

Note. LEA = local school percentage; ST = state percentage; US = national percentage indicating at or above level; G3 = third grade; G4 = fourth grade; NR = not reported. Adapted from "Mississippi District and School Information, Reports: Mississippi District and School Level Data," 2009-2013. Retrieved from http://www.mde.k12.ms.us. *Data from MAAP/PARCC = only proficiency data reported; state proficiency levels based on all students tested in the state for all grade levels.

The level of scores reported in the tables represent reading performance suggesting the likelihood for student success at succeeding grade levels. A minimum score is indicative of the need for remediation and supplemental instruction for success in the required curriculum. The basic level suggests some of the students' performance is at

a low level and may require some remediation. A proficient level suggests students demonstrate mastery of skills and knowledge required for success at their grade level. An advanced level describes a student's ability that exceeds performance required for success at the grade level (Mississippi Department of Education, 2011). The percentages in Table 1 represent students scoring at the different levels measured on the MCT2 for one of the nonability schools.

The data in Table 4 shows percentages for the school are lower than those of the state at the proficiency level. The data in all tables support that an investigation was warranted as an attempt to identify reasons for fluctuating scores and below proficient performance among these students. Although there are some instances where students score at or above proficient in comparison with statewide scores, in most instances where the LEA proficient percentage added to the LEA advanced percentage, the total is below the statewide percentage. National percentages from the National Assessment of Educational Progress are only for assessments at fourth grade for reading and are limited to every 2 years. These percentages combine national performance at the basic and above and proficient and above levels. As such, the proficient and above national percentage for the years shown is greater than that of the LEA in most of the 3 years reported.

One method that schools in the districts have used to try to increase academic achievement is grouping. Schools practicing within-class ability grouping have been observed to increase their levels of school performance, especially in reading (Puzio & Colby, 2010). The practice of ability grouping in intended to create an environment permitting teachers to target and address students' instructional needs efficiently (Collins

& Gan, 2013; Gamoran, 2009; Olszewski-Kubilius, 2013). The dilemma with this is that the same ways of assessing student performance and tracking them usually correspond to a "social disadvantage such as race/ethnicity and social class" (Gamoran, 2009, p.1). In essence, the achievement gap widens between high and low tracked students. Thus, some schools do not have students diversified by ability or socioeconomic levels between classes; also, some teachers may demonstrate low expectations of students who are assigned to the lower tracks and pay more attention to those in higher tracks (Stipek, 2002; Stipek, Newton & Chudgar, 2010). For these reasons, investigating use of ability versus nonability grouping was warranted.

Researchers report variations of teachers' behavior towards students who are low as opposed to those who are high achievers and in the quality of education provided (Kalogrides & Loeb, 2013; Loertscher, 2008; Mulkey, Catsambis, Steelman, & Crain, 2005; Oakes, 1985). According to Stipek et al., (2010), among these variations was the teacher-student relationship. Teachers tend to see high achievers as demonstrating fewer behavioral problems than low achievers and also view them as more active participants in the classroom (Stipek et al., 2010). Among early observations of heterogeneous ability grouping and instruction of low achievers are that lower achieving students received less instructional attention because the teacher was teaching to the class as a "whole"; therefore, students experienced little motivation to perform (Emily, Robert, & Michael, 2003). However, recent research has found these variations are diminished through within-class, homogenous, and flexible ability grouping, especially in the areas of science

and reading (Adodo & Agbayewa, 2011; Olszewski-Kubilius, 2013; Puzio & Colby, 2010).

Teachers often must expend a great deal of effort to create the best learning environment for each student with achievement as the ultimate objective. Maintaining equality of education for students requires teachers to ensure students' prior understandings, interests, beliefs, learning styles, and attitudes about self and school influence the meaning process (National Research Council, 1990, as cited in Tomlinson, 2001, p. 8). According to Cole (1995), the Advisory Panel on Improving Student Achievement in 1991, stated "good instruction is good instruction, regardless of students' racial, ethnic, or socioeconomic backgrounds. Good teaching that is engaging, relevant, multicultural, that appeals to a variety of modalities and learning styles—works well with all children" (p. 9). Emerging research on ability grouping encompasses the requirements for attending to the individual characteristics of learners and supports maintaining a teaching environment where the focus is on ensuring students are provided opportunities to learn (Collins & Gan, 2013).

Ability grouping has become a means of sorting along racial, class, socioeconomic lines, and separating behavior problem students instead of using groups to allow students to reach the optimal goals of increased achievement (Oakes, 1985). This experience results in low self-esteem from social interactions that are demoralizing and demotivating, and further results in these at-risks students entering the lowest tracks (Alexander, Entwisle, & Olson, 2001; Oakes, Gamoran, & Page, 1992). Classes distributed with these factors do not offer opportunities for academic growth and

diversity in teaching and learning styles, thus widening the achievement gap (Adodo & Agbayewa, 2011).

However, in terms of grouping for promoting student achievement, researchers debate the instructional quality provided students in lower tracked classrooms (Adodo & Agbayewa, 2011; Collins & Gan, 2013; Oakes, 1985; Slavin, 1990). Many researchers suggest there are both advantages and disadvantages of grouping designed to improve student productivity and equality of instruction. Gamoran (1992a) reported studies that favored grouping for improving student performance, but concluded that the true factor in achievement is based on the effectiveness of instruction. Oakes (1985) noted that high-tracked classes are more likely to focus on higher order skills, whereas classes of lower-tracked students are often focused on behavior management. Slavin (1990) surmised that inconsistencies observed in studies that were conducted for over 60 years suggested that grouping has no effects on student achievement. Gamoran (1992) also concluded that student achievement is not affected by ability grouping; however, it is related to inequality. In sum, the sorting of students in groups has been seen as a convenient way for some teachers to deliver instruction and manage students (Adodo & Agbayewa, 2011).

The National Education Association (NEA) registered its position against grouping. According to the NEA (2005), tracking students by performance using demographic characteristics as criteria that segregate them should not occur in any public school settings. More recently, researchers have taken the position that tracking is unfair and plays a substantial part in the continuation of social inequalities (Burke & Sass, 2013;

Burris, Welner, & Murphy, 2008). The University of Illinois at Urbana-Champaign (2009) reported a study involving ability grouping of African American and Hispanic students. The results revealed that these students learned less in this grouping arrangement for reading instruction than minority students with similar demographics who were not ability grouped.

Although there are oppositions to grouping, current instructional practices have now indicated a resurgence of ability grouping, but with more attention to flexible and customized grouping that employs constant reassessment (Olszewski-Kubilus, 2013). These and other studies of ability grouping are needed for informed decision making regarding best instructional practices for students whose academic performance is not adequate for their overall school success.

Studies are necessary to assess the power of ability or nonability grouping on student reading achievement for schools with a rural designation. In this study, I addressed the gap in practice where students are not consistently achieving in reading at required proficiency levels. Therefore, this study was designed to investigate teachers' perceptions of differences associated with ability and nonability grouping on student reading achievement and to gain a clearer understanding of why ability grouping is being used in rural schools when, per Mathews (2013), evidence is leaning towards considering it as detrimental to student achievement. This study adds to the literature regarding grouping practices for students whose progress is not acceptable in four rural schools.

Purpose of the Study

In this study, I examined the perceptions of teachers regarding the influence of school wide between-class ability and non-ability grouping on the reading performance of diverse learners using qualitative methods of interviews, surveys, and focus groups. Additionally, I explored whether teachers perceived student reading achievement differs based upon ethnic identification and socioeconomic status. Finally, factors that may be considered in the decision to use school wide between-class or school-wide non-ability grouping for third and fourth grades at four schools in two districts were identified. The information gathered may be helpful to school leaders to facilitate the design strategies that might improve student reading achievement as measured by test scores.

Research Questions

The aim of this qualitative study was to acquire information on differences in students' reading performance based on grouping practices. I used qualitative procedures to investigate teachers and administrators to determine their perceptions of student reading achievement in ability grouped/tracked versus non-ability grouped settings. Additionally, the study was designed to acquire views of teachers and administrators about grouping students based upon ability. Further, in this study, I sought to identify perceptions of whether ethnic and socioeconomic level influenced the reading achievement of ability or non-ability grouped students. Research questions guiding the aim of the study follow.

RQ1: How do participants perceive benefits of ability grouping/tracking and nonability grouping for helping students construct reading knowledge in Grades 3

and 4?

RQ2: How much, if any, do participants perceive the achievement gap between minority and majority students exists in ability and non-ability grouped schools?

RQ3: How important do participants perceive is the socioeconomic level of students to their achievement in ability and nonability grouped schools?

RQ4: What do participants perceive are the negatives of grouping and nongrouping students by ability of students in Grades 3 and 4?

Conceptual Framework

This study is framed with the concept of grouping practices. Decisions in the selection of grouping practices are informed, in part, through pedagogical, content, and theoretical knowledge included in teacher and leadership preparation programs and through practice. These types of knowledge guide perceptions and understandings regarding student learning; thus, what grouping practices may better encourage student achievement.

However, ability grouping has been a constant controversy for many years and is still a concern for many educators today. Instructional leaders and teachers are faced with designing ability grouping and non-ability grouping processes in recognition of students' diverse learning styles and to encourage students to construct knowledge through such pedagogy as collaborative interactions and differentiated instruction. Although in some school districts grouping arrangements are administratively identified as a school-wide practice, a core concern in controversies surrounding grouping practices, especially ability grouping, is student learning.

Grouping arrangements focuses on student learning informed through social constructivism that emphasizes the collaborative nature of learning such as with dialogue, discussion, and problem-solving activities. Dewey (1916) asserted that students use all their experiences for learning and understanding additional information; thus, building their own understanding of new ideas. Dewey's view is an early illustration of the importance of recognizing the needs of the student when considering promoting academic achievement through grouping patterns. Further, Dewey's thinking of student learning as a social construction of knowledge is seen in instructional practices including cooperative and collaborative learning (Choing, & Jovanovic, 2012; Lambert, et al., 2002). This focus has been effective in a mixed ability environment. García, Pearson, Taylor, Bauer, and Stahl (2011) are among researchers who found constructivist-based instruction improves student achievement. These instructional practices are often associated with types of ability grouping whereby the student is able to explore and apply creative thinking to develop new understandings.

The concept of grouping in this study is questioned from the perspective of what promotes student achievement in reading. The exploration has implications for the application of social constructivism for between classes ability grouping and mixed ability grouping instructional practices that encourage the construction of knowledge to promote reading achievement. Both social learning theory and grouping are explicit in the investigation of teachers' perceptions regarding ability and non-ability grouping.

This study is further supported by social cognitive theories as outlined in the work of Vygotsky (1978) with emphases on social interaction and cognitive development.

Vygotsky argued that a child forms concepts and develops culturally from social interactions with individuals. Vygotsky described the child's development of knowledge as a process from first having interacted with more competent individuals, then the child internalizes understandings influenced by these interactions. According to Vygotsky, this process "applies equally to voluntary attention, to logical memory, and to the formation of concepts. [He adds] All the higher functions originate as actual relationships between individuals" (p. 57). His work stresses the importance of the interaction with knowledgeable or skillful persons who can help to guide the learning process and recognize that the environment influences student learning.

According to the theory, this interaction helps the child to become independent. Internalization and appropriation are central to Vygotsky's theory. Social settings create opportunities for students to learn in their zones of proximal development (ZPD) that operate in collaborative interaction, at first, but gradually new processes are internalized, and students become more independent (Vygotsky, 1978).

Theoretically, Tryphon and Voneche (2013) added that the instructional setting for students is composed of multiple zones of proximal development operating simultaneously moving and/or progressing in different ways or directions at different rates. Subsequently, in collaborative interaction learning takes place at different times for individuals depending on their learning styles and needs. Social interaction and collaboration have support in the literature as important aspects of students constructing their own knowledge in various instructional formats (Ireson & Hallam, 2009; Vygotsky, 1978). The elements of the constructivist theory relate to how students achieve in social

settings such as in grouping arrangements, for example, as focused in this study. In mixed ability grouping, students have opportunities to learn from more advanced peers, to construct understanding through collaboration, as is consistent with Vygotsky's idea of learning with or from others. This study acknowledges that instructional arrangements such as ability and non-ability grouping require guidance in student/student and student/teacher interactions, so that students are better able to construct their own understanding of concepts. This guidance involves arrangements whereby advanced students can mentor or tutor less able students.

This study seeks teachers' and administrators' perspectives with surveys, interviews, and focus groups to better understanding the effects ability grouping practices may have on student achievement in reading. More important in the concept of grouping practices is who makes decisions as to the different grouping processes and what is the rationale in doing so. These concepts will be more thoroughly explained in Chapter 2.

Nature of the Study

Qualitative research is used to inquire of a phenomenon, usually in its natural setting. Additional characteristics of this form of inquiry include the researcher serves as the main instrument for the collection of data and multiple subjective views of participants are presented in the analysis (Creswell, 2013a; Patton, 2015). Qualitative research is comprised of different forms of inquiry: phenomenology, grounded theory, narrative, ethnography, and case study. These forms, except for the case study, are not as appropriate to address the problem investigated and to answer the RQs for this study.

Phenomenology focuses on examining the lived experiences of individuals who have experienced a given phenomenon. The researcher's role includes capturing the what and how of the experience; according to Moustakas (1994), this is the essence of the experience. The essence of the experience is often focused on participants' feelings about the experiences which require the researcher to conduct in-depth interviews, observations, and analyses during prolonged stays in the study's setting (Moustakas, 1994; Patton, 2015). The time for conducting the study and for employing the experiences of others, such as students, are among reasons phenomenology was not the best choice for this study.

Closely associated with phenomenology is grounded theory (Creswell, 2013a). In grounded theory, the researcher is charged with explaining a process based on the views of individuals experiencing the process which leads to the development of a theory about the topic (Creswell, 2013a). Individuals directly experiencing the process of ability and non-ability grouped instruction are students. The study investigated the perceptions of those delivering, supervising, or making decisions about grouping practices. Therefore, developing a theory of the influences of grouping on students' reading achievement would not be as appropriate with the sample investigated.

Narrative research is based on the collection of descriptive information of events that results in the form of a story such as a biography; an in-depth study of an individual is not my goal. Ethnography is an inquiry of cultural groups, distinguishing patterns they share such as language, beliefs, values, and behaviors designed to report how the culture works (Glesne, 2016). These patterns are shared because of the setting and the

interactions of the cultural group (Creswell, 2013a). Although it may be assumed that teachers and administrators at the study's sites shared some cultural values, individuals collectively did not make decisions about grouping patterns at the schools. Also, to determine how the culture works requires direct interacting in the setting which may require as long as a year (Glesne, 2016). The time and degree of engagement are beyond scope of my study.

I determined that the case study was the most appropriate form of qualitative research for this study. The case study is used to explore an issue within a bounded system (Patton, 2015). In this qualitative study, ability verses nonability grouping represented the issue in terms of their influence on students' reading achievement. Therefore, the study employed the qualitative case study research design. As a qualitative inquiry research design, the case was used to investigate the meaning participants conveyed about ability and non-ability grouping. The research illustrated real-world perspectives of the contributions that forms of grouping have on students' reading achievement. I used qualitative survey, interview, and focus group analyses in the design as Yin (2013) suggested. I selected the design for its appropriateness in using participants' experiences with the issue to acquire meanings related to the reading performance of students enrolled in school-wide ability and non-ability schools, the phenomenon studied (Creswell, 2013b). Data included responses of teachers at the third and fourth grade levels on open-ended survey items and in focus groups, and through interviews with principals.

Focus groups are designed to collect data through semi-structured interviews (Patton, 2015). The interviews provide information about a topic that observations may not permit (Creswell, 2013a). The focus group data from teachers added clarity to their survey responses. Two focus groups comprised of five teachers in one group and six teachers in the other were formed after the collection of survey and interview data from principals at the participating schools. Each focus group met once and offered further explanations to open-ended survey responses and follow-up questions. Content analysis was used to identify emerging thematic ideas from interviews with principals, and the survey and focus groups with teachers.

Definitions

The following terms and their definitions are used as they apply to the grouping and instructional practices associated with this study.

Ability grouping: Is defined as "grouping is the practice of placing students of similar academic ability [levels] within the same group for instruction" (Ireson, Hallam, & Plewis, 2001, p. 317). Tracking and ability grouping may be used interchangeably in this research.

Achievement gap: Is the difference in the achievement among student subgroups measured by standardized test scores (subgroups in this study refer to minority and /or low-income, students) (National Education Association, 2013).

Adequate Yearly Progress (AYP): Is an annual measure of student progress utilizing data obtained on state constructed and mandated testing instruments (Rebore, 2007).

Grouping/between-class: Is the school's practice of separating students into different classrooms, courses, or course sequences (curricular tracks) based on their similar academic achievement (Ireson et al., 2001).

Differentiated instruction: Is an instructional design model that emphasizes the importance of being able to simultaneously recognize and address the diverse learning needs as well as the abilities of all learners in a single classroom or group (ability/non-ability) setting (Tomlinson & McTighe, 2006).

Heterogeneous grouping: Is the grouping of students with varying abilities, learning styles, backgrounds, and racial and ethnic origins, with an emphasis on challenging curriculum and instruction for all students (Wheelock, 1994, p. 76) Heterogeneous grouping may be used interchangeably with non-ability or mixed ability grouping in this study.

Homogeneous grouping: Is the grouping of students solely with their academic peers by specific ability, interest, or subject area. Homogeneous grouping refers to the organization of instructional classes based on student similarity in one or more specific characteristics. The criterion for this classification may be a single or multiple demographic characteristic such as I.Q. and achievement (Adodo & Agbayewa, 2011). Homogeneous grouping may be used interchangeably with tracking or ability grouping in this study.

Predictive MCT2 reading scores: Are scores from researched-based *diagnostic,* assessments to predict state-test performance and target instruction and practice (Mississippi Department of Education*,* 2011).

Renaissance learning - Enterprise Star: Is a computer adaptive assessment tool that adapts to the student's level of performance (Renaissance.com, 2015). Skill specific information serves as an indicator of the student's performance level commonly used to predict MCT2/CCSC reading and math scores.

Response to intervention (RTI): "Is a process of gathering and examining data for use in developing, analyzing, and implementing, research-or evidence-based interventions used with students in the context of intervening with, and possibly evaluating, a student who may be at risk, academically or behaviorally" (*Response* to *Intervention Best Practices Handbook*, 2010, p. 14).

Within-class grouping: Is the practice of teachers using small groups to instruct students with similar abilities in basic literacy skills (Slavin, 1990).

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

Assumptions

The basis of the study is on the assumption that students do their best when completing tests. It can also be assumed that teachers implement best practice teaching strategies that include differentiated instruction along with the Response to Intervention (RTI) (*Response to Intervention Best Practices Han*dbook, 2010) in preparation for MCT2 and the CCS assessments while maintaining supportive and positive attitudes. RTI practiced at the site's schools is a three-tiered process that involves strategies for quality

instruction, intervention and supplemental instruction involving progress monitoring, and intensive interventions that are facilitated with the assistance of a teacher support team. Assumed is that teachers are assigned to students based upon ideal matching (i.e. students are placed with teachers because teachers work with that ability grouping best), rather than assignments that are not student-centered (i.e. the veteran teachers get the "best" students). Also, it is assumed that grouping of between classes may change from year to year. Because the administration changes, changes also occur in the way classes are grouped, depending on the philosophy or strategies employed by the administration. Within chosen structures, it is believed that students will be afforded the opportunity to practice the concepts and skills to be successful. Students may then develop increased comfort and confidence in their performance on the MCT2 assessment used to measure reading achievement. The students will apply formative learning to summative assessments.

Scope and Delimitations

This study was confined to perceptions regarding a group of third and fourth grade students at four rural schools in two Mississippi school districts. The scope of the study consisted of elementary schools with similar demographics in two rural school districts. One school practiced school-wide between classes homogeneous ability (tracked) grouping and three others used school-wide heterogeneous within-classes ability grouping. The study was limited to teachers' perceptions of differences in reading performance based on grouping practices and did not include conditions that may influence students' reading achievement such as school attendance. For this study, I used

data from interviews, focus groups, and a questionnaire to survey teachers' attitudes, and knowledge of ability grouping. The questionnaire was used to collect factual and/or attitudinal information as shown in Appendix A. As participants were not a randomized sample, the study's findings are only able to be generalized to the study's sample.

Limitations

This study's findings are not generalizable to all schools practicing tracking. This limitation is attributed to the nature of the qualitative design as well as the non-random selection of participants and sites of the study which would ensure an equal chance of all teachers and administrators to be included in the sample; thus, a representative sample of the population. Randomization could not be used in this study as a successful school-wide model of ability grouping with similar variables would have been difficult to locate, gain data, and study. The study may need a wider scope through including more schools that practice tracking or ability grouping between classes, by which to compare findings. Use of additional schools could have helped to increase the similarity of the ability grouped sample size to that of the non-ability grouped sample; thus, strengthening the comparison based on the views of teachers and administrators.

In this study, influences outside of the classroom may have affected the performance of students on standardized tests for which participants used as measures of reading, in addition to the grouping practices. These influences could include attendance, home life, prior knowledge, and other factors that may have hindered the performance of the students tested. Further, to control for all possible conditions that may influence student performance in educational settings is not possible; influences such as home life

and attendance are ever changing. Additionally, a limitation may be that in participants reporting of their true perceptions on self-report instruments such as questionnaires, answers may not be accurately or adequately presented.

Finally, a limitation may be bias on the part of the researcher in accurately capturing the meanings of participants' responses in interviews and focus group sessions. To address possible researcher biases, participants reviewed a copy of my notes of their responses for accuracy at the close of interviews and focus group sessions. At the completion of the study, I used member checking (Creswell, 2013a) to ensure that I accurately captured participants' meanings and limited any interplay of my biases involved in the study.

Significance of the Study

The study was designed to explore differences in reading achievement among students who were instructed through ability groups and those not in ability groups. The study is needed at the sites being investigated because the levels of reading performance of third and fourth grade students are not adequate and are generally below performance levels at the district, state, and national levels. The study is significant for educators as it could provide awareness of how classroom and school-wide climates affect student achievement. This awareness may promote the use of instructional arrangements and strategies that may provide opportunities to investigate alternatives for providing instruction that is engaging, age and ability appropriate, and encourages and supports understanding. The study may assist alignment with the present-day standards requiring the design of instruction to ensure that all students meet proficiency levels in the

prescribed academic area of reading to comply with the NCLB Act and/or Common Core Standards. Most importantly, the study is significant in determining what may or may not work in raising the reading performance of elementary students who must rely on this achievement for future success in school and in society.

The study lends itself to promoting improvement in a rural area where students may be successful and become productive citizens contributing to the growth of the economy, society, and the world. Based on insights about ability grouping learned from this study, suggested changes may be offered to the schools. For instance, teachers' ideas may suggest that a community of practice may be established among teachers to share pertinent data and teaching practices. Wenger (2006) described communities of practice as groups of concerned people passionate about a shared interest, interacting regularly to learn from each other on how to improve. A community of practice is characterized by members engaging in discussions, activities, and assisting one another by sharing information and finding solutions to problems.

Additionally, this study may help administrators to determine what is lacking in the structure of daily classroom activities (i.e. curriculum adjustments, improved grouping practices) that can be helpful in increasing student achievement. Furthermore, interventions to increase achievement and possibly different and improved teacher assignments may be necessary to establish and promote more positive change. These are only a few of the possibilities for social change that could affect the transformation of the rural schools into a more equitable entity, with the common goal of aligning with college, career readiness, and work expectations. According to the 2012 Social Change Impact

report published by Walden University, 64% of adults in the U.S. and Canada think that it is important to help the less fortunate. As communities of learners engage in attaining success on achievement tests, students' self-esteem may begin to build. Social change may occur with the students meeting expectations as well as the school benefiting in meeting the goals set forth by NCLB and CCS. Through exploring grouping practices and making needed modifications, students' performance levels in reading may increase which will lead to improved schools and increased opportunities for student success.

Summary

Chapter 1 included an introduction to the study designed to investigate the perceptions of teachers and administrators about reading achievement of students in ability and nonability grouped schools. The concept of grouping practices with attention to social learning framed this qualitative case study. Four RQs were investigated that considered variables of reading scores**,** grouping practices, students' socioeconomic background, and their racial identification. The qualitative research design relied on responses to survey items, focus group questions, and one-on-one interviews. The reading performance data used as a reference point for this study were based on a population of test scores for the years 2011-2013.

The results of the study are significant for promoting concepts that can be applied in evaluating ability grouping practices. Selecting practices are important for social change with respect to the degree to which they facilitate student development and are compatible with the achievement of specific educational objectives. Chapter 2 of this document contains a synthesis of research reports that connect praxis to theories of

learning and the impact of ability grouping practices on student achievement and social development. A detailed overview of studies that have explored between-class ability grouping and mixed-ability grouping practices is presented. The literature is supportive of the methodology described in Chapter 3 designed to determine teachers' views of differences in student achievement among ability grouped and nonability grouped students.

Chapter 2: Literature Review

The problem investigated in this study was that less than 50 % of third and fourth grade students in the districts consistently scored at proficiency on the MCT2 in reading (Mississippi State Department of Education Office of Student Assessment, 2014). Trend data also showed that less than 50% of some students at these grade levels have scored at the proficiency level within the last 3 years. High-stakes standardized test scores are one measurable determinant of success or failure in meeting the goal that is indicative on a yearly report card, the AYP report. Low reading performance and failure to meet AYP have resulted in some school districts being placed under state conservatorship (Kelly, 2012). Additionally, new state directives now require that third grade students pass a new test to exit to the next grade level. Therefore, many educators are pressed to develop ways to meet the proficiency goals of the local district, state, and nation.

Performance data over the past 3 years show a pattern of the majority of about 1,400 students tested at these grade levels often scoring below state and national proficiency levels as measured by MCT2 in school districts included in the study. Some schools in these districts group students in classes by ability. To identify ways to improve students' reading performance, I explored grouping as an instructional approach. In this study, I investigated perceptions of teachers and administrators of four schools in two school districts about the influence of school-wide between-classes ability grouping and school-wide nonability grouping on student reading achievement. Additionally, I explored participants' perceptions of an existing gap in reading achievement between

minority and majority students and the importance of the socioeconomic level of students to their achievement in ability and nonability grouped schools.

Chapter 2 consists of the literature search strategy, conceptual framework, and the literature review related to key variables. The literature related to key variables is divided in four major parts: (a) historical overview of ability grouping, (b) effects of ability grouping, (c) differentiated instruction, and (d) differentiation in Mississippi school districts.

Literature Search Strategy

I reviewed the literature on ability grouping through use of various sources. The results of searches from seminal works of theorists, refereed publications, dissertations, books, and news publications have added to the body of synthesized findings reported to enhance understanding of several topical areas that support the purpose of the study. The Education Resource Information Center (ERIC), Google Scholar, ProQuest Dissertations & Theses Global, Education Sources, Thoreau Multi-Data Base Search, ScienceDirect, and SAGE Journals were among search engines and databases I used in the review. Key terms used in the search for this section included *ability grouping, within-class ability grouping, between class ability grouping*, *mixed ability grouping, tracking, cooperative learning, differentiated instruction* and *constructivism.*

Conceptual Framework

This study is framed in the concept of grouping practices. Grouping practices explored in this study are ability (grouping between class) and nonability grouping (heterogenous). Practices for ability grouping place students of similar academic ability

within the same group or separate students into different classrooms or courses. Tracking and ability grouping are used interchangeably in this research and refer to a school-wide grouping arrangement. In nonability grouping, students are organized with varying abilities, learning styles, backgrounds, and racial and ethnic origins, with an emphasis on challenging curriculum and instruction for all students. Heterogeneous grouping may be used interchangeably with nonability or mixed ability grouping in this study.

The local setting, similar to school districts nationwide, is faced with ensuring accountability for student performance. Response to accountability dictates that districts must make data-driven decisions to implement changes in instructional arrangements including grouping practices (Musoleno & White, 2010; Popham, 2011). Guidance from the constructivist thought can contribute to decisions regarding grouping arrangements and instructional practices in local school settings. This guidance involves the use of frameworks for teaching and learning. An early framework was developed by Silver, Strong, & Perini, (2000) and encompassed the work of Marzano (1988) on learning styles. Further, the framework advanced the notion that students have preferred ways of thinking and processing information that are typical patterns for students to use to acquire knowledge Researchers demonstrated that the constructivist framework focuses on real-world experiences, expands upon students' preferred ways of learning, and incorporates instructional practices focused on the learner, discovery learning, play, and critical thinking strategies (Casey, Baghaei, & Nand, 2014; Cennamo, Ross, & Ertmer, 2012). Such frameworks for teaching and learning include how knowledge is constructed and levels of mental capacity for constructing knowledge.

Grouping decisions have been linked to constructivist thought in teaching reading. García et al. (2011) conducted a literature review of instructional strategies that employed a socioconstructivist theory for teaching reading. The review illustrated the appropriateness of the theory in implementing reading instruction in groups for elementary learners focused on guided conversations about the text to enhance students' critical thinking skills. Through instructional arrangements (grouping) and strategies, the student may model behaviors observed from fellow students that eventually will be internalized. Instructional practices such as cooperative learning incorporated in grouping practices permit the use of cooperative and collaborative dialogue. The social learning theory suggests that the development of conceptual knowledge through collaborative interaction depends on the individual's style of learning and how that style is addressed in the learning environment. Therefore, an implication of the theory, which is consistent with the conceptual framework of the study, is that teachers must recognize the need to employ diverse structures for facilitating students' understanding of skills and concepts.

Grouping practices also consider intelligence, which is often associated with ability grouping. This consideration in grouping practices is often linked with teacher perceptions or personal views rather than definitive data, especially for gifted and low-achieving students (Hornby, Witte, & Mitchell, 2011). Consistent with grouping practices investigated in this study, Schofield (2010) noted that although intelligence is among ways students are categorized, their socioeconomic status, race, and behavior are also used. However, when intelligence is used for placement, the research on multiple intelligences is very helpful to teachers in discovering the differing academic abilities

students have in different subject areas (Darling-Hammond, 2010). Effective procedures in identifying these subject-area abilities include administering special types of learning strategies associated with Gardner's (2011a) theory of multiple intelligences. According to Darling-Hammond (2010), assessment systems for students are among procedures that can "honor the research indicating that students learn best when given challenging content and provided with assistance, guidance, and feedback on a regular basis" (p. 1). Also, consistent with constructivism and multiple intelligences, Hattie (2011) and Tomlinson (2014) concluded that when students are provided multiple ways of acquiring information based upon knowledge of their strengths and needs, their learning is improved. These practices suggest that assessment and instruction are designed in concert with the variety of intelligences students demonstrate and are used in decisions about grouping practices.

Many gifted programs use multiple intelligences and learning styles questionnaires to gain insight into the interest and characteristics of students. These questionnaires are also used to place students into groups within the classroom. This practice can also be used in the regular education class to identify students' interests and possible learning styles, modalities, or other characteristics. This information can also be used to categorize and place students into groups of similar intelligences and interests within classes.

The frequency of students not making reading scores consistent with the site's objectives is an indicator of the need for examining grouping practices that promote learning. Considerations for improving students' reading performance include specific

instructional arrangements that are purported to promote and facilitate the active engagement of students and their construction of new knowledge. Lunenburg (2011) also explained constructivism as being related to teaching strategies and student learning. In this study, constructivism applies to teachers' understanding of their roles in guiding students to construct knowledge within ability or nonability grouping arrangements; therefore, in this study I explored teachers' thinking about grouping and their instructional practices such as cooperative learning and differentiated instruction that facilitated students' construction of reading skill knowledge.

Literature Review Related to Key Variables and Concepts

Issues included in the review address ability and nonability grouping, reading achievement, and student learning as related to constructivist strategies, grouping, instructional practices that are advantageous to student learning, and practices that are debatable in terms of assisting students to construct knowledge. These issues are incorporated in discussions with major headings. The literature review is divided in five main parts: (a) historical overview of ability grouping, (b) effects of ability grouping, (c) social constructivism, (d) differentiated instruction, and (e) differentiation in Mississippi school districts.

Historical Overview of Ability Grouping

The debate, which began the idea of tracking, or ability grouping within schools, formally began in 1892 by the panel of the National Education Association. Charles Eliot, the President of Harvard University, was the head of the Committee of Ten panelists (Wheelock, 1994). The panel saw the necessity for designing programmatic

changes in schools to provide increased support in preparing students for college and future employment (Wheelock, 1994). Since the practice of tracking the more elite students for acquiring an education beyond eighth grade in the 1800s (Loveless, 1998), ability grouping, which separates students according to academic performance, has now become standard practice in the United States. The ability grouping practice surged when Sputnik, the Soviet space advancement of the late 1950s was launched. This tracking movement was America's attempt to counter the Soviet Union through rapid development of the country's most intellectual students, with attention to scientific related content (Loveless, 1998). Sorting students by ability became common in some schools as so did the issues of tracking.

Educators developed tracks in schools that catered to higher learning and focused on remedial and vocational training during the 1950s (Davis, Rimm, & Siegle, 2011). Tracking declined in practices after Oakes' (2005) publication where she concluded that tracking works to the disadvantage of minority and socioeconomic status students and widens the achievement gap. According to DeLacy (2004), an earlier report by Loveless did not find evidence that tracking promoted inequality. Twenty years of tracking practices as reported by Loveless (2013) showed that tracking was revived during the 2000s and continues to be used basically at the secondary level and most frequently in mathematics. Similar findings were reported for ability grouping among fourth grade classrooms (Loveless, 2013; McCarter, 2014). These tracking issues remain topics of discussion with the following themes: sorting encourages segregation, separation of socioeconomic classes, group labels lower self-esteem creating self-fulfilling prophecies

in these students, children benefit from grouping, and untracking increases knowledge to every child (Ansalone, 2010; Burke & Sass, 2013; Vogl & Preckel, 2014). Implications from practices associated with these themes are threaded throughout the subtopics tracing the background of ability grouping.

Changing use of ability grouping. Accounts related to practices of ability grouping show that it was prominent in instruction for gifted students. The first special school for gifted was opened 1901 in Worchester, Massachusetts (Davis et al., 2011). Los Angeles, California and Cincinnati, Ohio developed classes for gifted students in 1916 (Davis et al., 2011). These classes were known as “opportunity classes." There was not much effort put forth toward meeting gifted students’ needs between the 1930s and the early 1970s; high public interest in ability grouping began to rise again during the mid-1970s (Davis et al., 2011). Individual states started to pass legislation about the needs for gifted students; then all 50 states and the U.S. government had enacted legislation by 1990, resulting in an increased commitment of teacher and administrators to gifted students (Davis et al., 2011). This fluctuation in using ability grouping for gifted students was also seen in instructional practices for specific content areas as seen in data collected by the National Assessment of Educational Progress. These data compared the existence of ability grouping in content area classrooms from the 1900s through the 2000s. The data revealed less frequent use of ability grouping in 1990 when the emphasis was on whole language, then an increase in its use in the 2000s with emphases in reading instruction. The data showed there were periods where ability grouping was similar in its use for both math and reading instruction, especially in fourth grade classes (Loveless,

2013). These data for math and reading are evidence that questions or issues determine the extent to which ability grouping is employed and the reasons for its use.

The data described in the account that Loveless (2013) presented suggested that ability grouping, as with other instructional arrangements and practices (the stress on phonics, for example), has gone through stages where most educators seemingly professed that ability grouping offered best opportunities for facilitating student learning. After years of reduced focus on ability grouping, student performance in reading and math based on national assessments suggested a need for reviving the practice (Loveless, 2013). Research reported by Davis et al. (2011), Loveless (2013), and Mathews, (2013) indicated that controversies associating ability grouping with racial discrimination and inequity of instruction contributed to the waning practice of ability grouping or tracking. However, as research emerged discounting ability grouping or tracking as a detriment to students of color and those from low socio-economic homes, the practice resurfaced (Garelick, 2013; Wilkinson, Penney, & Allin, 2016). Inherent in the thematic issues noted earlier, the resurgence of ability grouping seemed to address the issue of whether students benefit from ability or non-ability grouping.

Influences of research on grouping practices. In studies of grouping practices researchers have considered characteristics of learners in such topics as multiple intelligences, learning styles, and brain development (Loveless, 2013). Research included the development of frameworks for teaching and learning with attention to teaching strategies including differentiated instruction based on the characteristics of learners (Gardner, 1999; Silver et al., 2000; Vogl & Preckel, 2014). The research also included

attention to student characteristics such as personality type. One's personality type has implications for what interests the individual and the way students process information is directly affected by their interests. Teachers, therefore, who recognize and appreciate the needs of students, identify their learning styles and use diverse teaching styles to encourage learning based on the different ways students learn (Cennamo et al., 2012; Kolb & Kolb, 2011; Vainio & Raus, 2014). Teachers who differentiate in their teaching methods while considering personality types may be better equipped to motivate and teach a wider range of students because they are appealing to all preferences (Garelick, 2013). Awareness of personality types enables the teacher to approach the same lesson content in multiple ways. Research on personality types and interests is inherent in the Myers-Briggs Type Indicator (MBTI) (Kaler, 2007) and Gregorc's Style Delineator (Gregorc, 1989). These instruments are among tools that can be useful in differentiating instruction to ensure the needs of students are explicitly addressed in whatever grouping pattern is used.

The research on ability grouping is extensive. It has been addressed from different perspectives in many reviews (Ansalone, 2010; Gamoran, 2004; Gamoran & Berends, 1987; Harlen & Malcolm, 1997; Hallam, 2002; Kulik & Kulik, 1982; Loveless, 2013; Mathews, 2013: Oakes et al., 1992; Puzio & Colby, 2010; Slavin, 1987, 1990; Vogl & Preckel, 2014). However, emphasis in studies included in this research review regarding the placement of children was mainly on academic achievement and reading achievement levels (alone or in combination). For example, Slavin (1987) explored within-class grouping and non-graded instruction based on ability and their benefits for improving

reading, and concluded there are benefits for improving reading. While Vogl and Preckel (2014) examined grouping of gifted classes based on cognitive ability, conversely, Ansalone (2010) focused on ability grouping for low-achieving students. According to Deunk, Doolaard, Smalle-Jacobse, & Bosker (2015) high and low achieving students may require ability grouping as a form of differentiation. Both perspectives were employed as grouping patterns in the sites included in the current study.

Grouping schemes and their consequences have also varied. The consequences of grouping schemes (grouping by gender, performance scores, etc.) in the studies Vogl and Preckel (2014) and Ansalone (2010) conducted were examined with respect to academic achievement, attitude, and personality development. Notably, Loveless (2013) traced grouping schemes for various periods and concluded that the resurgence of ability grouping focused on student performance in reading and math rather than other content areas. Grouping elementary students based on their scores in reading and math resulted in their enhanced performance in these content areas (Loveless, 2013). A review of the previously cited reference sources suggested that the debate between homogeneous and heterogeneous ability grouping had focused on identifying practices related to both type groupings and those practices that were more conducive for student learning.

Other reports from research support that the issue of selecting an appropriate grouping scheme remains. The issue is also related to the extent to which the implementation of various ability grouping schemes result in equal educational opportunity (Kainz & Vernon-Feagans, 2007). In past research, few studies considered the educational relevance of ethnic and socioeconomic status in the placement of children

into ability groups or curricular tracks and few have examined the social, economic status, and political consequences of grouping schemes with respect to ethnic and socioeconomic separation of children (Lucas & Gamoran, 2002; Oakes et al., 1992; Slavin, 2012). The gap in the literature represented by the limited number of investigations of consequences of various schemes on different factors adds to the dilemma of selecting appropriate grouping schemes.

Reviews of the literature on grouping practices also suggest other problems associated with selecting appropriate grouping schemes. Loveless (2013) reported findings from a comprehensive review of studies on ability grouping since the 1920s and concluded that evaluating the quality of and designing educational environments present problems for users of ability grouping. A common practice in educational settings is to create grouping arrangements, instructional programs, and environments based on assessed needs (Wilkinson & Penney, 2014). However, according to Loveless (1998, 2013), the United States has received less attention in the comparison of tracking to non-ability or mixed-ability grouping because traditionally tracking has been prominent throughout secondary schools and less attention given to it in elementary schools. Additionally, with respect to the consequences of ability grouping/tracking relating to the distribution of children along ethnic and socioeconomic dimensions, the evidence suggests discouraging trends. Negative trends particularly apply when interpreted within the framework of educational equity where lower performing students do not receive the benefits of learning from more advanced learners.

Early trend data associated with ability grouping suggested its use would remain despite the controversy (Loveless, 2013). Among illustrations of increased trends in ability grouping practices were the results of a 2006 survey and data from National Assessment of Educational Progress 2011 that Mathews (2013) reported. The report showed increases in ability grouping from 63% to 71%. These increases were compared to low usage (28%) of ability grouping in 1998 to a high rate (71%) in 2009 in fourth grade (Mathews, 2013). Matthews also noted an increase of 21 % in its use in math from 1996 to 2011. These rates support perspectives that ability grouping is especially prevalent in elementary grades for such content areas as math and reading.

Reports that support ability grouping. Supporters of ability grouping have cited various benefits of the practice, as well as diverse grouping arrangements. For example, some teachers and schools purposely group students according to performance assessments, by behavior, race, and socioeconomic status (Adelson & Carpenter, 2011). Adelson and Carpenter (2011) conducted a study of ability grouped kindergarteners to determine their progress in reading skills. These students were placed in small groups by achievement throughout the year. In looking at their characteristics to include gender, minority, and socioeconomic status, they found that ability grouping in smaller groups provided benefits for all students in the form of improving their growth in reading.

Research reports reveal other views in favor of ability grouping. Hopkins (2009) is among researchers who cite the work of Slavin (1987, 1990, 2012) on ability grouping. Referring to findings reported because of Slavin's 1987 review of the research, Hopkins outlined grouping plans Slavin identified from practices in elementary school that may or

may not improve student achievement. Hopkins summarized five plans and the consequences of their use in the following excerpts:

- Grouping students as a class by ability for all subjects does not improve achievement.
- Students grouped heterogeneously for most of the school day, but regrouped according to ability for one or two subjects, can improve achievement in those subject areas.
- Grouping heterogeneously except for reading instruction (commonly referred to as "The Joplin Plan") improves reading achievement.
- Non-graded instruction that groups students according to ability rather than age and that allows students to progress at their own rates can result in improved achievement.
- In-class grouping, a common approach in which teachers break out two or three ability-based groups within a class for instruction, can benefit student achievement. (para. 4)

According to Hopkins (2009), Slavin recommended that grouping plans should be designed and implemented that include frequent evaluations of skill processes to permit reassignments based on progress. Support of grouping practices is evident in other publications of Slavin with a focus of instruction in math at the secondary level (Slavin, 1990; Slavin et al., 2009). In referring to Slavin's work, Hopkins reported that evidence of student benefits from grouping practices in mathematics is more definitive than those

in reading because employing a comparative research group design is constrained by within-class grouping practices in reading instruction.

Studies of ability tracking and mathematics have offered support that its use can lead to improvement in a student's assessment scores. Tieso (2005) conducted an observational study focused on the differences in whole, between, and within-class grouping and the students' achievement in mathematics. Using a quasi-experimental design, the results of an analysis of variance determined the effects of grouping arrangements and curricular design for control and experimental groups taught through selected curricular designs. Comparisons were made in pre-post scores of students in the three type grouping arrangements based on their performance on curricular-based assessments. Tieso found students' mathematics scores were significantly higher after ability grouping. The finding is consistent with reports of practices that included small group arrangements focused on individual attention to students (Tieso, 2005; Munro, 2012). The results showed significant improvement in student performance through using small group instruction within classes. The findings imply that when students are provided more opportunities for one-on-one instruction their feelings of intimidation are decreased, and their participation is increased.

According to NEA Reviews of the Research on Best Practices in Education (2005), commonly practiced in schools are within- and between-class ability grouping. NEA described within-class grouping as the practice of organizing small groups of similar ability students for instruction in a classroom setting, such as reading groups according to reading levels. Whereas grouping students as a whole class by academic

achievement was referred to as between-class grouping or tracking. Ability grouping between-class (grouping a whole class by achievement) and tracking are used interchangeably in this research study.

Those in favor of ability grouping say that the practice tailors the content and pace of instruction much better because skills and understandings of low achieving students can be reinforced through such strategies as repetition, while other practices can be used to accelerate skills and knowledge of high achieving students (Loveless, 1998, 2013; Vogl & Preckel, 2014). Additionally, Vogl and Preckel (2014) associated positive effects on students' self-concept with them being grouped as a gifted class. In the Vogl and Preckel investigation, which spanned from fifth to sixth grade, students in regular classes and a gifted class were matched based on four variables: cognitive ability, sex, socioeconomic status, and school. The results revealed self-acceptance, school interest, and student-teacher relationships were better for students in the gifted class than students in the regular classes.

Perspectives against ability grouping. Various views on the benefits and drawbacks of grouping have been presented in the literature. According to Lleras and Rangel (2009), tracking students by perceptions of academic ability is a pedagogical tool that has been perceived to be somewhat detrimental to student performance. It restricts the development of literacy among minority students placed in low groups and has limited benefits for those students placed in higher reading groups (Lleras & Rangel, 2009). Lleras and Rangel found African American students' reading gains in higher

groups were not that much different from non-ability grouped students, while African American students in lower ability groups lost skill development in reading.

Similar to proponents of ability grouping, views against ability grouping also vary. Those opposing ability grouping say that the practice does not benefit any student; rather, ability grouping facilitates low tracking of under-privileged and minority students and decreases their opportunities for engagement in the quality of instruction received by other students (Oakes et al., 1992; Wouters et al., 2012). Opponents also believe ability grouping widens the achievement gap, and reinforces social inequality because the tracking location most often is related to what has traditionally formed the concept of socioeconomic disadvantage (Lucas & Gamoran, 2002; Oakes et al., 1992; Wouters et al., 2012). Tracking is directly influenced by socioeconomic status, and indirectly influenced by race and ethnicity (Betts, 2011; Burris, Heubert, & Levin, 2006). Therefore, students representing different minority groups are just as likely to be placed in high tracks, if their performance in other demographics are similar to those of Whites (Ansalone, 2010; Burris et al., 2006; Gamoran & Mare, 1989; Lucas & Gamoran, 2002; Tach & Farkas, 2006). Other studies show that a child's demographics has a significant influence on the child's continued education and subsequent drop-out rate (Cornell, Gregory, Huang, & Fang, 2013). Cornell, Gregory, Huang, and Fang (2013) addressed both the demographics of students including students' performance on standardized achievement tests and school climate as factors in school dropouts. Students with low academic performance were often bullied or teased, leading to a 21% increase in student dropout. The authors concluded that students' academic performance is influenced by

teasing. The findings illustrate that when students are organized by performance level, they can be targeted for teasing and bullying by their more affluent peers. Further, ability grouped students placed in low curriculum track have low self-esteem, feelings of inferiority, and are more likely to be delinquents and ultimately drop out of school (Wiatrowski, Hansell, Massey & Wilson, 1982). These views demonstrate current issues of ability grouping that question the practice as a disadvantage to students of low socioeconomic groups and a practice that encourages segregation.

Opposing views of ability grouping also link the practice and student performance to segregating students by race and socioeconomic status. Findings of a study involving minority children of low income families who attended highly minority populated schools revealed the performance of these students in reading was low. A child's home life and lack of early literacy and reading skills may have a negative effect on achievement outcomes (Raag, et al., 2011). Demographic variables including instructional quality were among characteristics accounted for in the analysis of performance (Kainz & Vernon-Feagans, 2007). The study emphasizes how tracking by race or socioeconomic status, whether as a whole school or class, is a disadvantage to low performing students.

Noted in the study's report was that "the majority of black and Hispanic children in the United States attend such 'minority segregated schools' (Kainz & Vernon-Feagans, 2007, para. 2). A study of reading development of economically disadvantaged kindergarten through third grade children was conducted by the FPG Child Development Institute and the School of Education at the University of North Carolina at Chapel Hill

(UNC, 2007). The sample, consisting of 1,913 children, was drawn from a national data base of the children from Early Childhood Longitudinal Study-Kindergarten Cohort that included "a national representative of more than 22,000 children enrolled in approximately 1,000 kindergarten programs" (Kainz &Vernon-Feagans, 2007, para. 3). The study was instrumental in illustrating the importance of reading policies considering all influences on reading development simultaneously including the home and school (Kainz & Vernon-Feagans, 2007). The implication of this observation supports opposition to grouping low achievers together without considering all factors: child characteristics, home, classroom, school that would enhance or detract from the ability to perform.

The home as a factor is often associated with parental involvement. The study conducted through the University of North Carolina at Chapel Hill (UNC, 2007) identified home as a factor to be considered in instructional arrangements for teaching children to read. Home as a factor suggests parental involvement is considered essential to academic success (Fan, Williams & Wolters, 2012). Parental involvement such as helping with homework, attending school functions, and visiting the child's classroom has been associated with higher reading and math scores (LaRocque, Kleiman, & Darling, 2011). Although parental involvement has been associated with the socioeconomic status of the home, researchers also contribute differences in students' performance to other factors (Kainz & Vernon-Feagans, 2007). In the UNC study, Kainz and her colleagues conducted surveys and telephone interviews involving teachers and caregivers of children whose basic reading skills had been assessed. Assessment results

showed students' abilities in reading over time were affected more by the demographic characteristics of the schools' environment, characterized by low achievers, than by students' background, economic status, or the instructional methodology to which they were exposed.

Student demographics and school climate have been shown as important factors in grouping decisions. Kainz and her colleagues (UNC, 2007) reported that classroom environments reflected high percentages of students who performed below grade level and who were struggling readers. These conditions led to negative influences on all students' assessment results in categories of reading and vocabulary skills (Kainz, 2007). The research not only illustrated the value and need of policies related to improving reading through comprehensive reading instruction, but also the negative influences of large numbers of poor readers placed together in classrooms on the reading ability of all students in the classroom (Kainz & Vernon-Feagans, 2007). The study's findings have implications for homogeneous and other grouping patterns, and the structure of schools participating in this mixed methods study.

The practice of ability grouping may suggest providing instruction that is less complicated when students do not represent a wide range of abilities. Homogeneous grouping is viewed as offering students an opportunity to perform at a higher level when tasks are accompanied by materials and procedures that are geared to their abilities, but also realistically challenge them to work to their potential at their own rate with students of similar abilities (Esposito, 1973; Gallagher, Smith & Merrotsy, 2011; Hong, Corter, Hong, & Pelletier, 2012; Marcus, 2009; Schullery & Schullery, 2006). This view,

however, was somewhat challenged in findings of a recent study where the performance of ability grouped students was compared to those where grouping patterns were not used. Puzio and Colby (2010) conducted a meta-analysis of 15 studies representing experimental or quasi-experimental designs to determine the impact of within-class grouping on reading performance. Given interventions of the experimental groups such as cooperative learning and strategy instruction, the researchers reported that higher ability grouped fourth grade students in reading (+0.22 effect size) performed better than students who were not ability grouped; however, the performance of lower ability grouped students was substantially less than non-ability grouped students. The effect size of the intervention with fourth grade as the mean grade, was interpreted as providing the higher ability grouped students with an additional half of a year in reading growth.

Labeling students is among the current issues associated with ability grouping. A major opposition to ability grouping identified through Slavin's 1987 research was the concern for labeling students from being grouped as a specific type learner. This labeling was thought to result in students being deprived of needed stimulation for developing positive self-expectations (Esposito, 1973; Oakes, 2005). In recognition of achievement gaps among students, some views regarding homogeneous (low-end ability) grouping support that this type grouping is not the best for all students (Slavin, 2012). The limited availability of reading materials in poverty stricken areas may contribute to students' performance. Frustration starts for low performing students when they compete with their brighter counterparts because they know they are less capable (Alderman, 2013). Students who are placed in lower groups continue to fall further behind their peers. The

perception is that some classes are distributed with race, socioeconomic level, and discipline problems as factors in ability grouping that tend to foster inequality (Lawless, 2013). This inequality creates larger achievement gaps among minority students. Collopy, Bowman & Taylor (2012) explored techniques teachers could use to help close the achievement gap between Blacks, Whites, and other ethnic groups. Heterogeneous mixed ability within classes using differentiated instruction and other instructional strategies gives promise to closing the achievement gap.

Additionally, the argument for heterogeneous (mixed/non- ability) grouping is that homogenous (between class/tracking-low) grouping is undemocratic, stigmatizes students, and does not promote an understanding of the real world where they will work with persons of diverse backgrounds. Those who oppose homogenous grouping suggest that students benefit from being taught in an environment with higher ability students (Esposito, 1973; Loveless, 2013). Therefore, an implied challenge is in making school decisions regarding grouping practices that are most beneficial in relation to students' diversities and characteristics.

The theme of encouraging segregation and inequality through ability grouping has been present in the literature in early publications. Oakes (2005) demonstrated the harm caused through ability grouping and tracking students and emphasized these practices promote inequality. Loveless (2013), the director of the Brookings Institution's Brown Center on Education Policy, noted that tracking as opposed to ability grouping is initiated at the school level rather than in a classroom. This issue, ability grouping and tracking remains among current topics of discussion in the research literature.

Grouping based on scores and lower grade level performance has been viewed as sometimes limiting the upward mobility of students in the future. According to Sloat, Beswick, and Williams (2007), the upward mobility of skill deficient third grade completers requires long-term support; as they will likely have limited engagement in the regular curriculum; therefore, also decreasing the likelihood of their performing like that of their more literate counterparts. Too many students who cannot read at grade level continue to the next grade. There is a problem with students meeting grade level performance in math as well. According to the NEA (2013), gaps in test scores sometimes result in other gaps that influence academic success and job security in later years.

Effects of Ability Grouping

Ability grouping has been reported to have several positive and negative effects. Ability grouping is implemented to facilitate individualized instruction, to eliminate boredom, to encourage participation of low achievers, and to focus instruction on specific learning needs, according to researchers in this area (Ansalone, 2010; Pierce et al., 2011). Researchers disagree about the effects of ability grouping. For example, Swiatek (2001a) suggested achievement rates of lower ability students were not improved because of grouping them by ability. Further, the researcher recommended grouping should be based on accurate and unbiased measures of students' knowledge. Robinson and Lubienski (2011) concluded that the accuracy of measuring knowledge and learning by using standardized test scores is questionable. Swiatek (2001b) also examined high school gifted students using the Social Coping Questionnaire and concluded that self-esteem was

often not affected by ability grouping of low level students. However, the author claimed that lower ability students may experience more positive self-esteem when grouped with similar students. Thus, opinions differ regarding the effects of ability grouping.

Reports on the influence of ability grouping vary. Brulles, Saunders, and Cohn (2010), and Ireson, Hallam, Hack, Clark, and Plewis (2002) studied math performance among gifted students in cluster grouping and ability grouping for English instruction respectively. The researchers found that high achieving students performed at even higher levels when grouped with students of similar performance levels; they concluded however, that students who had a harder time learning felt left out. Contrary to findings of Swiatek (2001b), lower level groupings were found by other researchers to have a negative influence on students' self-esteem as well as their perceptions of school-related responsibilities (Catsambis & Buttaro, 2012; Ireson, Hallam, & Plewis, 2001). Catsambis and Buttaro (2012) studied the socialization of kindergartners to determine whether their psycho-social development was related to within-class ability grouping. Their results revealed differences in development based on the type of within-class group. Lower level student groups produced lower level development than students not participating in groups; whereas, higher level student groupings produced more advanced development of attributes such as interpersonal skills and self-control. Similarly, Ireson, Hallam, and Plewis (2001) studied how secondary learners perceived themselves when grouped by ability in math, science, and English. The degree of structure in English classes was found to negatively influence self-concept of low performing students while enhancing self-concept for higher performing students. There were no effects on students' self-

concept in the other two content areas. Other researchers concluded that only high achievers experience the positive effects of ability grouping (Ansalone, 2010; Pierce et al., 2011). Lu, Weber, Spinath, and Shi (2011) examined the relation of academic achievement and motivation and found no relation between ability-grouped children's reports on perceived ability, intrinsic value and academic achievement. However, Fletcher and Sampson (2012) concluded that the intrinsic motivation and determination drives a student to complete a challenging task or assignment. This may be true, whether ability grouped, or non-ability grouped. Thus, some researchers reported negative aspects of ability grouping, while others indicated ability grouping resulted in positive aspects of ability grouping.

Other effects of ability grouping have been identified in the literature. For example, high achieving peers seem to positively influence the lowest achieving students (Burke & Sass, 2013, Sojourner, 2013). Researchers have found causal relationships when comparing characteristics and behaviors of learners with achievement. Burke and Sass (2013) conducted a longitudinal study of students in Grades 3 through 10 in Florida of peer effects on student achievement. The researchers found peers influence achievement, but it depends on the abilities of both peer and student. They suggested aggregate achievement may be positively influenced through using some ability tracking. The researchers also cautioned that lack of teacher inputs can limit peer effects on achievement. Also, positive behaving students have been linked to their having enhanced achievement; similarly, negative behaving students have a negative influence on self and

peer achievement (Carrell & Hoekstra, 2010; Imberman, Kugler, & Sacerdote, 2012; Lavy, Paserman & Schlosser, 2012).

The effects of ability grouping have been linked to student demographics. For example, negative implications related to social development, socioeconomic status and ethnicity were apparent in a study where ability grouping was used in a rural and an urban school setting (Flashman, 2012). Flashman (2012) found differences in students developing friendships when grouped as high and low achievers based on the setting. Both high and low achievers in the urban setting developed friendship with their peers. In the rural school, developing friendships was not significantly associated with academic placement (Flashman, 2012). Also, researchers examining gender placement in ability grouping suggested the need for considering the potential impact of social inequity. Catsambis, Mulkey, Buttaro, Steelman, and Koch (2012) found kindergartners placed in reading groups were disproportionately represented by gender when groups were formed as average, high, and low achieving. There was an underrepresentation of boys in high achieving groups and an underrepresentation of girls in low achieving groups (Catsambis et al., 2012).

Using school data matched to cases of domestic violence, Carrell and Hoekstra (2010) found the behaviors of students from domestic violent homes negatively influenced their peers' reading and math scores. Implicit in the influence of behavior on peer performance is that factors determining ability grouping schemes should be considered in efforts to promote achievement. Although there are diverse ideas on the

effects of ability grouping, studies reported tend to agree on variables, such as self-esteem, for which ability grouping is either beneficial or not beneficial.

Opinions also vary about teaching practices and their influence on student performance. Among opinions is that the performance of low-achievement students is negatively influenced by teacher's perceptions of their capabilities (Yerrick, Roth & Tobin, 2007). These perceptions influence what teachers expect of students grouped for remedial instruction and the pace of instructional delivery (Marcus, 2009). Although typical instructional practices will involve identifying the specific needs of students in low-level groups and corrective measures, students' exposure to assignments for their needs may be limited (Marcus, 2009). Implications from literature reviews also suggest an opposing idea: teachers' perceptions and subsequent curriculum adjustments benefit students (Ansalone, 2010; DeLacy, 2004). Researchers conclude teachers' perception of the academic ability of lower track students has an influence on their performance in the classroom (Kususanto, Ismail, & Jamil, 2010; Parson & Simpson, 2006). Ansalone (2010) discovered that low ability level mathematics classes and teachers' expectations for student learning often are a concern. A decrease in academic expectations results in a self-fulfilling prophesy of underachievement (Chiu & Xihua, 2008; Rosas & Campbell, 2010). These researchers emphasized that teacher perceptions about students' ability also influences any adjustments in their curriculum practices. These studies highlight the importance of forming ability groups based on accurate and measurable information along with teachers' perceptions of students' abilities as previously discussed.

Additional findings from research revealed conflicting views regarding ability grouping and improved teacher-student relationships or enhanced student self-concept (Kususanto, Ismail, & Jamil, 2010; Vogl & Preckel, 2014; Wouters, De Fraine, Colpin, Van Damme, & Verschueren, 2012). Wang and Eccles (2013) suggested that students have greater motivation to be engaged and to learn when they have a positive relationship with their teacher. According to Slavin (1986), low track students are usually low in academic self-esteem, have inferiority feelings, shame and anger. However, one study showed that students' self-concept improved when they were dropped from a high-level track to a lower track. The academic challenges were less demanding in the lower track and students' performance improved, which resulted in the conclusion that academic achievement is related to self-concept (Wouters et al., 2012). This may be attributed to less stress to compete with high achievers and they could achieve easier and better at their level. These findings directly relate to influences on students' learning.

Another perspective on ability grouping relates to the preferences of teachers based on grade levels. Loveless (2013) reported teachers of fourth grade students showed a preference for using ability grouping over instructing all levels of students together. Positive views of ability grouping suggest it is beneficial in permitting more attention in assisting more promising students to reach the level of proficiency included in standards associated with NCLB and the Common Core. Ability grouping, and teacher expectations possibly coincide because many of these teachers may not teach from a multicultural perspective; therefore, students notice teachers' preconceived ideas of how they behave or perform (Ansalone, 2010). Wang and Eccles (2013) suggested that motivation and

engagement in the learning process is enhanced when learners have a positive relationship with their teacher. Callahan (2005) observed that one's limitations in language or language differences have been misinterpreted as limitations in one's academic abilities. This confusion has been often observed as contributing to English language learners being tracked disproportionately into low-level classes characterized by instructional modifications that are less demanding and that eventually prohibit benefits of more challenging instruction once these students acquire proficiency in language skills (Chang, Singh, & Filer, 2009; Henry, 2015; Rosas & Campbell, 2010). These reports on teacher expectations and learners suggest researchers agree that ability grouping, and some associated teaching behaviors negatively impact English language learners and causes decreased levels of motivation.

Differences in views among educators regarding ability grouping have included the view of the permanency of arrangement for learners as they progress in schools. In other words, once a student is placed in a lower track, that student is often kept there (Loveless, 2013). Previously, Slavin (1987) recommended that a successful ability grouping plan should reassess student placement frequently and reassign students based on their progress. Also, the practice of pulling students from the regular classroom for group instruction can impede their progress on the ongoing, on grade level activities in the class and decrease engagement in instruction planned for their individual needs. However, similarities exist among teaching practices in group arrangements (Reis, McCoach, Little, Muller, & Kaniskan, 2011). Teachers most often initially organize groups and vary content in concert with students' instructional levels. Flexibility in

grouping arrangements occurs as students progress in their individualized instruction, become more proficiency in skills and content taught, and demonstrate the need for more advanced content.

Tracking and educational inequity. The effects of ability grouping, or tracking have been linked to earlier practices deemed as unfair. Evolving practices in the United States are consistent with previous practices of tracking that were criticized to reinforce inequality (Loveless, 2013; Mathews, 2013). Changes in vocational education that emphasized academics have been observed as employing race and ethnicity as the basis for arranging classes (Lewis & Cheng, 2006; Mickelson & Everett, 2008). Previously in the United States, the influence of race and ethnicity in questions about school equity was addressed in court-ordered desegregation plans. Reardon, Grewal, Kalogrides, and Greenberg (2013) investigated the persistence of school desegregation in districts after being released from court-ordered desegregation plans. According to Reardon et al., there was a gradual increase in racial school segregation, especially in the South at elementary grade levels, both while the court order was in effect and when the districts were released. Reardon et al. concluded that the effectiveness of these court order plans was limited. A continuation of these practices suggested that reducing inequities related to race and ethnicity require some type of monitoring. Proponents of the resurgence of tracking view it as a vehicle to maintain rigor in the curriculum (Mathis, 2013). As the U.S. continues to fail to increase in student achievement as rapidly as other nations, missing the mark in preparing students for a growing, more demanding career readiness and competitive global society, it is important to note the underlining problems.

According to Darling-Hammond, “If we improve race relations and help all students acquire the knowledge, attitudes, and skills needed to participate in cross-cultural interactions and in personal, social, and civic action, we will create a more democratic and just society” (2015, p. xi). This study has implications for the need to review evolving practices in tracking and other strategies to avoid the possibility of labeling or other disadvantages to student achievement discussed in this review.

Influences of tracking on diverse populations. Several influences of tracking on students have been noted. Tracking students promotes intolerance, a negative effect on race-relations that reduces relationship building among students with diverse demographic and ethnic characteristics (Hattie, 2011; Oakes, 2005). Subsequently, the critical race theory (Grant, 2014; Milner, 2013; Sleeter, 2015; Taylor, Gillborn, & Ladson-Billings, 2009) emerged in preparing teachers for the diverse student population. Studies from Japan (Ono, 2001), Korea (Park, 2009), South Africa (Carter, 2012; Hoadley, 2008), Germany (Cheng, Martin, & Werum, 2007), Israel (Ayalon, 2006), Belgium (Van de gaer, Pustejens, Van Damme, & De Munter, 2006; Van Houtte, 2004), and the United Kingdom (Boaler et al., 2000; Ireson, Hallam, Hack, Clark, & Plewis, 2002; Ivinson & Duveen, 2005) all related grouping between or within classes in schools with some elements of increasing inequality. Furthermore, according to Hattie (2011), “tracking has minimal effects on learning outcomes and profound negative effects on equity outcomes” (p. 90). Findings from the research suggest that in homogeneous settings, including European countries, increases in minority group size results in increases in ethnic inequality.

Issues of Black and White intercultural differences are at the core of social inequity. As noted in the previous discussion of emerging changes in organizing classes in vocational education, there is research evidence that inequities are promoted by organizing students by race into levels for instruction (Cheng, Martin & Werum, 2007). Blacks and Whites interacting in the classrooms need to be examined directly from students' voices providing interventions that connect culture and learning (James, 2012). This example of how issues can be better understood through using the voices of students support trends of including student discussion as a critical intervention tool for learning and understanding science concepts and processes (James, 2012; Rodriguez, Zozokiewiez, & Yerrick, 2008). In this way science educators, for example, can better understand issues from a personal perspective about feelings of underachieving African Americans and their over-representation in lower track classes.

Students often bring funds of knowledge to instructional settings gained through culture, intrinsic value of personal success, mostly inherited in parent involvement and respect for the expertise of the teacher, and the willingness to learn from effective instructional strategies. Some researchers challenge science educators to consider if they are aware of the wealth of cultural knowledge students possess that they can tap into to help them facilitate their teaching of and respect for social equity (Delpit, 2006, 2012; Nogeura, 2016). In a study of lower tracked science learners, these students did not associate their success with ethnicity or gender. Rather, based on personal experiences and affective attributes with effective teaching strategies, their interpretation of expertise in science teaching and how they chose to learn were closely associated with their

success (Yerrick et al, 2011). The cultural knowledge of decision-makers for tracking and teachers implementing tracked instructional groups may influence student achievement. Epstein (2013) suggested that teachers and parents should support one another to develop a community involved to promote and create a positive school climate and culture. Teachers are encouraged to select and develop instructional activities that have meaning for both the community and school (Epstein, 2013). Empowering students and teachers to become involved in the direction of learning enables social change (Weimer. 2013). Research on the culturally different (minorities and socioeconomically disadvantaged) suggests the significance of the family, the peer group, the society and the significance of role models in the development and achievement of the individuals in these groups (Ladson-Billings, 2009). The findings suggest that teaching should be culturally responsive; therefore, recognize the role of students' culture and experiences in planning activities for classroom instruction based on the demographics of instructional groups.

Influence of standards and assessments. Accountability challenges are increasing in our nation's schools with changes in standards and legislation. U.S. public schools have had limited success in increasing student achievement through high standards using ability grouping (Ansalone, 2010; Lu et al., 2011; Pierce et al., 2011). Evidence has supported that fewer or any college preparatory courses are chosen by students who are in lower track classes (Chmielewski, Dumont, & Trautwein, 2014). This is mainly because students in lower track classes do not demonstrate their capabilities on standardized test. Some students are not prepared with strategies to take these tests and others lack knowledge, intelligence, or confidence (Tomlinson, 2015). The U.S. is

pressured to implement common core standards that demand students to score proficient or advanced on assessments that require high order or critical thinking skills (Holloway, Nielsen, & Saltmarsh, 2017). There should be more frequent assessments of students' progress with adequate time allowed and provide low achievers assistance (i.e., paraprofessionals, peer tutoring, scaffolding) and other strategies (Wu, 2017). Public schools must provide more equitable learning opportunities to develop a workforce capable of critically thinking, reasoning, inferencing, and decision making (Slavin, 1987; Tomlinson, 2015). The decision to ability group students is frequently made in elementary grades, often based on questionable data, and usually last through high school years (Loveless, 2013; Marcus, 2009). In a study involving kindergarten students McCoach, O'Connell, and Levitt (2006) found that when the teacher used within-class ability grouping, the students' assessment scores in reading were higher. A positive relationship was found between the use of within-class grouping and reading performance, an example that when ability grouping is used to a certain extent, it can be beneficial as found in other research (Slavin, 1987; Tomlinson, 2014). Despite the diverse views about grouping patterns, reports in this section suggest instructional time, strategy, and selected grouping arrangements factor in students' ability to respond better on standards and assessments.

Social Constructivism

This study recognizes the association of social cognitive and constructivist theories as an important consideration in grouping for social learning. Social interaction in cognitive development is associated with Vygotsky's (1978) theory. Vygotsky's work

formed the foundation of social constructivism in educational settings (Churcher, Downs, & Tewksbury, 2014). His emphasis on the social context in learning caused educators to re-examine the concept of individual learning processes of Piagetian educational applications and earlier behaviorist, and to look closer at the social construction of knowledge (Jones & Brader-Araje, 2002). Vygotsky's concept that learning takes place between a student and teacher or student and more advanced learner supports nonability grouping.

This study purports that grouping is framed around constructivism, a philosophy of learning that suggests learners need to form their own perception of new ideas. Piaget (1969), Dewey (1916), Bruner (1960, 1963), Vygotsky (1978), Duckworth (2006), and Gardner (1999, 2011a, b) are just a few scholars and researchers who contributed to the constructivist thought. Constructivism, as suggestive in its development by Dewey, gave the view of students learning as a social construction of knowledge now seen in collaborative and cooperative learning groups. The constructivist learning environment enables context and content knowledge construction as seen in differentiated instruction. This theory encompasses the idea that social interaction of varied academic levels and/or diverse groups is necessary in the progression of constructing rich communities of learning through grouping practices that will promote increasing student academic achievement. By comparing test results of ability grouped schools to non-ability grouped schools and investigating teachers' and administrators' perceptions of ability grouping, resultant data may help administrators and teachers make plans to improve reading achievement.

Perceptions in this study were based on the variables grouping and reading achievement based on students' reading scores. Socioeconomic and ethnicity factors were also examined in participants' views related to reading performance. Reading achievement, according to Vygotsky's (1978) theory, can be facilitated, in part, through cooperative and collaborative dialogue. He emphasized the collaborative nature of learning and the role of sociocultural environment which include dialogue, discussion and problem-solving activities. Guidance from the theory was addressed in this study from the perspectives of leaders and teachers regarding consideration of student characteristics including social/emotional behavior, ability, ethnicity, gender, socioeconomic status, and background when making decisions for grouping students.

The theories of social learning and constructivism undergird the analysis in that factors of SES and ethnicity also influence how students perform. There is evidence in studies that show limited opportunities for resources, lack of exposure to positive learning environments away from the homes of the disadvantaged, lack of enhanced positive cognitive dialogue that would motivate students to higher aspirations and higher order thinking, socially interacting with diverse groups, and positive parental involvement influence student performance (Cornell, Huang, & Fang, 2013; Senge, Cambron-McCabe, Lucas, Smith & Dutton, 2012; Raag et al., 2011; Slavin, 1987). These factors influence the construction of new knowledge that would increase student performance and they are important when considering how students are grouped.

Commonly understood is that SES and ethnicity factors, questions of isolation, segregation, low self-concepts and inequities in curriculum and instructional strategies

exist in the pedagogical constructs of learning environments. Belfi, Goos, Del Fraine, and Van Damme (2012) recognized these concerns are among those in schools who choose or choose not to ability group. Belfi et al. (2012) studied the composition of classes in secondary education and the effects of ability grouping and gender on students' achievement and academic self-concept. The results indicated that ability grouping was beneficial for higher academic level students' achievement, but rather detrimental for the lower academic level students' achievement. The reverse held for students' academic self-concept. Furthermore, results showed single-sex classes were advantageous for girls' school well-being and academic self-concept. The results for boys were inconclusive. These results illustrate that grouping decisions continue to relate to the task of developing more equitable communities of learning so that no child is left behind.

The theoretical constructs have been examined with implications for instructional arrangements, instructional methodology, and student learning. Agreement can be found in the literature for recognizing the role of the student and the impact of decisions about instructional arrangements, formats, and practices, especially when practices include ability grouping based on the student's social, behavioral, and academic development (Catsambis & Buttaro, 2012; Catsambis et al., 2012; Flashman, 2012). Catsambis and Buttaro (2012) demonstrated implications for instructional arrangements in studying the socialization of kindergartners to determine whether their psycho-social development was related to within-class ability grouping. Their results revealed differences in development based on the type of within-class group. Lower level student groups produced lower level development than students not participating in groups; whereas, higher level student

groupings produced more advanced development of attributes such as interpersonal skills and self-control. Catsambis and Buttaro, found that when kindergarten students, boys and girls, are equally placed into average reading groups, boys were underrepresented in high achieving groups and girls were underrepresented in low achievement groups. These findings suggest that the examination of theoretical constructs for this study's theoretical framework provide guidance in the selection and design of groups.

Although decisions to ability group purport benefits to students in constructing knowledge within a peer environment of similar academic abilities, researchers argue that there are negative sides to this arrangement as the student applies prior experiences to learning. In recognition of possible negative influences, Catsambis et al. (2012) suggested that evaluations at the beginning of a school term would guide the placement of students in ability groups when considering gender, skills, and behaviors. Contrary to a negative side of ability grouping, Flashman (2012) found that placing students into classes based on ability creates friendships which can have an impact on their academic achievement. These findings may suggest that attention could be placed on mixed ability grouping since the product of social interaction is students learn from one another. Mixed ability grouping allows students to collaborate with other students who are not on the same level; they can challenge and guide one another because they have different intellectual levels. Among drawbacks noted are in the areas of social development, self-concept, and gender.

Differentiated Instruction

The history of differentiated instruction depicts it as a model initially used with specific groups of students. According to Tomlinson (1999, 2014), differentiated instruction was first applied in the general education classroom as a model for initially working with gifted students. The content provided in a general education classroom setting offered no challenge for these students. Because of changing classrooms dynamics with the inclusion of special needs students and increased mixtures of different populations in public schools, differentiated instruction applies to all levels for students of all abilities (Tomlinson, 1999, 2014). In this regard, researchers have found students with high performance levels learned more, demonstrated better self-esteem, and more confidence in the content areas (Tomlinson, 2000, 2014). Differentiated instruction is now frequently employed with students of varying abilities yielding successful results.

Differentiated instruction is viewed as providing a mechanism for developing and improving literacy skills, especially in recognition of low achieving students. Numerous studies have explored instructional arrangements, strategies, and standard examinations with promises that will lead to completers in U.S. schools having the tools that match or exceed those of their counterparts in other nations (Duncan, 2012; U.S. Department of Education, NCES, 2014; Woessmann, 2001). U.S. Secretary of Education Arne Duncan (2012) reported that in 2006, the performance of U.S. fourth grade students in reading lagged their counterpart in other nations, but by 2011, they had surpassed students in some of these other nations (Duncan, 2012). However, schools are striving to ensure that all students perform at or above proficiency in their grade levels to prepare them for

challenges presented in an ever-changing world. U.S. student performance in math and other areas still lags that of some other nations (U.S. Department of Education, NCES, 2014).

Children exhibiting low literacy skills have also performed below grade level in math and require the type of support provided through differentiated instruction (Loveless, 2013; Sloat et al., 2007). Flexibility in the delivery of instructional practices is expected for student learning rather than students having to modify their approach to learning the curriculum. As a support system, explicit in differentiated instruction, the teacher uses a combination of classroom arrangements to include whole-class, group, and individual instruction. The value of using differentiated instruction was enhanced through requirements of the NCLB Act enacted in 2001, which increased accountability for teachers and schools nationwide to ensure students are reading on grade level by third grade.

The research on teacher effectiveness has revealed some difficulties with teachers differentiating instruction. Although much teacher effectiveness research focuses on the perspective of teacher knowledge and classroom instruction, teacher effectiveness research has also focused on teacher efficacy from a socio-constructivist view (Ladson-Billings, 1999, 2014). Reports from such studies suggest that sometimes teachers lack preparation to teach in a differentiated classroom environment. For example, Crum (2004) found that teachers who had not been trained in the implementation of differentiated instruction self-reported they had negative attitudes about its use. This finding is liked to other observations of teacher ineffectiveness and teacher training.

According to Holloway (2000, 2017), teacher pre-service programs do not provide students enough training or experience in using differentiation methods. Holloway observed that university and school-based mentors encouraged pre-service teachers to target instruction to middle level students which did not promote the use of differentiated instruction. Surmised from this practice was the possible attempt to decrease instances where these teachers would become overwhelmed; however, Holloway noted that the practice of pre-teachers targeting basic levels may cause difficulties when they begin their teaching profession. In exploring the influence of administrative support, Holloway concluded that the lack of administration support in differentiating instruction can be a major constraint. In view of some challenges teachers face in differentiating instruction, Gatlin (2012) suggested mentors should be assigned to first year teachers to positively influence their acquisition of practical skills, knowledge, and experience. Brown-Jeffy and Cooper (2012) addressed instruction from the perspective of a culturally relevant instructional conceptual framework. These various views support the need for teacher guidance in providing instruction to address diverse student needs.

This research study questions how and why teachers group by ability group and what practices they use. Teachers use differentiated instruction with various types of group arrangements. The need for using developmentally appropriate practices and differentiated instruction to help students construct knowledge has also been emphasized (Hong, Corter, Hong, & Pelletier, 2012; Hornby et al., 2011; Shaunessy-Dedrick et al., 2015). Slavin (1994) viewed developmentally appropriate education as the alignment of instruction, learning environment, materials, and curriculum with the student's cognitive

abilities, social, and emotional needs. One strategy supporting mixed-ability classrooms is differentiation which became prominent as a connecting theme in classroom instructional practice in the early 2000s (Brulles & Winebrenner, 2012; George, 2005; Tomlinson, 2001; Tomlinson & McTighe, 2006; Winebrenner, 2001). Early leaders in this strategy firmly believed that the student's diverse needs – especially gifted students – could be met through differentiation in content, process, and product (Cennamo et al., 2012; George, 2005; Sisk, 2007; Tomlinson, 2015; Tomlinson & McTighe, 2006). Differentiated instruction is viewed as a positive strategy for encouraging students to construct knowledge as a participant in a grouping arrangement.

Constructivism and differentiated instruction. According to Bruner (1960), the construction of knowledge is an active process in which past or current knowledge of the world forms the basis for new knowledge. Bruner's theory suggests that new knowledge is an extension of what is already known that evolves through experiences and reflection; therefore, constructivism is not a process of reinventing knowledge. In concert with Vygotsky's (1978) views, Bruner (1963), later added social and cultural aspects of learning to the cognitive processes of constructivism. Instructional strategies involving questioning and assessing knowledge promote constructivism which are reflective in differentiated instruction and cooperative learning.

Issues associated with grouping patterns also relate to cognitive processes in the construction of new knowledge. Early researchers, Jensen (2005), Wolfe (2001), and Lambert et al. (2002) have applied brain research to design curriculum and instruction in the classroom. These and more current researchers (Sousa, 2011) have attempted to

illustrate how the brain operates to take in new learning and how students' "natural way" of learning enables them to process, store, and retrieve information so they can demonstrate what they have learned (Lambert et al., 2002, p. 25). Brooks, Brooks & Goldstein (2012) suggested that everyone has different ways of learning different concepts that makes them feel comfortable in the learning process. Associated with brain and cognitive processes, Gardner (1999) proposed nine distinct forms of intelligence that everyone possesses in varying degrees. The forms of intelligence are linguistic, musical, spatial, logical-mathematical, body kinesthetic, intrapersonal, interpersonal, existential, and naturalistic (Gardner, 1999). Gardner suggested two types of intelligences have traditionally been referenced (i.e., verbal/linguistic and logical/mathematical) in education; however, reference to the remaining seven types of intelligences have been limited. Implied from his work is that if instruction is developed to engage, then all the possibilities for success are increased through recognition of all intelligences. Differentiated instructional practices such as cooperative learning recognizes differences in forms of intelligence.

Differentiated instruction has been recognized as a valuable part of helping students to construct knowledge when they are grouped. Differentiation addresses students' strengths and weaknesses. Hong et al. (2012) concluded when heterogeneous grouping is used for reading instruction, optimal learning occurs for middle and low performing student with ample differentiated instruction. Hong et al. drew this conclusion based on a study of more than 20,000 kindergarteners which involved observations of the amount of time students spent in groups and the level of grouping in which they

participated. In the analysis of the Early Childhood Longitudinal Study-Kindergarten cohort data, Garrett & Hong, (2016), found that heterogeneous grouping was optimal for language minority kindergartners while homogeneous grouping was detrimental. Varying abilities and needs of elementary students suggest that the instruction provided should also vary. Grouping practices are often complimented with differentiated instruction which is the opposite of teachers focusing instruction on the class.

Differentiated instruction is among practices that may assist learners to read at or above the proficiency level. A rationale for structuring differentiated instruction in grouping for low achieving students can be implied from the initial research of Dunn and Griggs (2007) and more current practical application of the research (Dunn & Honigsfeld, 2013). Dunn and Griggs identified factors that aid in determining appropriate instructional strategies in view of group and individual differences. These factors are "global versus analytic processing styles, age, gender, and high-versus-low academic achievements" (Dybvig & Church, 2012, para. 3). Leaders in the differentiated strategy firmly believe that the student's diverse needs – especially gifted students – can be met through differentiation in content, process, and product (George, 2005; Sisk, 2007; Tomlinson, 2015; Tomlinson & McTighe, 2006). Valiendes (2015) reported students in differentiated instruction classrooms made better progress compared to those students who were not in differentiated classrooms. Socioeconomic status was not a factor in student achievement and the quality of differentiated instruction had a corresponding effect on student achievement. It enhanced the quality of effective teaching and promoted

equity (Valiendes, 2015). These findings illustrate the connection of differentiated instruction and increases in students' performance level.

Ability grouping practices are in alignment with differentiated classroom instruction aimed at students constructing their own knowledge. Exploratory learning is encouraged whereby students are exposed to data and interact with other students to question information and processes; to create new knowledge. Teachers in this classroom setting create a learning environment where they vary instruction to meet the diverse ways students learn. Therefore, characteristic of the setting are multiple instructional strategies, intervention plans that also focus on behavior modification, materials, and arrangements that are used to accommodate students' interests and needs. Instruction is implemented with the use of assistive and other technologies to provide a variety of options for student engagement, opportunities for student discourse, and platforms for enhancing problem-solving and communication skills.

Cooperative learning. Cooperative learning is also a differentiated instructional strategy applicable for helping to improve student achievement (Baines, Blatchford, & Webster, 2015; Kaldi, Filippatou, & Govaris, 2011). The use of cooperative learning groups as a differentiated strategy has been recognized in the research for its benefits and positive impact for all students (Marzano, 2001; Marzano & Brown, 2009; Slavin, 2012). According to Fore, Risen, and Boon (2006), "Cooperative learning is an instructional model that draws extensively on contributions of multiple theorists, including Piaget, Vygotsky, Carroll and other researchers" (p. 3). This strategy makes use of interaction among students of different performance levels in small group arrangements to

accomplish common learning goals and objectives. Kaldi, Filippatou, and Anthopoulou (2014) reported that teachers who employ cooperative learning strategies help students improve. According to Slavin, (2012) cooperative learning improves student achievement in most subjects and grade levels. Emphases in cooperative learning groups are placed on collaboration, social skills, individual accountability, and positive interdependence. Findings of early studies regarding cooperative learning are consistent with current views of its benefits as a differentiation strategy. According to these early studies, cooperative learning reinforces the legitimacy of peer tutoring as a learning aid and has contributed to increasing student performance across subjects and grades (Johnson & Johnson, 1989; Slavin, 2012; Wong & Wong, 1998). It is among the most popular learning and teaching strategies in current educational research (Dixon, Yssel, McConnell, & Hardin, 2014; Slavin, 2012; Tomlinson, 2015). This strategy is popular and effective because of the diversity of activities that can be used to guide and enhance student learning (Slavin, 2012). Peer tutors serve to assist other members of the team in the learning process. This creates a successful learning environment for all.

The literature reviewed revealed that for some learners, the use of cooperative learning groups along with other methods for differentiating instruction is effective for various reasons. Among them is that a move toward differentiating instruction, especially when it replaces homogeneously grouped classrooms, can arouse fears in parents concerning lowered expectations for gifted students. Brulles and Winebrenner (2012) suggested that using cluster grouping with gifted students within heterogeneous classes is beneficial to their recognition that they need additional knowledge. Through gifted

students working together in cooperative learning groups tends to motivate them to explore and acquire new knowledge rather than viewing themselves as higher leveled students assisting lower leveled students (Brulles & Winebrenner, 2012). This perception is contrary to parents' fear of grouping encouraging lower expectations for gifted students. Cooperative learning grouping dispels the notion that mastery of grade-level content means there is nothing more for them to learn.

Teacher efficacy: ability grouping, cooperative learning and differentiated instruction. A resounding theme in the teaching and learning literature is the teacher is an important factor for student success. The theme has been historically demonstrated in U.S. elementary schools as teachers have most often employed instructional groups to teach children how to read. However, decisions to use ability groups to differentiate classroom instruction have often been determined by administrative personnel in attempts to meet demands for improving school and student performance and to aid teachers in addressing multiple diversities in a classroom (Hornby et al., 2011). Studies of teachers' perceptions reveal not all teachers perceive this practice as positive in their efforts to enhance student learning (Gallagher et al., 2011). A lack of teacher self-efficacy, knowledge of the practice, and knowledge of gifted students were among reasons researchers identified associated with negative perceptions about ability grouping. Additionally, perceptions regarding between-class ability grouping were that it promoted an elitist attitude among gifted and talented students and did not encourage social development (Gallagher et al., 2011). Approximately 30% of teachers were opposed to ability grouping in a study Forgasz (2010) conducted with Australian teachers while

Gallagher et al. (2011) found many teachers agreed with its use but preferred mixed-ability classrooms or within-class grouping based on subject specific intervention for gifted students. These studies reveal teacher knowledge and teacher preference are linked to instructional choices.

Teacher perceptions are linked with self-efficacy and teacher perceptions impact students' perceptions and achievement. Calik, Sezgin, Kavgaci, and Kilinc (2012) determined teacher self-efficacy was related to student achievement in a study of 1,500 teachers where the impact of school leadership on teacher self-efficacy was examined. An investigation of 302 secondary ability grouped students in Malaysia revealed students assigned to low-level classes viewed teachers as controlling; however, views of students in high-level classes were the opposite (Kususanto et al., 2010). Kususanto et al (2010) reported teacher perception and students' self-esteem were related as both the scores and views of high-level students differed from those of low-level students.

Studies have illustrated the importance of teachers' views being recognized and valued by school leaders in efforts to enhance student achievement. According to Aslanargun (2012) and Calik et al (2012), teachers respond positively to leaders who demonstrate fairness and have confidence in their staff. These factors were found to enhance teacher self-efficacy. Therefore, researchers agree that when teachers without a positive perception of ability grouping feel valued, they will work hard to employ the strategy (Aslanargun, 2012; Forgasz, 2010).

This review supports that instruction in differentiated classrooms is initiated based on the needs of students and preparedness of teachers rather than on the dictates of a

curriculum guide. Implied from self-assessment and other measures of teachers' attitudes about differentiated instruction is that most teachers do not have the program preparation, professional development, planning time, and the ability to implement differentiation consistently (Casey et al., 2014; Casey & Gable, 2012). Teachers develop better self-efficacy using differentiated instruction through professional development that helps them acquire the content and the products needed for the approach (Dixon et al., 2014). The effectiveness of having this knowledge is visible in reports that reveal the use of differentiated instruction has shown such results as increases in math and reading abilities (Smith & Turner, 2012). Such results may have implications for the design of flexible grouping programs that combine cooperative learning techniques and within-class skills grouping in efforts to accelerate student learning in reading, writing, and math.

Mixed ability grouping has been an effective strategy for gifted and talented students. A study reported by the National Research Center on the Gifted and Talented (Moon, Callahan, Tomlinson, & Miller, 2002) revealed the benefits of mixed ability grouping to increasing student achievement in general and specifically high achievers. Per the report, a middle-school teacher indicated a preference for differentiated instruction as opposed to homogeneous gifted classes. The report also included the observation that a classroom filled only with gifted children who are concerned about doing what is right, can create a great deal of anxiety for those in the room who are not the quickest problem solvers. The teacher featured in the report found that mixed-ability classes in which there is grouping and regrouping for a variety of reasons, take the pressure off. The idea is to create an inclusive environment where each student is valued

for what he or she can do. Further, an acceleration and enrichment coordinator for a public-school system suggested the need for differentiation in homogeneous classes because there is a range of abilities and interests. The National Research Centre of Gifted and Talented, University of Virginia (2010) reported the CLEAR curriculum model was developed based on Renzulli's (Renzulli & Reis, 1997) schoolwide enrichment model; Kaplan's (2009) depth and complexity model, and Tomlinson's (2004) differentiation model. According to Tomlinson et al. (2008), the differentiation process built into the curriculum gives teachers step by step directions to differentiate instruction. Wu (2017) quoted Tomlinson as stating, “we cannot rely on teachers to do what they don’t have: time, energy, or skills to do” (p.54). The program was developed for the gifted and talented in rural schools and they are aligned with the Common Core State Standards. This type model can possibly be readily utilized in general education to promote student achievement.

The student and the cooperative learning differentiated classroom. Advocates for employing different learning styles recognize that all students have preferences for either working alone or with others. Therefore, diverse strategies need to be incorporated in instructional planning to accommodate varying needs and styles of learning students bring to the classroom (Carbo, Dunn, & Dunn, 1986; Dunn & Honigsfeld, 2013). Brain research, during the last years of the twentieth century, established principles of learning quite different from the way teachers teach and students learn. As stated in *The Differentiated Classroom: Responding to the Needs of All Learner* (Tomlinson, 1999; 2014), instruction is initiated based on the level and needs of students in differentiated

classrooms and not on a curriculum. The effective use of cooperative learning suggests that teachers include practices whereby students' unique styles of learning are considered along with their learning rates in adjusting instruction to meet their needs and to encourage them to challenge themselves (Tomlinson, 2014). Concluded from these reference sources is that student performance is contingent on the teacher's implementation of cooperative learning strategies.

Differentiated classrooms use flexible grouping, which accommodates students who are strong in some areas and weaker in others. Through proactive planning, differentiated instruction addresses the diverse characteristics of learners. In the article, *Differentiated: Lesson faster Teachers*, Carolan and Guinn (2007) provided accounts based on their observation of classrooms. Observations of five teachers suggested ways teachers could provide for diversities among students. These included

- Offering personalized scaffolding (to guarantee students internalized complex concepts).
- Using flexible means (designing and facilitating multiple paths) to reach defined ends.
- Mining subject-area expertise (showed multiple ways to navigate subject area).
- Creating a caring classroom in differences is assets (model respect for diversity). (p. 46)

Multiple instructional approaches and materials are provided in differentiated instruction. All curricular inputs and processes designed to assist student understanding have a role in

student outcomes. The learning environment in the differentiated classrooms sets the tone and expectations of learning.

The student's readiness and learning profile are also important components. Teachers and schools use different criteria and approaches to assist student's understanding through ability and non-ability grouping (Catsambis & Buttaro, 2013; Flashman, 2012). Among them are test scores, academic abilities, remediation needs, content areas, and learning styles (Musoleno & White, 2010; Wouters et al., 2012). Researchers have focused on learning styles and associated teaching strategies over the last 20 years. Renuzulli and Reis (2013) recommended various strategies for inclusion in classrooms for the gifted in recognition of early findings regarding influences on learning. According to the Dunn and Dunn Learning Styles Model (Dunn, 2000, Dunn & Honigsfeld, 2013), most people can acquire knowledge, and everyone has a unique way to acquire and master new and more difficult information. The model contains strands of elements directly related to one's learning style. Some elements are biological, and others are developmental in nature. The five strands are environmental, emotional, sociological, physiological, and psychological (Dunn, 2000, 2013). In their review of learning styles, Dybvig and Church (2012) identified important variables in the Dunn Model that illustrate differences among groups and individuals. These were "age, gender, global versus analytic processing styles, and high-versus low- academic achievement" (Dybvig & Church, 2012, para. 3). Beneficial to low-achieving students is the guidance implied from these variables in directing the identification and implementation of instructional strategies. This implies that differences exist in how groups of different achievement

levels of learners influence each other. One group that may be successful with the use of certain teaching strategies may not have the same results as another group.

In addition to considering learning styles as part of the student's profile, grouping and differentiated instruction aimed at increasing student achievement require attention to other diverse needs and characteristics of students such as personality types. The Myers-Briggs Type Indicator (MBTI) (Kaler, 2007) and Keirsey's Temperament Sorter (Keirsey, 1998; Weber, Lee, & Dennison, 2015) based on Jung's (2014) work in the early 1900s, may help teachers recognize and understand how personality differences affect communication between individuals and how they respond in a learning environment. Kolb and Kolb, (2011) and Gregorc's Style Delineator (1989) present a different learning style concept among many others; however, all have merit for some children and a blend of these learning styles would be more effective than any single approach. One's interest and how learning is acquired influence how information is processed. Teachers, therefore, must recognize and differentiate instruction to meet the needs of students. Teachers who differentiate in their teaching methods after learning about personality types may be better equipped to motivate and teach students of a wider range, because they are appealing to all preferences. Teachers can approach the same lesson content in varied ways when they are cognizant of personality types.

Commonly perceived is the expectation that teachers collaborate and share ideas for effective responses to students' academic needs. This collaboration may facilitate teachers' efforts in adapting their practices for the benefit of student learning instead of placing a burden on students through expecting them to conform for the sake of the

curriculum offered. Adapting teaching to the learner's need is inherent in the concept of "readiness" or teaching skills a little advanced of the student's current level of mastery. This concept is attributed to Vygotsky's (1978) position that there is a range of development at which learning takes place. Therefore, educational theory and research provide guidance for teachers' responsiveness to students' needs.

Teachers have practiced different strategies for addressing the needs of struggling and advanced or gifted students. Among them is removing students from the regular classroom for instruction in smaller groups for a set period. Students are instructed by a teacher who has the knowledge and skill to meet these students' unique needs. Some researchers claim that placing the struggling learner in homogeneous classrooms does not work because so often there are inhibitors to include declining teacher expectations, low levels of student interactions, slower paced of instruction, and the simplicity of materials included in the instruction (Oakes, 1985; Slavin, 1987; Tomlinson, 1999, 2014). As the literature reveals, remedial classes keep remedial learners remedial. However much of the best research suggests that when advanced learners are put in accelerated, homogeneous classes, they continue to advance and benefit because of the level of student discourse, the faster pace of instruction, and both teacher expectation and materials used are enriching (Kulik & Kulik, 1991; Tomlinson, 1991, 2014). These findings illustrate varying views of diverse teaching practices for both struggling and non-struggling students.

Similarly, views vary regarding the benefits of different types of grouping arrangements. Tomlinson (1991, 2014, 2015) expressed the opinion that although

expected of heterogeneous arrangements are that they are beneficial for addressing equity and excellence for all learners, they are not. According to Tomlinson, the assumption is flawed because readiness for preparing struggling students who are placed in heterogeneous classes is not always established. Readiness for instructing them in view of their needs is needed for them to perform with greater competence. The assumption is also flawed because the potential of advanced learners is inhibited when they are not served while waiting for other students to master content assigned to the class. Tomlinson (2015) noted that suggesting that they are on or above grade level will not permit them to grow. Finally, the researcher noted the assumption that the experiences in heterogeneous form *typical learners;* heterogeneity being a one-size-fits-all position where diverse learners are provided equity or excellence.

There is an imbalance of evidence regarding the positive effects of homogeneous grouping based on types of students. Much evidence exists of positive effects on the achievement of gifted students when they are assigned to homogeneous classrooms with an accelerated curriculum. In contrast, research evidence of positive effects on the achievement of regular and low achieving students when they are grouped homogeneously and placed in classrooms with grade level curriculum is less noted. In homogeneous grouping, the positive effect of high ability students is small and there is a negative effect on the low achievers (Marcus, 2009). Research continues to refer to gifted but these findings are not true; they are also relevant for all students (Tomlinson, 2014). Research only implies that this model can be used for all. The implication of inequity in

benefits or preferential treatment in serving this "elite" group of students may prove to be a subtle way to impose a hidden caste system that creates more harm than good.

Differentiation in Mississippi School Districts

Instructional practices in Mississippi's school districts suggest that differentiated instruction (DI) in theory should be adaptive to the learners' varying background knowledge and language, readiness level, individual and diverse learning styles and interests. Processes established in these school districts to differentiate instruction are responsive in that they recognize and attempt to maximize students' growth and success while addressing individual needs of students of mixed abilities within a classroom. There is support in the literature that central to the classroom experience in a democracy that works, heterogeneous classrooms and differentiated instruction must align and consider many factors (Gregory & Chapman, 2013; Parsons, Dodman, & Burrowbridge, 2013; Roda &Wells, 2013; Sleeter, 2015). Aside from academic preparedness, these factors include cultural and ethnic differences, student interests, and parental influence.

In Mississippi, as also is true in other states, economic deprivation is related to poor outcomes. Economic factors influencing these poor outcomes are apparent at all stages of development and range in form from low birth weight to problems with cognitive development, school achievement, and emotional wellbeing (Duncan & Brooks-Gunn, 1997). Varied home characteristics influence a child's situation. These may include the presence of married parents in the household, poverty, and secure parental employment. A general lack of parent involvement of the students of low socioeconomic status is prevalent (The United States Commission on Civil Rights, 2001).

These factors contribute to the need to diversify instruction to ensure elementary students in the districts become proficient readers; thus, influence need to consider importance of effects of instructional practices including the use of ability grouping and differentiated instruction in general.

Today, it is a mandate for Mississippi schools to implement RTI, which is concurrent with meeting NCLB, the Individuals with Disabilities Education Act (IDEA) of 2004, and least restrictive environment requirements. The basis for this change is a national understanding of these laws requiring interrelated processes using scientifically based research (SBR) curricula/instructional practices. These practices are intended to improve learning and achievement for all-inclusive students by setting high performance expectations. Instructional delivery use results of reliable, valid, and sensitive indicators to evaluate and adjust practices. According to the Mississippi Department of Education (2008), "RTI represents a philosophical shift in how schools identify and respond to students' academic and/or behavioral difficulties. RTI is intended to improve many of the problems associated with the 'wait to fail' model" (Mississippi Department of Education, *Response* to *Intervention Best Practices Han*dbook, 2010, p. 14). Under those procedures, it is not until severe academic problems occur that many students begin to receive intervention services.

Through RTI as soon as identification of needs occur, each student receives interventions. If assessment data confirms that a student is not making appropriate progress interventions are progressively intensified. Results of assessment with sensitive indicators of instructional effects inform educators of strategies specific to the success of

individual students. In the quest to support school use of RTI, Mississippi has adopted a Three-Tiered RTI process which incorporates differentiated instruction among its other instructional strategies in Tier one (Shapiro, 2014). Tier two is designed to supplement instruction based on students' performance in Tier one. Intensive interventions occur in Tier three when students are experiencing difficulties in the general education curriculum and/or social and behavioral competence. Tier three students advance to the Teacher Support Team process and Teacher Support Team outcomes. Several Curriculum-Based Assessment tools are put into place to screen and monitor progress. Several schools in Mississippi use the Renaissance Star Accelerated Reading and Common Assessment to monitor progress and predict students' achievement. More discussion of assessment tools and progress monitoring instruments will appear in Chapter 3.

Summary and Conclusions

This review of research demonstrated the conceptual framework and corresponding theoretical foundation upon which the study is based. Further, the chapter outlined key factors related to the study including perspectives on ability and non-ability grouping, and factors that influence reading achievement. The review suggested that a continuation of the examination of data in the interest of promoting the principle of equal educational opportunity could be necessary. Further suggested from the review is the necessity of assessing racial identification, socioeconomic status, and ability or non-ability grouping on student achievement. Ascribed to in this study is the philosophy of learning, constructivism, as it relates to grouping arrangements, non-grouping practices,

and associated best practices that can encourage students to construct knowledge about content presented in the classroom.

Leaders and teachers in school districts who participated in this study identified instructional practices and arrangements for teaching students to read. This social setting includes instructional formats in which ability and non-ability grouping are used and practices consider differentiated instruction and the need to motivate learners. Like Bruner's (1960) view of constructivism, this study recognizes the importance of the social setting in the acquisition of language and construction of new knowledge. Social constructivism, based on Vygotsky's (1978) views, is applied to grouping arrangements and non-grouping practices among efforts in the local setting to improve student achievement in reading, especially as it is measured by standardized examinations. Thus, this study adds to the literature through exploring the impact of the practice of ability grouping on elementary students and its influences on improving the design of educational settings and student achievement. The procedures involved acquiring teachers' perceptions of differences associated with ability grouping and gaining a clearer understanding of why ability grouping is being used in rural schools when evidence is leaning towards its detriment to student achievement.

Chapter 3: Research Method

In this study, I examined the perceptions of teachers regarding the influence of school wide between-class ability and nonability grouping on the reading performance of diverse learners. Additionally, I explored whether teachers' perceived student reading achievement differs based upon ethnic identification and socioeconomic status. The information gathered may be helpful to school leaders to facilitate the design strategies that might improve student reading achievement as measured by test scores.

In Chapter 3, I present the research design and approach used to seek answers for the RQs posed for the study. Justification for employing the design is also included. The chapter is organized in major topics to include research design and rationale, role of the researcher, methodology, trustworthiness, ethical procedures, and summary.

Research Design and Rationale

The aim of the study was to determine how teachers perceived student achievement in ability grouped/tracked and nonability grouped/nontracked classrooms and to identify the perceptions of teachers and principals regarding grouping students based upon ability. Further, I sought to determine whether participants thought ethnicity and socioeconomic status influenced reading achievement among the two type groups. The overall purpose of this study was to investigate teachers and principal's perceptions about the use of ability grouping and nonability grouping for reading achievement. The research questions posed were the following:

RQ1: How do participants perceive benefits of ability grouping/tracking and nonability grouping for helping students to construct reading knowledge in Grades 3 and 4?

RQ2: How much, if any, do participants perceive the achievement gap between minority and majority students exists in ability and nonability grouped schools?

RQ3: How important do participants perceive is the socioeconomic level of students to their achievement in ability and nonability grouped schools?

RQ4: What do participants perceive are the negatives of grouping and nongrouping students by ability of students in Grades 3 and 4?

I used the case study approach as a qualitative research design for the collection and analysis of the data. The case study allowed me to capture data based on the issues teachers experienced. Teachers were the most knowledgeable about the reading performance of students taught in both ability and nonability group settings. In this strategy, clarity regarding teachers' and administrators' perceptions on the use of grouping in their schools was achieved, and it allowed me to gain a broader understanding of the phenomenon from different types of data.

Role of the Researcher

As the researcher, I served in the role of observer participant in data collection. The observer participant role entailed conducting one-on-one interviews and focus group sessions in a discussion format using an interview protocol. As a teacher in one of the schools in the study, I have knowledge of grouping practices used throughout the state and about grouping practices and the implementation of differentiated instruction in

classrooms represented in the study. However, my employment is not in the third or fourth grade levels studied, and I do not have any supervisory responsibilities involving the participants. Although my position has no influence on other employees, any perceived threats of influence on participants' decisions to respond in the data collection process was addressed through informing them of their rights, that their participation was voluntary, and their decision to participate or not participate would not have any negative influences on their employment. Additionally, any possible researcher bias in data collection and analysis was controlled through participants reviewing my notes from interviews and focus groups for discrepancies and through member checking at the close of the study.

Methodology

The methodology I report in this section is an overall discussion of procedures for the selection of participants, collection of data, and data analysis. My discussion of the procedures provide detail for the rationale for the selection of participants, describe the survey and interview protocol as instruments, and present the coding procedures for analyzing the data.

Participant Selection

Participants represented a purposeful sampling from a population of four schools in two school districts with third and fourth graders' reading scores for the 2011-2013 school years. The population site, based on a convenience sampling of nearby schools, comprised of three schools practicing nonability grouping and one school practicing school-wide between-class ability grouping. The site was selected as it represented an

already formed group where grouping arrangements differed, a criterion for participating in the study. Also, expense and time were the key elements in my choice of using a convenient population from which the study's sample was selected. The sites for data collection were close to my location and the purposeful sample of teachers and administrators provided the most appropriate data based on the purpose of the study.

All certified language arts/reading teachers from four schools were invited to participate in the study. Teachers ($N = 15$) and administrators ($N = 4$) of the participating four schools composed the purposeful sample from an already formed group. The sample consisted of 70% of all teachers (22) meeting the criteria of being assigned third and fourth grade reading and language arts classes, teaching in an ability grouped learning environment, and teaching in a nonability grouped learning environment; and principals currently serving at the four participating schools. Participants were identified from public rosters of certified teachers and principals located on websites of the state board of education and those of districts and schools targeted for participation.

Instrumentation

A clearer understanding of the positive and negative features of ability grouping is necessary to determine its influence on student achievement. Understanding the perceptions of teachers associated with ability grouping and nonability grouping of students on student achievement aid in this determination. Therefore, a survey, audio-recorded interviews, and focus groups were used to gather information to answer four research questions concerning the perception of teachers regarding ability grouping of children.

The process for interviews and focus groups followed procedures in an interview protocol I developed based on related literature about ability grouping, which also ensured that rapport was established prior to the questioning. Questions included on the protocol and the survey were researcher-created to align with the study's purpose. These questions were submitted to a panel of peer reviewers to establish content validity and appropriateness for answering the research questions as recommended in the research literature (Creswell, 2013a, 2013b). The 5-member panel was composed of individuals with expertise and experience in grouping practices, questionnaire design, English, and reading. Their feedback was considered in finalizing the questions.

The survey consisted of 10 open-ended questions (see Appendix A). Focus group questions were extracted from survey responses to gain a deeper understanding of how grouping was determined and the influence of different grouping patterns on students' reading achievement. Probes to responses elicited clarity for the research questions and resulted in additional questions based on the analysis of the survey. The follow-up audio-recorded interviews with administrators consisted of four questions (see Appendix B). Similar to extracted responses from the survey to create questions for the focus group, responses from the focus group sessions offered additional questions to guide the interviews with administrators.

Procedures for Recruitment, Participation and Data Collection

Potential participants were identified from public rosters of certified teachers and principals located on websites of the state board of education and those of districts and schools targeted for participation. I requested permission to conduct the study in the

districts in a letter to the appropriate authorizing officials. I obtained access to participants through written permission from the district superintendents, an introductory meeting with school principals, an information letter, and consent forms submitted to potential participants. All certified language arts/reading teachers from four schools were provided a letter asking them to participate in the study to provide factual and attitudinal information by responding to questions on a survey and in a focus group. These teachers were selected based on the criterion of their positions as reading instructors for the third and fourth grades. Similarly, all principals ($N = 4$) of these schools were also asked and agreed to participate in an interview.

Information about the study was provided in the letter to participants and permission to participate was requested through a consent form e-mailed to them at their school. The form conveyed that participation was on a voluntary basis and the decision not to participate was respected and would not cause any negative consequences. I also informed them that they could withdraw from the study at any time. I requested that participants sign and return the consent form within 7 days to my personal e-mail address provided if they agreed to participate in the survey and focus group interview. Likewise, I e-mailed a participation letter and consent form to principals requesting that they sign and return the form if they agreed to participate in a one-on-one interview. Upon receipt of consent forms, I established a date for interviews with principals and confirmed the location; similarly, teacher participants were e-mailed the survey and contacted to establish the date and place of the focus group interviews.

I obtained narrative data for the study from 15 consenting certified language arts/reading teachers with assignments in Grades 3 and 4 from each of four schools in two rural school districts. Teachers classified themselves as teaching in an ability-grouped or nonability grouped differentiated learning environment. Teachers responded to questions on an e-mailed survey to their respective schools and in a focus group (see Appendix C). The survey consisted of 10 open-ended questions. I anticipated that responses to these questions would take approximately 20 minutes.

I estimated the period for collecting all data to be 4 weeks. I administered the survey first and asked participants to return the survey in 7 days. I e-mailed a reminder to potential participants after the 7-day period when less than 70% of the surveys had been returned. After 10 days with less than a 70% return rate, I e-mailed a final request that included an alternative of conducting the survey by phone if the individual desired. After 14 days, I determined that completion of the survey data collection process would need to be extended because of interruptions in schedules at a participating school.

Simultaneously with receipt of an appropriate number of survey responses, I collected data through the focus groups with a subset of teachers and one-on-one interviews with administrators. I conducted two focus group sessions composed of 5-6 teachers in each group reflecting the four schools. I conducted audio-taped sessions at an agreed time in a conference room of one of the schools for one group and in a meeting room at a public library for the second group. I extracted focus group questions from survey responses to gain a deeper understanding of how grouping was determined and the

influence of different grouping patterns on students' reading achievement. The length of time for the focus group session was approximately 75 minutes.

Principals at the four schools responded to interview questions conducted in one face-to-face interview in their respective offices. The audio-recorded interviews with administrators consisted of four questions. The length of interviews did not exceed 45 minutes. Interview questions identified administrators' perspectives on the use of ability grouping and its influence on student achievement in reading. The process for interviews and focus groups followed procedures in an interview protocol I developed based on related literature about ability grouping, which also ensured that rapport was established prior to the questioning. At the close of data collection and analysis, I e-mailed reviews of transcriptions representing themes for participants' responses for the accuracy of information or feedback for modification. I requested they respond within 2 days.

Data Analysis Plan

According to Creswell (2013b), data analysis of qualitative data occurs before, during, and after data collection because of the nature of the data. I transcribed and coded audio recorded interview (Appendix D) and focus (Appendix E) group data, and identified emerging themes as suggested in qualitative research. Basic interpretive, qualitative content data analysis occurred with the use of coding the emerging ideas from interviews, survey items, and the focus groups to obtain themes accounting for an explanation of the participants' perceptions of ability grouping in response to the research questions. I also used member checking to ensure clarity of interpretations based on the transcribed data (Creswell, 2013b).

Two kinds of codes appeared in the final analysis: pre-set codes developed from the research questions, survey questions, and conceptual framework; and emergent codes developed from the interview and focus group data collected (Patton, 2015; Yin, 2010). Codes are symbolic references for capturing interpretatively the essence of the meaning in data (Creswell, 2013a). Pre-set codes for content analysis are like open coding as used in grounded theory, as concepts or ideas suggested through the research questions and conceptual framework are identified for the initial categorization of data (Boyatzis, 1998; Strauss & Corbin, 1990). I formed these codes using alphabets and or numbers to identify related information. I identified ideas and concepts based on relationships I found from the pre-set information. I coded emerging ideas and then used axial coding to relate the ideas and organize them, combining them into meaningful categories or themes.

In the analysis of surveys, I read and reread surveys, printed them out, and coded emerging ideas. I transcribed recordings of focus groups and interviews, printed them out, and coded ideas that emerged. I combined all these coded responses into one and organized them and developed themes. A list of codes is in Appendix F.

Themes were supported with participants' comments and included any discrepant responses. Additionally, I found support for some participants' responses from visually inspecting MCT2 composite reading scores by performance categories for third and fourth grade students at each of the three schools that was not ability grouped and scores of third and fourth grade students for the one ability- grouped school. The analysis revealed that grouping of students by ability was determined by their previous year’s MCT2 scores of minimal, basic, or proficient in reading. These scores were established

by the state based on students' raw scores identified in ethnic categories of White, Black, Asian, Hispanic and Native American. Collectively, the analysis brought greater clarity regarding teachers' and administrators' positions about the use of grouping in their schools and influences on students' reading performance.

The results of the study are reported in narrative and tabular form when appropriate. The study is intended to provide a model for future instructional settings with the intent of closing the achievement gap among students with diverse characteristics represented in the study. Further, it is anticipated that the study will assist in alignment efforts with the present-day standards requiring that instruction is designed to ensure that all students meet proficiency levels in the prescribed academic area of reading to comply with the NCLB (2002) and other evolving district standards. A compiled one to two-page summary analysis of the data will be shared with participants and the school administration via e-mail after receipt of approval of the final document from Walden University.

Trustworthiness

Johnson and Christenson (2011) noted that validity in qualitative research means the study is "plausible, credible, trustworthy, and therefore defensible" (p. 264). Through triangulation of participants' responses on different forms of data collected: survey, focus groups, interviews; and considering the reports of reading performance, "validity and trustworthiness" of conclusions for qualitative research were enhanced (Calfee & Sperling, 2010, p.68). Triangulation of the data from interviews and focus groups was ensured through an accurate recording of responses. Ensuring the accuracy of recording

responses included hand-coding, interviewing, and then a review by the respondents (member checking) for any additional comments. At the close of both one-on-one interviews and focus groups I invited participants to review notes of their comments to ensure they have been accurately presented. Member checking through participants' reviews of transcriptions representing themes were e-mailed for their response for the accuracy of information or feedback for modification which was anticipated to require no more than 10 minutes of their time. The purpose of member checking, according to Harper and Cole (2012), is to ensure the description of data findings is free of researcher bias. They were requested to respond within two days. Similar to Merriam and Associates (2002**),** I worked for trustworthiness by "using different data sources, … aimed to triangulate … references to ensure greater data reliability" (p. 184).

The analysis was reported in a narrative which included themes generated from common or frequent similar expressions from teachers and administrators regarding grouping practices. Final interpretation and conclusions in the form of my themes were shared as a member check with participants via e-mail; a review of the original data along with the participants' feedback to make any modifications that do not accurately reflect their meanings were considered and reflected as needed for accuracy. The participants had no feedback suggestions for change. These themes served to support or refute trends from the review of reading scores on the MCT2 test.

Researchers agree that clarifying participants' contradictory views can occur in different stages of data collection and analysis and that including views or observations contrary to those that establish a thematic finding adds validity to the study (Creswell,

2013a; Denzin & Lincoln, 2011). The focus groups served to discuss varying views that were found in survey responses. Agreement was found on some of those views; however, in discussions of themes I included discrepant or negative views that ran counter to the majority views that had resulted in a theme.

Credibility

Credibility of the study was ensured through the implementation of an appropriate research design and steps included in the study's methodology. These steps included selecting an appropriate sample for providing information consistent with the study's purpose and research questions. Further, triangulating data from different sources to include interviews with school principals, surveys of teachers, and focus groups with teachers added credibility to the study's findings.

The accuracy of data was facilitated through audio recording, note taking, and meticulously transcribing recorded data. Transcribing involved continuously checking hand written notes to confirm participants' comments. I ensured a true representation of the problem studied by providing rich and thick descriptions of the setting and participants' responses. Further, participants were aware of their rights including reframing from answering questions that deemed uncomfortable or wished not to answer. Finally, in addition to participants reviewing my notes of their responses for accuracy at the close of interviews and focus group sessions, at the completion of the study, member checking, ensured that I accurately captured participants meaning. According to Creswell (2013a) member checking helps to ensure researcher bias does not interfere with reporting participants meaning of their expressions. Participants were provided a copy of

transcriptions representing themes for feedback. Additionally, for trustworthiness, I have included two transcribed interviews in Appendix D and a transcription of a focus group in Appendix E.

Transferability

Characteristic of the qualitative research is that transferability is limited to the setting in which the study takes place. However, I ensured a true representation of the problem studied by providing rich and thick descriptions of the setting and participants' responses. Through my description of the context of the study, readers can determine whether the results may be appropriate to a similar setting.

Participation selection is also considered in the transferability of the study's results. Participants for this study were purposely selected for their ability to provide the best information for the study's purpose. These sources are credible as the participants represent individuals most able to respond to questions regarding their sites and experiences in teaching students in the two types of settings. Further, the number of individuals constituting the sample was appropriate given that 22 individuals constituted the population of language arts teachers for third and fourth grades and four principals was the total number in the population. Of these numbers, 15 teachers and four principals participated.

Dependability

I provided detailed procedures for collecting and analyzing data that other researchers may replicate in their investigations of ability grouping. The description of the role of the researcher contains an acknowledgment of my experience related to the

phenomenon under study and knowledge of the study's settings. The exactness of participants' comments illustrated how themes that I identified emerged rather than through my own perceptions.

Confirmability

The analysis process required constant reflection on data to ensure accuracy and the identification of meaningful units. Reflexivity in the coding process resulted in categorizing data following procedures recommended for content analysis. Reliability of coding is associated with the consistency of the coding process that ensures the codes identify the intended information. The details of the coding process illustrate how pre-set codes guided the identification of categories of data and how the coded categories were reduced or changed as other categories emerged. These categories allowed me to see themes that emerged from large chunks of information. Sample codes are discussed earlier in this chapter.

Ethical Procedures

Before beginning data collection, I obtained Walden IRB approval #05-19-16-0118111 and adhered to site and federal regulations regarding the rights of human subjects engaged in a research study. Approval to conduct the study in the districts was followed by my meeting with site administrators face-to-face to provide a review of the procedures, assure them that the study would be conducted in a professional and ethical manner, and to elicit directions needed in the data collection process.

Approved qualitative data collection methods were used without risk of harm to participants. Participants signed an informed consent form. All information gathered, and

the participants' names were kept confidential and not disclosed; pseudonyms were used to refer to participants. Teachers and principals were asked to participate on a voluntary basis and had the liberty to change their minds at any time. I signed a confidentiality agreement to continue the obligation under the agreement after activities associated with conducting the study and reporting its results terminated. It is understood that a breach of confidentiality is unprofessional and does not adhere to research ethics. I also understand that violation of this agreement is a binding document. Data and informed consent forms will be kept in a locked file for five years following the completion of the study. Data will then be destroyed through shredding. Electronic files will be deleted.

Summary

Chapter 3 included the procedures that were followed in the conduct of this qualitative study. Data were in the form of responses of teachers for items on a survey and in focus groups. Responses of administrators based on an interview protocol (Appendix B) also constituted the qualitative data. The study's participants included a purposive sample of 15 certified language arts/reading teachers and four principals from four schools in two rural school districts. Themes resulting from content analyses of participants' responses were used to triangulate findings from the three forms of data collected. The section to follow will report the results of these procedures.

Chapter 4: Results

In this study, I explored teachers' and principals' perceptions of ability grouping and student reading achievement in four rural schools in two Mississippi school districts. My intent was to examine the perceptions of teachers regarding the influence of schoolwide between-class ability and nonability grouping on the reading performance of diverse learners. Additionally, I explored whether teachers perceived that student reading achievement differs based upon ethnic identification and socioeconomic status. In this regard, I posed four RQs that follow.

RQ1: How do participants perceive benefits of ability grouping/tracking and non-ability grouping for helping students to construct reading knowledge in Grades 3 and 4?

RQ2: How much, if any, do participants perceive the achievement gap between minority and majority students exists in ability and non-ability grouped schools?

RQ3: How important do participants perceive is the socioeconomic level of students to their achievement in ability and non-ability grouped schools?

RQ4: What do participants perceive are the negatives of grouping and non-grouping students by ability of students in Grades 3 and 4?

I gathered data using surveys, interviews, and focus groups to answer the RQs concerning the perception of teachers and administrators regarding ability grouping of children. I also investigated their perceptions of the influence of reading performance based on ethnicity and socioeconomic factors among ability and nonability grouped

students. Chapter 4 contains a review of the setting, data collection, analysis, the results of the study organized by RQs and themes, and evidence of trustworthiness of the study.

Setting of the Study

Four elementary schools in two school districts constituted the site of the study. These schools are in a rural area of Mississippi. The schools are comparable in student enrollment and in the quality of teachers for the third and fourth grades (Mississippi State Department of Education, 2014). The goal of the districts is for all students to achieve reading proficiency. As two different school-wide instructional practices exist in the setting, nonability grouping across classes and ability grouping or tracking, the selection of the setting was appropriate for determining teachers' and principals' perceptions of differences in student reading performance.

The site was selected as it represented an already formed location where grouping arrangements differed, a criterion for participating in the study. Also, expense and time were the key elements in my choice of using a convenient population for selecting the study's sample. The site for data collection was close to my location and I thought the convenient population would provide the most appropriate data based on the purpose of the study.

The 2011-2012 and 2012-2013 demographic data for the four participating schools are summarized in Table 5; this was when the study took place. The total student population of the site was composed of Black (48.5%), White (31.3%), Hispanic (20%) and other (2%) students. Schools 1-3 constituted nonability grouping practices. Neither between-class ability grouping by achievement nor a standard practice of grouping for

instruction by achievement was present in nonability grouped schools. Arrangements for completing projects or reading skill activities were left to the discretion of the teachers.

Table 5

School Demographics for 2011-2012 and 2012-2013

School	HQ Teacher%	Enrollment 3rd *N*	Enrollment 4th *N*	*Min%	Maj%	**SES%	Below Prof 3rd%	Below Prof 4th%
School 1 B = HP	100	115	110	52	48	87	51	45
School 2 B = HP	99	63	56	40	60	76	49	36
School 3 B = HP	100	74	70	52	48	81	49	37
School 4 D =AW	100	111	108	84	16	93	55	61
			2012-2013					
School 1 B = HP	100	121	110	56	44	87	56.2	47.3
School 2 B = HP	100	65	63	41	59	76	33.9	31.7
School 3 B = HP	100	85	63	55	45	81	50.6	44.5
School 4	97	144	94	85	15	92	62.9	46.8

Note. (*N*=1452). Min=Minority; Maj=Majority; Below Prof=Below Proficient; *Minority = Blacks, Hispanics, Others; **SES = free/reduced meals; B = HP is grade B for high performing school; D = AW is grade D for academic watch; HQ = Highly Qualified teachers. Adapted from "Mississippi District and School Information, School Profile," 2014-2015, http://www.mde.k12.ms.us

School 4 represented school-wide ability grouping. Students were placed in classes including accelerated classes based on academic performance including reading scores on the MCT2 test. Although the schoolwide between-classes ability grouped school had a status rated as academic watch and the remaining three were rated high

performing, the academic progress of students in reading was only met in one high performing school, per the NCLB 2011-2012 report card (Mississippi Department of Education, 2012). The schools are about equal in representation of females and males. Two (1 and 3) of the schools are about equal in the percentage of minority/majority third and fourth grade students; the remaining schools have a reverse representation of these groups. The minority ethnicity presented for School 4 included unidentified ethnicities (2%). In this school, Blacks represented 55% of the enrollment and the percentage of Hispanics was (27%), greater than that of Whites (16%).

Schools 1 and 4 had an enrollment that ranged from 108 to 115 third and fourth graders, while the enrollment at these grades for Schools 2 and 3 ranged from 56 to 74. The average socioeconomic status for both reading performance years included in the study represented by the percentage of students who were eligible for free or reduced meals for the participating schools was as follows: 87% (School 1), 76% (School 2), 81 % (School 3), and 93% (School 4). There was an average rate of 96% for students passing from third to fourth grade for three schools; one school (School 4) had a 73% passing rate. There were also similarities in the demographics of participants. Table 6 is a summary of participant demographics by pseudonyms. Four principals of the schools were women, who, with the exception of one, commanded the position at the current school for 2-6 years. One principal had only served at the site for 6 months. All principals made the decision for whole-school (or tracking) or nonwhole-school grouping practices (within class grouping) at the school. However, the majority received input from teachers or counselors about the structure to be used. The 15 teacher participants were all women

employed in third and fourth grades. Table 6 includes the demographics of the 19 participants (15 teachers and 4 principals) from the sample of four schools in two rural school districts. The four schools included reading scores for third and fourth graders taught by the 15 teachers listed. Teachers' experiences with ability grouping averaged 5-6 years; their class size was an average of 23 students at each grade level.

Table 6

Demographic Profile of Participants

Participant	Role	Years of Experience	# Students in Class/Grade	Years Ability Group Experience
America	AAG-IP	2 (at site)	275 (3rd & 4th)	N/A
Andrea	TA-SFGP	6-10	24/3rd	6-10
Angela	TA-FGP	8	22/4th	3-4
Annette	TA-SFGP	3-5	22/4th	3-5
Annise	TA-SFGP	26	26/4th	6-10
Avery	TA-SFGP	3-5	22/4th	3-5
Jane	TNA-SFGP	6-10	23/4th	3-5
JayLee	TNA-SFGP	NR	18/3rd	NR
Jeannette	TNA-SFGP	6-10	23-25/3rd	2
Jeannie	TNA-SFGP	11	24/3rd	2
Jessie	ANAG- IP	6 (at site)	160 (3rd & 4th)	N/A
Jewel	TNA-SP	10	18/4th	2
Jill	TNA-SP	15	18/4th	10+
Joan	TNA-SP	6-10	22/3rd	3-5
JoAnn	ANAG- IP	2 (at site)	145 (3rd & 4th)	N/A
Johnnie	ANAG- IP	6 mos. (at site)	270 (3rd & 4th)	N/A
Joyce	TNA-SFGP	20	18/3rd	14
Julia	TNA-SP	21	22/3rd	20
June	TNA-SFGP	15	21/4th	6-10

Note. (N = 19). TA-SFGP = teacher ability survey/focus group participant; TA-FGP = teacher ability focus group participant; TNA-SFGP = teacher non-ability survey/focus group participant; TNA-SP = teacher non-ability survey participant; AAG-IP = administrator ability group interview participant; ANAG- IP = administrator non-ability group interview participant; N/A = not applicable; NR = no response.

Data Collection

Upon receipt of permission to conduct the study in the districts from appropriate authorizing officials, I identified prospective participants and their e-mail addresses from public rosters of certified teachers and principals located on websites of the state board of education, districts, and schools targeted for participation. I collected data through a survey instrument administered by e-mail to third and fourth grade language arts teachers in four schools located in two districts. The survey required no more than 20 minutes to complete (see Appendix A). Of the 16 surveys e-mailed, 15 were returned. The majority were returned within the 7-day period requested. Each teacher electronically signed a consent form (see Appendix B) to participate in the e-mailed survey. Consenting survey participants were contacted using the phone number they provided to schedule a focus group session.

Two focus groups comprised of representatives from both type schools were conducted. A subsample of three teachers representing the whole-school ability grouped setting and three representing the nonability grouped setting engaged in a focus group held at the whole-school ability grouped site. Another focus group comprised of three survey responders representing the nonability group setting and two participants from the whole-school ability setting was held in a public library. Teachers were actively involved in the focus group discussions. The focus groups were conducted for 75 minutes (see discussions in Appendix E). Discussion questions for both groups included extensions of responses to survey questions. Both focus groups were audio-taped with a standard tape recorder.

Contrary to the proposed time period for the collection of data from the survey and focus groups, the data collection period for these data expanded over 3 months. Interruptions associated with schoolwide testing and the closing and opening of school sessions delayed the process. Additionally, organizing the focus group session for the nonability group participants was somewhat complicated as schools were not closely located. The locations for focus groups differed based on the preferences of participants who were not located in close proximity.

Additionally, four administrators were interviewed in their respective offices in sessions lasting no longer than 45 minutes. Principals were cooperative and seemed eager to answer interview questions and to share their experiences of grouping practices. Each principal of the four schools participated in one face-to-face interview with me to provide information regarding grouping patterns at their respective schools. Their responses included the rationale for establishing these patterns, the influence of these practices on student achievement, and how decisions were made for instituting whole-school ability or nonwhole-school ability practices. The interview process proceeded as proposed in the data collection plan presented in Chapter 3.

Data Analysis

In addition to survey responses, data for this study included transcriptions of the two focus group audio recordings and those of recorded interviews with four administrators. To analyze the data, I transcribed each interview and focus group audio recording. I then printed out the survey and the transcriptions to read and reread on hard copies and to code the survey information. I studied coded survey responses,

transcriptions of audio-recorded one-on-one interviews and focus group discussions, took notes of emerging ideas, categorized ideas, and identified themes. According to Creswell (2013b), data analysis of qualitative data occurs before, during, and after data collection because of the nature of the data.

I used the coding process recommended for qualitative research and content analysis (Boyatzis, 1998; Creswell, 2013b; Yin, 2010). The process of organizing data analysis for this component began with establishing pre-set labels to represent the research question, survey questions, and the conceptual framework. Pre-set labels for concepts or ideas suggested through the research questions and conceptual framework were identified for the initial categorization of data (Boyatzis, 1998; Strauss & Corbin, 1990). I formed these labels using alphabets and or numbers to identify related information.

I also used emergent coding to identify ideas and concepts based on relationships I found from the pre-set information. These pre-set labels were as follows: RQ# (research question number); SQ# (survey question number); and CF (conceptual framework). Likewise, labels established for interviews included the alphabets II# (interview item plus the number) and those for focus groups included the alphabets FG# (focus group item number).

I read and reread transcribed interviews, focus group discussions and survey responses while taking notes of emerging ideas. Also, as in selective coding, I used the categories to validate the essence of participants' meanings. The same or similar words within categories led to themes that are reported in the study's results.

Similarities in content and the frequency of a word or expression resulted in initial codes and categories for each of the three forms of data. Initial codes and categories established from interviews were (a) grouping patterns [GP]; (b) grouping rationale [GR]; (c) grouping impact [GI]; (d) achievement gap factors [AGF]; (e) grouping decision making [GDM]; and (f) gap closures {GC]. Similar categories were identified for the focus group data and coded with alphabets representing each word. Initial categories were (a) achievement gap; (b) socioeconomic level; (c) instructional methodology; (d) grouping patterns. Initial categories for survey data were (a) grouping decision making; (b) advantages/disadvantages of ability grouping; (c) achievement gap; (d) achievement factors; (e) differentiated instruction/ability grouping; and (f) grouping patterns and influence of test scores.

Similarities in content within categories across all data forms served as the rationale for the reduction of categories or the emergence of new ones. The reduction process resulted in the following categories and corresponding codes: (a) grouping patterns and rationale [GPR]; (b) influences of grouping patterns on student achievement [IGA]; (c) student achievement [SA]; and (d) student characteristics [SC]. These codes identified responses that arose in focus group data [FG], interview items [I#], survey items [SQ], and that related to a research question [RQ] and or the conceptual framework [CF]. Responses coded as GPR-II#1-CF denoted that the information described the rationale for a grouping pattern found in interview item #1 and that pattern had implications for the conceptual framework identified for the study. The comment America made is an example of this type code:

> I took the top 75 children and made three accelerated classes . . . and of those classes numbers 1 - 75 just weren't one group; a teacher may have #1 and #75, so it mixed it up within the 75 so that gave an opportunity for those children who worked a little slower to work with children who were a little more advanced, so they could have a role model.

The theory of constructivism serves as the foundation for this study. Indicated in the explanation of the theoretical framework is that the social construction of knowledge has been expanded to include conditions that promote students learning how to learn, students' engagement in their learning, and students' abilities to construct their learning based on their capacities and various learning modalities (Bruner, 1966; Duckworth, 2006; Gardner, 2006; Marzano, 1988). The participant's comments regarding the rationale for using a particular grouping pattern is exemplified in the theory that proposes students construct knowledge based on their abilities and ways of learning, which includes peer modeling.

Themes emerged through the identification of similar codes throughout all data collected. Codes are symbolic references for capturing interpretatively the essence of the meaning in data (Creswell, 2013a). The frequency of similar words and phrases that expressed the meanings in the coded data categories of (a) grouping patterns and rationale [GPR]; (b) influences of grouping patterns on student achievement [IGA]; (c) achievement factors [AF]; and (d) student characteristics [SC], resulted in the following major thematic terms and expressions: (a) assessing student achievement and implications for grouping, (b) student characteristics and implications for practice; (c)

factors influencing student achievement; and (d) grouping patterns and rationale. The results are reported according to research questions and corresponding themes and supported by participants' comments. Participants' views differing from majority views were also included. The results of the analyses follow.

Results

The results of teachers' and principals' perceptions of the research questions are demonstrated in four major themes. This section is organized according to the research questions and the following associated themes: (a) assessing student achievement and implications for grouping, (b) student characteristics and implications for practice; (c) factors influencing student achievement; and (d) grouping patterns and rationale. The themes were derived from a synthesis of participants' comments that reflect several sub topics related to the research question based on questions in the data collection tools. Codes identified common expressions that were then reduced to themes (see Appendix F for the code list). Participants' quotes support thematic findings. All names used are pseudonyms to protect the confidentiality of participants.

Research Question 1

RQ1: How do participants perceive benefits between ability grouping/tracking and non-ability grouping for helping students construct reading knowledge?

Responses to questions from items on all data collection tools supported the thematic findings for this research question. Items regarding the benefits between ability and non-ability grouping questioned the use of assessments for determining grouping patterns, advantages and disadvantages of ability and mixed grouping, the impact of

grouping patterns on student achievement, and instructional practices for promoting lower achieving students' construction of knowledge. The themes associated with RQ1 capture positive and negative views of participants regarding influences on student learning in both type settings. These views include perspectives on reading assessment scores and students' classroom performance, their use for placing students at both sites, and their use for teacher interventions for assisting students to construct knowledge. Participants described students who struggle in reading and practices that have been successful; therefore, one theme addresses characteristics of students with implications for ability and non-ability grouping practices.

Theme 1. Assessing student achievement and implications for grouping. This theme emerged with at least two distinct meanings. One meaning considered the use of assessments to create grouping patterns and the other meaning was associated with student achievement that permitted advancement to the next grade level. In this regard, both districts employed similar assessments. The MCT2 assessment, applicable for the years of this study, is a state required test that is part of the accountability measures of NCLB (2002). Scores constitute part of the criteria for students making average yearly progress and for rating schools. In some schools, scores indicate how groups are set up. Districts also employ the STAR assessments as predictive tests for student performance on a gate test administered near the end of a school term. Performance on the gate test, the Mississippi K-3 Assessment Support System (MKAS), determines whether a third-grade student advances to the fourth grade.

STAR results guide instructional practices and arrangements, especially for within-class ability grouping. Jessie explained that "we ability group within the classroom by using our STAR data to guide the interventions in the classroom to meet the needs." However, JoAnn indicated that "we use STAR to do that [group students], but not so much. We use STAR for the data where it has the four progressions and we look at that to see what they [students] need to get to that point." These perspectives revealed that results of the STAR for within-class ability grouping provide directions for helping students to meet benchmarks based on their potential and performance.

The nature of the STAR assessment and the use of the results were among beneficial aspects of non-ability grouping practices for helping students to construct knowledge. Teachers identified several advantages in using the STAR assessments. Among advantages is that the assessments aid teachers in planning and delivering instruction. Jane connected this assessment with teacher performance and concluded that "I think having tests helps us as teachers. If you don't have anything to measure the success of your students as a whole, how do you know if you have been a successful teacher? The . . . STAR test holds the teachers accountable." Julia also noted benefits of the STAR assessments for teachers and said, "they help teachers . . . to plan learning in a differentiated manner, which helps students to learn the same skills at their own level." JoAnn added, "in the room they have the autonomy of when they are doing small groups to group according to the data that they are teaching, meaning if a child was very good at main ideas, they [*sic*] don't have to be in the low group that week."

According to Joan, "the teacher can have an idea of the weaknesses or strengths, what skills that student needs to help them to proficiency, and future success." Similarly, JayLee expressed that " it helps with determining what a child needs to be successful and where to start in remediation. It should be used with other tests to get more data" and Jewell supported this observation in saying, "the scores can help predict who needs more help with certain skills." The comments supported appropriate use of assessments for differentiated instruction and varying instructional groups within classes according to skills, strengths, and areas of weaknesses.

Although within-class grouping practices based on STAR data permeated in non-ability school-wide settings, the data also determined ability grouping by classes in the school-wide ability group setting. Avery explained that "we are still grouping our students by ability and behavior. . . . students are grouped according to STAR data, final averages, and the reading gate test." However, using STAR data was not always perceived as beneficial among participants in both type settings. Some participants in non-ability school-wide settings reported that the assessments hindered student achievement. Hindrance for Jill is "because most students require test taking skills that most lower performing students have not mastered yet," and for June, "because the ratings only categorize students negatively." Comments of these participants suggest ability grouping based on test results is not advantageous for helping students to construct knowledge.

According to some participants, student achievement was hindered because students were placed according to their reading test scores and the scores did not actually

represent the student's potential based on classroom performance. Further, grouping of students by ability was determined by their previous year's MCT2 scores of minimal, basic, or proficient in reading. Once grouped, teachers provided interventions designed to improve test scores. Thus, being placed in a low group unfavorably categorized the student as a challenged reader; a negative aspect of school-wide ability grouping practices.

Other disadvantages or concerns regarding assessments for grouping students are illustrated in participants' comments from both type school settings. Avery noted that "STAR scores don't match the grade and if you *water down* the material, of course they are going to make As and Bs. You have to water it down or they are going to fail." Other participants in the focus group discussion of the disadvantages of ability grouping related the nature of tests to the abilities of students to pass them. Jeannie shared that "the ready gate test [MKAS pretest] is on the basic reading level; they will be unable to pass it. It is a cycle." This suggests the students will remain in a low ability group pattern and will be limited in the ability to construct knowledge from interacting with higher performing students.

Participants also discussed measurements of the STAR and the frequency of the assessments as problematic. Angela suggested that "STAR tests don't measure ability; it [*sic*] changes their accelerated reading goals. They take it too often. It [takes] them down a level; therefore, students check out books below their level." In essence teachers perceived that sometimes the tests did more harm than good, especially in view of the frequency some tests are administered. The time between intervention and testing does

not permit the true abilities of the students to surface. These views support the cycle of low performance from being ability grouped referred to in an earlier comment where, according to JoAnn, "children were in a whole class that knew they were low." Implicit in participants' reference to the cycle of low performance is that it continues as students may compensate for their placement with the perception that through reading more books [despite being below their level] puts them ahead of others in the class and makes them look smarter. However, the low-level status continues as the below-reading-level books do not significantly add to the construction of new knowledge. Also, if there are more challenging books selected, students do not have sufficient time to over learn concepts that may improve the reading score before the next testing cycle.

The MCT2 and the MKAS assessments also provide data for grouping students. The MCT2 assesses reading performance on four levels: minimum, basic, proficient, advance. Joyce had taught in both school settings and referred to practices in the school-wide ability setting. She said, "At my previous school, students are grouped according to achievement on MCT2 in addition to other factors." Participants revealed that the MKAS is administered three times during the school term. The first administration occurs within weeks of the beginning of the school term and serves as a pre-assessment of student performance. As an exit test, it is administered in April; a May administration permits third graders who do not pass to repeat the test. Third graders' performances on the final administration of the MKAS assessments determines whether they are promoted to fourth grade.

Participants were generally adamant about tests that determine a student being promoted. Jeannette was among participants who emphatically registered her opposition to frequently subjecting students to assessments and for using the results of one test to retain a student. She expressed her opinion using a situation that involved one of her students. She reported.

> Scores are subjective when you think about all the factors involved. Example, one of my students took an important assessment this year for the first time and did not pass. I was very surprised . . . due to his/her performance in my classroom all year. Later, I found out that the night before the big test, the child had been told the mother packed up and moved five states away without any warning. . . . I concluded that played a huge role in the child's mindset before taking it. . . . I am not a huge fan of all the state assessments our students are subjected to these days.

Other participants commented on the results of the assessments based on changes in the school setting and their students' passing rates. In Johnnie's school "it was projected that only 33% of third graders would be passing the gate test based on the STAR scores and they were divided by class with lower [students] and the others evenly distributed." Johnnie explained that they employed ability grouping within classes and instructional interventions including learning centers. As a result, the projection of third graders passing to the fourth grade continually increases. According to Johnnie, "initially it was 86.3%; now it is 97.6%." The projected pass rate percentages for all settings practicing non-ability school-wide grouping ranged from 90 - 98.8% while the school-wide ability group setting projected a 77% pass rate.

Most participants expressed the opinion that grouping practices along with instructional strategies account for students passing the MKAS. JoAnn also had success with MKAS that she attributed to plans implemented during an instructional period set aside for students based on their STAR score and skills identified as deficient. Using a teaming and tutoring approach, JoAnn said that "at Christmas we had 30% of our children slated to pass third grade gate, and by spring break, I had 80% and we ended up with 85% passing and the second go around, we were at 90%." America also shared changes at her school that led to increases in students passing the test.

> In first–fourth grade students take placement tests at the end of the school year which gives us an idea where they rank numerically within their subgroup or grade. It was the pattern of this school up until this past year to take the top 50 children and make two accelerated classes. I changed that up and took the top 75 children and made three accelerated classes in each grade. . . . of those classes, numbers 1 – 75 weren't just in one group. A teacher may have #1 and #75; it mixed it up within the 75. . . . That gave an opportunity for those children who worked a little slower to work with children who were a little more advanced, so they could have a role model. [For] the bottom classes I did the same thing by taking my lowest children and mixing them up with the average children. . . .by doing that, instead of having half my children [and] having two groups of children scoring perfect on the MKAS, I had three groups of children scoring perfect on the MKAS; so those 75 children I grouped with peers all passed.

These responses support that the majority of participants preferred non-ability grouping, although they expressed both positive and negative features of assessments for forming ability groups. Both sites used the same assessments as required in the districts. However, some participants felt all assessments did not provide a true assessment of students' performance for grouping purposes.

Theme 2. Student characteristics and implications for grouping. Participants discussed the benefits and disadvantages of ability and non-ability group settings in relation to student behaviors with attention to procedures for identifying grouping arrangements and instructional practices. Participants in both settings agreed that the basic implications from having to use state tests are in the values of employing grouping arrangements and instructional methods based on pretest measures that identify students' needs. Participants also agreed that students' needs were easily observed in the ability-grouped setting because of the assessment measures used. Although students' needs were commonly addressed in both settings through tutoring, the practice and emphasis varied by setting and grade levels. Tutoring in the form of whole class most often occurs after school. The percentage of students tutored who attend classes together ranges from 10 - 90% with an average of 45% for schools providing tutoring. Annette, a school-wide ability group participant shared that fourth graders do not have this service; however, other school-wide ability group participants noted that from 20 - 80% of third graders are tutored. Participants shared that emphases in tutoring is on third grade to assist them in passing the gate test. The focus on tutoring was perceived as a positive feature of ability-wide grouping in that the service was scheduled to promote the skill development of low

achieving students. It was also perceived as very necessary to permit students to move from third to fourth grade. Non-ability group participants perceived the setting promoted peer tutoring which permitted students to learn from each other; a positive feature for non-ability school-wide grouping.

For the ability-group setting, tutoring for low achieving students occurs in many forms. Jeannette's comments provide an overview of some of these forms and the frequency of their use. She included the following in her survey comments as a non-ability group participant who was familiar with the ability-group school:

> I have never seen a school district that has so many different outlets of tutorial programs that help students achieve their educational goals. They were taken out of class on a daily basis. They had after school programs that would tutor the students, provide snacks, and even transport them home afterwards. And there are also, summer school programs provided for the students who did not pass the exit tests. During the programs, they will be further prepared for the final retesting period before the following school year starts.

Jeannette 's observation supported the need for such extensive services in schools practicing ability grouping between classes where poorer performing students are in classes separate from higher performing students. Although some of these practices occur at non-ability group sites, they do not appear to be as extensive as is shown in other participants' comments.

Another non-ability group participant, Jeannie, indicated that "from the low class, about 60% of the children attend tutoring during and after school. They are split into

separate groups." Jane, a non-ability school-wide group participant, summarized the status of tutoring at her school:

> We used to provide after school tutoring for students who scored minimal on their state assessment. However, this year we do not have any after school tutoring that is provided by the school. Several teachers do tutor, but it is on their own will. It is not required of them to do it. Our school does have an intervention team who pulls struggling kids and works with them. Each grade has 30 minutes of intervention time added in their schedule, and tutoring students in need does occur during this time.

Beneficial in non-ability grouping is providing tutoring during class through peer tutoring. Focus group participants agreed that peer tutoring can occur in mixed grouping patterns. A frequent use of peer tutoring as Jennie cited is "pair [ing] a high student with a low student." The rationale for peer tutoring seen in most comments is that students learn from each other and struggling students benefit from an advanced student as a role model. This rationale is evident in America's comments that describe projected practices in her school. In an interview, America explained:

> I want to have a high, a middle, and a low group. Instead of having an accelerated class, every teacher will have some accelerated groups . . . . my opinion is that separating children out, is great for those [high] children, but the children who struggle have nothing to compare themselves with as far as excellence. The most they can ever get is average, and that is not fair to children. . . . and then it’s my opinion that other children can teach each other. That’s what I am working on.

Supporting this rationale, Angela observed that "the advanced class wants to help the lower students. It's been going on for so long." The expression that students learn from each other was among those most frequently cited by all participants. Therefore, this phrase emerged for the meaning of peer tutoring as an implication for practice. Participants perceived this as a benefit associated with non-ability school wide practices.

Participants perceived that instructional practices employed in either setting were crucial to helping students construct knowledge. Differentiated instruction was the most frequent instructional practice participants identified in both types of school settings. However, differentiation was most often addressed within grouping arrangements and in employing small group instruction rather than a practice of a school-wide ability-group setting. For example, in an interview with JoAnn, a non-ability group participant, she described grouping arrangements that involved teaming to provide instruction during a school period referred to as *power hour*. JoAnn explained that during the power hour, "we took the STAR scores and grouped them . . . brought in an outside tutor . . . . created groups that were 10 or less . . . pulled everyone (sped teachers, interventionists, third grade teachers) to work with them." This grouping practice within the classroom described temporary arrangements where additional instruction reinforced the skills needed to obtain success of the students in those groups. Labeling students was avoided through this practice, unlike that in a class (school-wide ability grouping) designated for low skilled students.

Annette identified strategies she used during a focus group discussion. She said, "the class labeled lowest knew more than they were showing, [on test results], so I

organized some motivational strategies and they ended up in the middle and some high [groups]." Johnnie explained that ELL students improved because "some teachers were able to pull ELL students aside and work with them . . . .so that they understand that some of our language is figurative." Additionally, parents volunteered to tutor fourth graders after school and "in Boot Camp prior to the gate test." This practice is another example that described the benefits of varying instructional groups within the class to address students' needs as opposed to separating them through a labeled track.

Participants perceived that differentiated instruction is valuable for meeting the needs of students. Joyce acknowledged its use in her school and indicated that "differentiation works to meet the needs of all learners." Julia also shared that "at my school we use differentiated instruction on a daily basis." Although participants were split in their opinion as to whether differentiated instruction has replaced ability grouping to the extent that all levels of instruction are met successfully without the stigma of inequality, they maintained its value in addressing the diverse needs of students. However, most participants in non-ability school-wide settings referred to the inquiry by stating they do not practice ability grouping.

Other non-ability school-wide participants elaborated on their *yes* or *no* response. In response to whether differentiated instruction has replaced ability grouping to the extent that all levels of instruction are met successfully without the stigma of inequality, Jane responded as follows: "I do feel as if differentiated grouping instruction does help meet the needs of all levels of instruction. If differentiated instruction is carried out correctly, then the effectiveness of it is outstanding." Jill specified such "classes like

science and social studies and P. E." as examples of where the practice is carried out correctly. June was less defensive of the outcome. She stated,

> It appears that it does, but there are underlying differences in the classrooms when students are not equally being taught completely at their level; and some fall through the crack or get left behind because they cannot keep up. That is why remediation is necessary.

Finally, Joyce's response illustrated both implications for practice included in the theme. She responded, "Yes, in our school, differentiation works to meet the needs of all learners. Mixed groups require more differentiation, but also allow more opportunities for peer tutoring and modeling."

Participants' views supportive of this theme represented two basic ideas. They saw the need to determine students' needs to provide the type of instruction that would improve their reading performance. Differentiated instruction, peer tutoring, and programs that offer after school tutoring were strategies that helped students to construct new knowledge and enhance their application of skills.

In response to the first research question, views expressed through both themes demonstrate how participants perceive ability and non-ability grouping as beneficial for helping students construct reading knowledge. The majority perspective was that ability is less beneficial as students are placed based on assessment scores that may not accurately reflect their capabilities, lower performing students are deprived of engaging in a learning environment with their higher performing peers, and students become aware of what their placement level means which hinders their academic and social well-being.

Although they perceive differentiated instruction and tutoring as beneficial aspects of ability grouping, differentiation applied within class grouping arrangements and peer tutoring were preferred ways of helping students to construct reading knowledge.

Research Questions 2 and 3

> RQ2: How much, if any, do participants perceive the achievement gap between minority and majority students exists in ability and non-ability grouped schools?
>
> RQ3: How importance participants perceive that the socioeconomic level of students influence achievement in ability and non-ability grouped schools."

These questions were included on the survey instrument and also discussed in focus groups. Responses from all forms of data collected resulted in one major theme that addressed perceptions of an achievement gap between minority and majority students in the settings and the influence of students' socioeconomic level on their achievement. Although participants recognized several factors influencing student performance, much of the discussions centered on the home and parents. Home resources, parent training, and the time parents have to devote to the school setting and to helping their children were basic aspects of these factors. Socioeconomics as a primary influential factor emerged whereas ethnicity did not. The discussion of the theme is first basically associated with influences on achievement that can contribute to an achievement gap and then moves to a basic discussion of the influence of socioeconomics.

Theme 3. Factors influencing student achievement. Responses addressing this theme are also supportive of how participants perceived the influence of ability and non-ability grouping on students learning to construct reading knowledge. Participants agreed

there are varying influences on student learning that often result in poor and advanced classroom performance. Factors reported by participants that influenced student achievement included grouping patterns, parents' expectations and socioeconomic status, language and ethnicity. Participants felt that these factors have implications for students' behavior as well as their reading performance. Some of these factors, with emphases on socioeconomic status for the provision of home resources, were perceived to add to the achievement gap among minority and majority students in both settings.

Focusing on RQ2**,** participants' comments suggested that some grouping patterns tend to suggest to higher performing students that they are the *elite students* and to lower performing students that they are *the least likely to succeed*. These ability group labels hamper them socially, emotionally, and academically; and for some low socioeconomic status families, this stigma adds to widening the achievement gap among minority and majority students. In a focus group discussion Avery made the following observations:

> Students realize they are in a low group. . . .they know they are low performers. They have been told they can't do it and it is hard to make them want to do if they have been told that all their lives.

Similarly, Jane observed that "once they have been grouped, students then begin to label themselves and others as *the dumb* or *smart* class. Kids aren't dumb, and they know when they aren't in the *smart* class. This tends to cause behavior problems." Annise elaborated on the behavior of low performers in the statement, "the lowest group didn't try; they didn't follow directions; they lacked care in the lowest group." Andrea added that (when

grouping by ability)"with the kids being so low it causes more discipline problems because you have so many bad kids. Sometimes you can't teach at all."

Some grouping patterns were also stressful for teachers. Referencing the non-ability group setting and within-class grouping, Jeannie said, "every year we had three different groups: high, average, low. We could group them in smaller groups; we have never had so many discipline problems. I have never seen anything like it." Jeannie's description of within class grouping at her school was challenging for her as she instructed three different levels of groups. Managing student behavior was a major problem for this grouping arrangement. However, similar experiences were shared with participants from the school-wide ability site.

Relating student behavior and performance to group sizes, participants concluded that many problems resulted with having to teach large groups of low performing students as in ability grouping between classes. Therefore, Annette suggested, "if they are going to do grouping, especially with lower groups, they should be split up into smaller groups." [with] a class of 25 . . . . struggling to read two syllables, it's hard." Angela's sentiment also supported previous comments. She noted that "it's an overwhelming task to teach a whole class on the same level" which also favored the view that students should be mixed ability, and peer tutoring should be used. Participants concluded mixing students promotes their performance and aids in closing the achievement gap among students.

The perception that parents or the home influenced students' behavior and performance was shared by all participants. However, the perception that parents'

expectations or lack thereof added to the negative behavior and performance of students was a discrepant view of two participants. For example, from an administrator's point of view, Johnnie explained that "the parents' expectations are always going to affect what the student believes." In communicating "with some of the parents of lower students" Johnnie found that "they really had high expectations for their children, but they were not quite sure of what their child's abilities were." Johnnie concluded, "I think the parents don't know what to expect because they have been told their child is low or their child is high . . . . so their expectation is projected from the school." Expressing similar views, Jessie addressed student achievement from the perspective of involving parents in the school setting. In terms of factors that may contribute to any gaps in reading achievement between ethnic groups, Jessie said,

> I think a lot of it depends on the home. We take the approach not just to educate the child, but to help at home. We offer workshops for parents to come in and get that extra reading and phonics support. A lot of it [achievement gap] is the lack of reiterating at home what we do at school.

Participating teachers in focus groups attributed parents' behaviors and their socioeconomic status to their children's low academic performance and negative behavior. For instance, Annette stated,

> I have noticed that we have a lot of parents who do not work; they depend on the government - - some are on food stamps. Students see their parents at home doing nothing because 'I'm going to get paid by the government' . . . .I think that has something to do with it, so they don't have anything to strive for.

According to Jeannette, parents contribute to children's negative behavior because "the parents don't care anything about their discipline. Parents support the child in bad habits. . . . Students are not pushed at home or not challenged at home, so why should they try to do anything at school?" She added, "Students are mirroring the expectation level of parents which is not very high." Avery expressed the opinion that "some parents are more interested in field day and sporting activities as priorities. The students need love and to be believed in." Jeannie agreed and said, "They start in kindergarten in the same group or class and it has done something to them, their self-esteem." She concluded that "if they don't change the way the school is set up, they will always have low achievement." These perspectives suggest that some parents are not aware of the negative influences their words and actions have on the academic and total development of their children. Implicit in these is the idea of parent education and their role modeling high expectations and positive behaviors beginning in early childhood. The school was also included as requiring a good role model for students.

Referencing the influence of the school on student achievement and practicing ability grouping, America explained that it took time for a school to acquire a low rating and will take time to turn that rating around. She presented the following reasoning:

> If you segregate children away (as in ability grouping between classes) then what you have left are children who have no role model and nothing to attain to, and they have behavior problems because they can't keep up; they are discouraged and frustrated and it results in an F.

For RQ3, all focus group participants remarked on the despairing situation regarding the performance of lower performing students, but not all participants associated socioeconomics with poor reading performance. Jeannie appeared to be disturbed by similarities in student demographics and their academic performance in delivering the following observation:

> It's sad between both county and city schools that share the same socioeconomics, but I can definitely see the difference in the academic level here because they (lower achieving) have been put together. It is not normal for there to be so many low children; it's like half the school.

Directly related to RQ 2, language and ethnicity emerged as factors contributing to students' reading performance. According to Jill, "Some students in low socioeconomic levels do not begin to read or write until they begin school." Language and ethnicity were also referenced together as the achievement factor was related to English Language Learners (ELL). Johnnie noted that a language barrier among some ethnicities in the school contributed to an achievement gap between some of the student population. She explained:

> They [ELL] work really hard and these are students who excel in math, but not in reading because they don't understand the language." Language, ethnicity, and socioeconomic factors collectively contributed to the achievement gap in the school-wide ability setting. According to America, "a large Hispanic population . . . the fact that they do not speak English at home contributes to the achievement gap." America combined socioeconomic and ethnic factors as contributors for

> segments of the school population. She explained: My Black children who are living at home without a father are low socioeconomically because most of the time the mamma is trying to provide for them and they are very poor. Sometimes mama is working two jobs and they are living with grandma and she is old. And it is not just my Black children; it's my White children too. Many of them come from broken families where there is not a father who contributes.

Specific to RQ 2, a student's socioeconomic status is a factor contributing to achievement, according to several participants. Joyce attributed the achievement gap among students in her school more to "socioeconomic rather than racial factors." She further explained that "students with a higher socioeconomic background have more home support, more experiences to draw from, and more resources than their less privileged peers. It is often a critical factor in a child's success."

The importance of a student's socioeconomic status as a factor in achievement was a prevailing perception among participants. June said, the status was very important because "they [low socioeconomic status students]do not have the resources, and some may have limited language, social skills, discipline, home training, lap tops, Internet, and other software programs" that could advance students' understanding of content and concepts. Supportive of this perception, JayLee added, "The poor cannot compete with their peers with a lack of resources; for example, i-pads, computers, etcetera." When asked what led her to this opinion, JayLee replied, "the playing field is not equal, and it shows in the scores." Jewel provided an encompassing view of the importance of a student's socioeconomic status to academic achievement as follows:

> [It is] very important because more parents are below poverty level and cannot provide the education that their child needs . . . . most of them are not educated and don't understand how to help them. They need to know how to use computers themselves and most can't afford them. The parenting skills are lacking also.

Related to concerns about parents' skills, Barrow and Schanzenbach (2012) viewed that parental assistance with their children depends on their level of education, and other assistance may also be limited because of a shortage of tutoring programs and resources. However, one participant expressed a minority view that one participant expressed relayed that some students with the same socioeconomic background perform better than expected. Angela commented, "Just because of their socioeconomic level doesn't mean they are not going to do well. A lot of the students come from the same kind of background." JayLee also recognized that "all students who live in poverty are not behind. Some try very hard to succeed." Another comment illustrated a similar meaning. Julia wrote on the survey:

> I believe that all students can learn. It does not have anything to do with Socioeconomic status. It is harder for lower socioeconomic students to achieve because parents are in the workforce trying to earn a living for their families at lower paying jobs, but if we as teachers work with these students while they are at school, they can achieve and feel a sense of success in their education.

Participants varied in their ideas about the part SES plays in students' reading achievement. However, there was general consensus that available resources, informed parents who model clear and high expectations, and parent participation in schooling

were contributing achievement factors and are often related to the family's socioeconomic status.

Research Question 4

RQ4: What do teachers of students in Grades 3 and 4 perceive are the negatives of grouping and non-grouping of students by ability?"

The examination of this question also identified participants' overall views of the two grouping patterns studied and factors associated with decisions to use ability or non-ability grouping in the school settings.

Theme 4. Grouping patterns and rationale. Participants in both non-ability school-wide settings and the school-wide ability grouped setting illustrated mixed views regarding practices in the use, advantages, and disadvantages of ability and mixed grouping patterns. Although most non-ability grouped school-wide participants indicated that they did not group students by test scores, grouping lower performing upcoming third grade students together in one class and evenly distributing better performing students in other classes is among practices in the non-ability grouped schools. An example from a non-ability grouped**,** Jane (all names used are pseudonyms to protect confidentiality) said, "our school does not ability group. The computer randomly places the children in the classes in elementary based on gender and race. Each classroom has close to the same number of each." However, most practices in the non-ability school-wide settings focused on within-class grouping practices that basically represented mixed grouping arrangements in all content areas. Jennie found mixed ability grouping in the classroom effective "because I can pair a high student with a low student. Also, with

mixed ability grouping there is more time available to help the low students one-on-one or in small groups." Their comments suggested that as a result of practices in both type settings, the projection of third graders passing to the fourth grade continually increases. Characteristic of grouping patterns in both settings are groups established by test scores (STAR, MCT2, MKAS, assessments for Common Core State Standards), and final grade point averages from the previous grade.

According to JoAnn, a non-ability grouped school participant, "in the room, they [teachers] have the autonomy when they are doing small groups to group according to the data that they are teaching; meaning if a child was very good at main ideas, he won't have to be in the low group that week. Avery, a school-wide ability group participant, supported the position that "higher learners could help the lower learners when [they] are not understanding what the teacher is teaching." Avery also said, "a disadvantage [of mixed ability grouping] would be teaching to the middle. Your higher learners could come down instead of going higher."

When Jane, a non-ability survey participant referenced accelerated classes as an ability grouping practice, her position demonstrated a mixed position. She explained,

> I have mixed feelings about this. My child is a high performing student. I sometimes feel as if he is not pushed as hard as he should be. I believe it would challenge him to be placed in an accelerated class. I think this would help test scores in the long run. On the flip side, I see the teacher's stand point of it. As previously stated in another question, when students are ability grouped, it tends to cause controversy between the kids because the lower kids don’t like the higher

> functioning kids because they are the “smart kids” and they consider themselves the “dumb kids.” With that being said, I am on the fence about ability grouping. I do think the advantages [of ability grouping] outweigh the disadvantages.

Some ability grouped school-wide participants expressed reservations about practices of using accelerated classes as a grouping pattern. Among survey participants, Avery registered disagreement from the position of the implications of a teacher's performance. She noted that "it is not fair for one teacher to have good test scores based on students she has and then another teacher has not so good test scores because of the students she has." As a focus group participant Avery also elaborated on the differences among students assigned to the accelerated and other classes as follows: "It was a big difference between the advanced classes and then the extremely low [students]; they couldn't do anything; they would say 'I don't know, what do you want me to do with this?"’ Focus group participant Annette added, "The higher classes know what to do and they will do it; the difference in abilities is extreme.”

Participants also expressed opinions of the advantages and disadvantages of ability grouping. Overall, participants from both type settings viewed a disadvantage of ability grouping was that it limited students learning from each other; specifically, lower performing students would be denied the kind of learning they would attain from interacting in classes with higher performing students. Similarly, they agreed that ability grouping offered an instructional advantage because the teacher could focus on students with similar needs and strengths. Various comments from survey and focus group

participants supported these views. For example, Joyce, a non-ability group participant noted,

> Ability grouping requires less differentiation; students are closer to the same level of achievement whether it is a lower group or a higher group. Lower groups are at a disadvantage because they do not have high achievers among their peers. Mixed groups require more differentiation, but also allow more opportunities for peer tutoring and modeling.

Participants from the school-wide ability setting and non-ability settings expressed the advantages and disadvantages of ability grouping from the perspective of teaching strategies and the impact on teachers. Annette from a school-wide ability school setting said, "Classroom hands-on activities can be more inclusive and advanced with . . . . students who are in a more advanced academic group. On the other hand, if students were not grouped based on ability, I would be able to utilize peer grouping." In a focus group discussion, Angela said, "with between class [grouping] [for] the higher class we can let them work on their own and they can take it to another level, but for the lower class, we have to go step by step and [use] more whole class instruction." However, Jennie, a non-ability participant, discussed her experiences with grouping as follows:

> I strongly believe that grouping students by ability is a disadvantage to the children who struggle. I have learned this year that finding enough time to help students one-on-one have been very difficult because too many children need one on-one time. For this reason, it has been extremely challenging and exhausting at times to help these students achieve proficiency.

The prevailing perception of teachers of third and fourth grade students in both type school settings regarding ability grouping between classes is that the practice is a disadvantage because of student labeling and because lower grouped students are limited in their ability to assist each other. Participant Jessie, who is employed in a non-ability school-wide school explained:

> We ability group within the classroom by using our Star data to guide the interventions to meet the needs. . . . It enables the teacher to work on specific target skills instead of teaching several different skills to different students. . . . ability grouping between class is a disadvantage and does more harm than good. It stifles a child's confidence; kids feel like they don't measure up; [they are] not good enough.

In defense of ability grouping as a school-wide practice, Annette noted, "I do not have to incorporate as much differentiated instruction because my students are ability grouped." However, teachers agreed that ability grouping within classes benefitted lower performing students as their higher performing peers could assist them. Although most all participants favored mixed ability grouping, they also concluded that its use means that the teacher utilizes peer tutoring and differentiated instruction. Annette shared that in the school-wide ability grouped school, "I may have a few classes where more advanced students have been placed within the same classroom as lower level students; I do have to use some differentiated instruction within these classrooms." Most participants remarked that within class instructional arrangements included the use of high, medium, and low grouping patterns.

Evidence of Trustworthiness

Trustworthiness in qualitative research is similar to reliability and validity in quantitative research. Qualitative researchers recommend establishing trustworthiness through such practices as selecting participants who can provide the best responses for the phenomenon studied, providing detailed descriptions of the site and participants, using multiple data sources, and following procedures to ensure findings reflect the meanings participants convey (Creswell, 2013a; Johnson & Christenson, 2011; Patton, 2015). These and other procedures are described in the major strategies to follow.

Credibility

The procedures established for credibility of the study were implemented as cited in Chapter 3. These procedures included using a credible sample for the qualitative component consisting of knowledgeable individuals who had experience in the instructional arrangements explored in the study, and triangulating data from different sources to include interviews with school principals, surveys of teachers, and focus groups with teachers. Additionally, member checking, peer review, and constant reflection ensured that I accurately captured participants meaning, and that researcher bias did not interfere with reporting the results. Further, coding participants comments to relate them to the research questions, conceptual framework, and questions in the data collection tools added credibility to the study's results.

Transferability

I addressed transferability through using both administrators and teachers in the sample who had some similarities, but also varied in terms of years of total

teaching/leadership experience. I presented a true representation of the problem studied by carefully explaining the setting and participants' responses. Finally, I described the study's boundaries, the procedures for data collection and analysis, and the period used in the data collection. These actions help the reader to determine whether findings can be considered in their settings which may have some similarities.

Dependability

I provided detailed procedures for collecting and analyzing data that other researchers may replicate in their investigations of ability grouping. Additionally, my methods for collecting data overlapped as responses to surveys determined questions that were asked in focus interviews.

Confirmability

As the researcher, I acknowledged my experience related to the phenomenon studied and knowledge of the study's settings. I also demonstrated an audit trail of the analysis process from pre-coding the research questions and conceptual framework to identifying categories of information, and finally to identifying themes. An addition to the procedures included in Chapter 3 is that I disclosed limitations in procedures and their potential for influencing the study's results.

Summary

The results of teachers' and administrator’s perceptions for the research questions are captured in four themes: (a) assessing student achievement, (b) student characteristics and implications for practice; (c) factors influencing student achievement; and (d) grouping patterns and rationale. The assessment theme included their use, advantages,

and disadvantages. Participants concluded that although reading performance results did not always represent a true assessment of student achievement in either setting, reading performance of students in the school wide non-ability setting was higher than students in the ability grouped setting. A review of test score reports on the state's website also revealed reading achievement of students in the non-ability school-wide schools was greater at the minimal and proficient levels of reading than the achievement of students at these levels in the school-wide ability grouped school.

Participants identified grouping patterns, parents' expectations and socioeconomic status, language and ethnicity as factors that influenced student achievement. However, socioeconomic status was favored over ethnicity as an influence on student performance. Data on the state's website for schools included in the study revealed year to year reading proficient level scores of students by ethnicity in ability and non-ability grouped schools were similar. In terms of socioeconomic status, the data showed the mean proficiency scores of non-ability schools were higher than the means of the ability grouped school for all students in fourth grade, suggesting SES was a factor in reading performance when students were not grouped by ability. The major theme for the final research question translated to mean that teachers preferred mixed ability grouping patterns over ability grouping by test scores or similar criteria. Responses also addressed instructional practices supportive of enhancing student reading performance. These findings have implications for instructional practice and advantages of non-ability and flexible grouping arrangements discussed in the interpretation of findings included in Chapter 5. The chapter also includes recommendations based on the results.

Chapter 5: Discussion, Conclusions, and Recommendations

This qualitative research study was designed to examine schoolwide between-class ability grouping and schoolwide nonability grouping on the academic performance of diverse learners from the perspectives of teachers and principals. Further, I sought to determine whether participants believed ethnicity and socioeconomic status influenced reading achievement among the two type groups. The study was intended to provide a model for future instructional strategies and professional development with the intent of closing the achievement gap among students with characteristics represented in the study. Further, I anticipate that the study will assist in alignment efforts with the present-day standards requiring that instruction is designed to ensure that all students meet proficiency levels in the prescribed academic area of reading to comply with the NCLB Act (2002) and other district standards. The perceptions of third and fourth grade teachers and school principals participating in the study provided a deeper understanding of grouping patterns used and their impact on student performance.

The setting of the study consisted of four rural elementary schools in two school districts in Mississippi. I used a qualitative survey, interviews, and focus groups as sources for data collection. For illustrative purposes, teachers' responses regarding student reading test performance were linked to assessment reports on the state's website.

Four research questions guided the analysis of data. Responses revealed student reading performance differed based on grouping patterns and socioeconomic status. Participants perceived the reading achievement of students in the nonability schoolwide schools was greater than reading achievement of students in the ability grouped site. Data

from the state's website supported this perception as fewer students in the nonability sites scored at the minimal level and more students scored at the proficient level than students in the ability-grouped site.

The analysis also revealed participants did not perceive that ethnicity was as relevant to students' reading performance as socioeconomic status for either of the two types of schools. Again, this perception was supported with reading performance data from the state's website that showed similar scores by ethnicity for students enrolled in both type settings.

The results of teachers' and principals' perceptions of the research questions are demonstrated in four themes. These are (a) assessing student achievement, (b) student characteristics and implications for practice, (c) factors influencing student achievement, and (d) grouping patterns and rationale. Major findings imbedded in the themes include that teachers preferred mixed ability grouping patterns over ability grouping by test scores or similar criteria. Participants identified grouping patterns, parents' expectations and socioeconomic status, language, and ethnicity as factors that influenced student achievement. However, ethnicity was not perceived as an important factor. The assessment theme included the use, advantages, and disadvantages of assessment tests. The theme of student characteristics and implication for practice addressed instructional practices that participants suggested would be supportive of enhancing student reading performance. Consistent with an intent of the study, these themes represent factors that may be considered in the decision regarding whether to use schoolwide between-class ability grouping or schoolwide nonability grouping in these four schools.

Interpretation of Findings

Findings from the data analysis for the research questions are interrelated. The test performance results also reflected participants' views in the various forms of data collected. The RQs were based on the type of grouping practices in two different school settings: ability grouping between-classes; nonability grouping between-classes.

The literature contained mixed perceptions about ability grouping between classes; there are both positive and negative perspectives about its use (Adodo & Agbayewa, 2011; Bui, Imberman, & Craig, 2012; Burke & Sass, 2013; Collins & Gan, 2013; Flashman, 2012; Gallagher et al., 2011; Loveless, 2013; Mathews, 2013). The results of this study are an example of mixed feelings about ability grouping with most participants registering opposition to ability grouping between classes. Among arguments in favor of ability grouping is that its use resulted in higher test scores for students. For instance, the results of research where tracking was employed with eighth graders showed a positive association between tracking and successful performance on advanced placement exams in high school, and this association was not limited to ethnicity (Loveless, 2016).

Another argument for ability grouping relates to instructional practice that some teachers reported enabled them to more effectively tailor the content and instructional pace to learners' needs and use strategies to reinforce skills and understandings of low achieving students (Loveless, 1998, 2013, Vogl & Preckel, 2014). Some participants equated benefits of ability grouping between-classes with not having to employ differentiated instruction. These participants explained that there is less, if any, need to

differentiate instruction since students are grouped mainly by the same level of achievement. This position conflicts with the experiences I bring to this study. Differentiation beyond ability grouping is appropriate as all students do not learn in the same way or have the same learning style or needs (Gardner, 1999, 2011a, 2011b), even though they may be on the same performance level, low or high. However, most participants for or against ability grouping between classes recognized the need for employing other differentiated instructional strategies.

The recognition that both high and low achieving students require differentiation in the classroom is also clear in the ability grouping literature (Deunk et al., 2015; George, 2005; Hong et al., 2012; Loveless, 2013; Sisk, 2007; Sloat et al., 2007). Schofield (2010) is among researchers who purported that modifying the curriculum is a differentiated instructional strategy. Consistent with the need for implementing different forms of differentiated instructional strategies, implied is the need for teachers to recognize there are various ways to differentiate instruction. In this regard differences in the performance of students based on gender, ethnicity, or socioeconomic status would be addressed, as they would with the use of culturally relevant pedagogy (Ladson-Billings, 2014) or culturally responsive teaching (Brown-Jeffy & Cooper, 2012; Grant, 2014), despite an overall specific grouping pattern selected.

Consistent with research findings that the performance of higher performing students is enhanced when they are grouped together (Brulles et al., 2010; Vogl & Preckel, 2014), other study participants also identified ability grouping between-classes as beneficial for higher achieving students. One participant said, "In between-class

[grouping] for the higher class we can let them work on their own and they can take it [learning] to another level." Somewhat inconsistent with these perceptions are the results Chmielewski et al. (2013) reported in their study of tracking. These researchers found that although mathematics self-concept was higher for high-track students and lower for low-track students, it was higher for students with within-school arrangements and lower for those in between-school tracking (Chmielewski et al., 2013). In other words, when students' courses were arranged by ability, classes of high achievers demonstrated high achievement; classes of low achievers demonstrated low achievement. But when students were grouped within a class, their achievement was higher than students who were sorted between-classes. Other researchers also report that using achievement to sort students is disadvantageous, especially for minority groups, as they do not receive benefits from being with more advanced students (Kalogrides, Loeb, & Beteille, 2013). This study's findings also showed that participants stressed that peer assistance from more advanced learners was beneficial for their students.

Some participants added a qualifying factor for the effectiveness of between-class arrangements, stating that between-class grouping is beneficial when the classes also use small groups. This is also a practice Adelson and Carpenter (2011) found beneficial for improving student achievement. Per a participating principal, the school began differentiating students in small groups to target needed skills using tutors. This practice resulted in better score results for students in the 2015-2016 year. This finding and the resulting student performance further illustrated consistency with other research studies.

However, for reading, this study indicated between class grouping resulted in lower achievement.

Both early and more recent studies have found limited to no advantages in achievement of students in self-contained ability grouped classes, and based on some student characteristics, it may be detrimental when used without other instructional alternatives such as cooperative learning, differentiated instruction, and flexible grouping (Garrett & Hong, 2016; Hong et al., 2012; Slavin, 1987). The scoring trend of students, according to participants' responses and a review of reading performance data from the districts' websites, suggests the need for increasing differentiation or other practices that consider differences in learning styles among males and females. Website data showed the performance of males in both type settings was lower than females in both grade levels studied.

In contrast to findings illustrating ability grouping results in higher test scores for students, participants viewed that students in the between-class ability grouping pattern scored lower than students in nonability class grouping patterns. This view received support from a review of test score reports of the sites found on the state's website. The performance trend illustrated in the study may have been influenced by such factors as learning styles, reading interests, or differences in maturity levels between males and females at the same grade level. However, the literature reviewed supports that consideration of these possible influences is limited or does not exist when students are grouped by ability based on test performance scores. The finding may also relate to aspects of the critical race theory where exclusion or social learning construction

influence performance (Mor Barak, 2017). In this study, the exclusion would result from ability grouping.

Responses from participants revealed their instructional practices included peer tutoring, differentiated instruction, small group instruction, and motivational techniques to encourage better performance. These practices are consistent with helping students to construct their own knowledge using social learning as stated in the conceptual framework. Implicit in the performance trend is that nonability grouping appears to be more successful in promoting students' reading performance, enabling them to score at or above the proficiency level on reading assessments.

Participants opposed to ability grouping between classes expressed their opposition in the theme of ability and mixed grouping. The consistent explanation for their opposing position was "students learn from each other." In focus group discussions, proponents of mixed ability grouping provided examples of how students learn from each other. They also noted that students display talents in mixed grouping patterns that do not emerge when they are grouped by ability. Although in opposition to ability grouping between-classes, participants' views of student learning were consistent with the tenets of the study's conceptual framework. For instance, teachers concurred with one participant's expression: "Students learn better from their peers, and if students could interact with peers in a learning setting, cognitive development would occur." This thought pattern aligns with Vygotsky's (1978) social learning theory that a child forms concepts and develops culturally from social interactions. Developing independence is also facilitated

as children interact with each other, receive assistance from one another, and work in collaboration.

Although most participants opposed ability grouping, some of their views were mixed regarding the use of accelerated classes or mixed-groups for gifted students. Related to this concern, Brulles, Peters, and Saunders (2012) did not find any differences in mathematics achievement rates between students who were in gifted cluster classrooms and those who were not in a cluster group arrangement. This finding has implications for the conceptual framework that suggests students learn challenging material through the assistance and interactions of others who understand the materials (Vygotsky, 1978). This position is also supported in a recent qualitative study of guided reading for first grade students taught in mixed-ability groups; the study was founded on social learning theories that purport learning is interactive (Morton & Bennett, 2015). Interactive learning was demonstrated by students assisting each other. The study's findings included that students' self-efficacy developed and was reinforced and their reading performance improved (Morton & Bennett, 2015). Contrary to the position that the performance of advanced learners is inhibited in mixed ability grouping, Morton and Bennett found that not only did low-performing students' progress, but the progress of advanced students was like their previous progress when they were grouped by ability. Researchers noting negative effects of ability grouping suggested that nonability (heterogeneous) grouping would be preferred if it did not retard progress of advanced or gifted students (Brulles et al., 2010; Vogl & Preckel, 2014; Garret & Hong, 2016; Hong et al., 2012; Slavin, 1987; Loveless, 1998).

Most teachers perceived ability grouping between classes as a pedagogical tool that is detrimental to student performance. As conveyed in the ability grouping literature (Lleras & Rangel, 2009), participants associated the practice with restricting the development of literacy among minority and low performing students. Socioeconomic status and achievement differences between minority and majority students in both settings were questioned in this study. Not all participants associated SES to low reading performance as one participant stated "all students who live in poverty are not behind. Some try very hard to succeed." Most agreed, as our study suggested, SES was a factor in reading performance when students were not grouped by ability. Favoritism for within-class ability grouping and mixed grouping patterns emerged from the study as flexible instructional alternatives whereby "the students with the same deficits [can] work on the same area and focus on the same skill set." A participant noted that "it's an overwhelming task to teach a whole class on the same level" which also favored the view that students should be mixed, and peer tutoring should be used. However, although non-ability group participants generally practiced within class grouping, one participant described three levels of class grouping that presented challenges for delivering instruction. Managing student behavior among the *low, average, and high groups* was difficult.

According to participants, advantageous for mixing ability levels are that (a) students are not labeled as *smart* and *dumb,* (b) student's levels of achievement increases as they are exposed to richer curriculum, (c) discipline problems are decreased as compared to grouping all low-performing poorly behaving students together, (d) lower achieving students have a role model, and (e) student motivation is increased. These

advantages are linked to promoting an environment where students are motivated to construct their own learning through collaborative learning: *students learning from each other.* This concept is also supported in the literature from the position of peer tutoring (Allen, 2013). This linkage is also supportive of aspects of the conceptual framework that focus on the social construction of knowledge based on students' capacities and various learning modalities (Bruner, 1963; Duckworth, 2006; Gardner, 2011a, b; Marzano, 1988). Implicit in these views is the importance of creating an environment where all levels of achievers can see that they have attributes that are helpful to others. This shared knowledge may then help each individual learn something new.

Participants' views are also linked to other aspects of the conceptual framework that guided this study. They noted the importance of positive verbal interactions between students and parents, between students and students, and between students and teachers in discussions of modeling behavior and motivating lower performing students to achieve. Participants concluded that when lower achieving students could engage in conversations where they could see that they could do the same things as higher achieving students, and that both parents and teachers expected them to do well, they appeared to try harder (Morton & Bennett, 2015). Grouping practices facilitated social learning. Researchers suggest that a child's aspiration to academic success is related to how the parent perceives education (Senge, Cambron-McCabe, Lucas, Smith & Dutton, 2012). Mercer and Howe (2012) addressed classroom talk from the perspective of the "Vygotskian model of the relationship between social/intermental activity and psychological/intramental development" (p. 20) and suggested "that it is not only the use of talk for reasoning that

helps learning and the development of understanding, but an awareness of the potential value of talk for reasoning" (p.20). Participants' views and research applications of Vygotsky's (1978) theory to teaching and learning suggest that regardless of the grouping pattern used, student performance is influenced by engagement in talk which can assist the student in reasoning, choice-making, and developing self-knowledge.

Implications of the study's findings of reading performance based on ethnicity and socioeconomic status are apparent in other studies. My examination of reading scores from the state's website suggested that scores did not appreciably differ based on ethnicity for the two type settings in the study. Some reference sources included in this document addressed academic problems of low-performing students and students of color (Lleras & Rangel, 2009; Reardon, 2011). Researchers outlined strategies designed to improve performance of low performing students and students of color such as the use of appropriate scaffolding, peer groups, and monitoring (Mayer &Tucker, 2010). Although ethnicity was not mentioned as a significant factor, participants recommended that such strategies as peer grouping and peer tutoring would assist low-performing students, regardless of ethnicity.

Participants perceived differences in reading performance based on socioeconomic status for the two type settings. Students of lower socioeconomic status were perceived as performing better in the mixed-ability group setting than students in the setting where students were grouped by ability school-wide. A review of the schools' web-based score reports, showed higher proficiency performance scores were associated with the socioeconomic status for students in non-ability group school-wide settings than

in the ability group school-wide setting. Consistent with participants' perspectives on the school serving as a model for motivating students, this difference in student performance has implications regarding the importance of the school's environment and suggests grouping practices can influence the environment. Examples of this observation appear in the research literature (Catsambis et al., 2012; Collins & Gan, 2013; Esposito, 1973; Flashman, 2012). For example, findings from one research study also led to the conclusion that the demographic characteristics of the school environment, such as instructional arrangements that included peer assistance and small groups, contributed more to students' reading performance than their economic status (Kainz, Vernon-Feagans, 2007). The environment in school-wide ability group settings, according to participants, allowed for student labeling. Focus group participants addressed labeling students from grouping them as a specific type learner which deprived them of needed stimulation for developing positive self-expectations, a point Slavin (1987) and other researchers illustrated.

Additional factors contributing to reading performance emerged from participants' comments. Participants' perceived that the environment of the school was not always most conducive for learning, and identified some factors influencing the environment that are also found in the literature (Jonassen, & Land, 2012; Hannafin et al., 2014). For example, parental expectations are viewed as contributing to a positive or negative school environment. One participant suggested that some labeling comes from parents who remark “my child is slow like I was and hard to learn." Participants believed that parents

who have low expectation and aspirations for their children encourage the development of low self-esteem and leads to their children "living out a self-fulfilling prophecy."

Participants' conclusion that socioeconomic status was a factor related to the performance of students was consistent with the review of state reading performance data. Observations of socioeconomic status influences related to the lack of resources, such as books, available in the home and the inability of some parents to model appropriate language or to assist in guiding students to learn. The socioeconomic status factor supports practices related to tracking or placing students in courses based on ability. Several researchers concluded that tracking is directly influenced by socioeconomic status defined by income and level of education, for example, and indirectly influenced by race and ethnicity (Betts, 2011; Burris et al., 2006). These researchers concluded that low socioeconomic status students were often tracked in lower ability groups. The state's score reports defined socioeconomic status as students qualifying for the free and reduced lunch program for the participating schools.

Consistent with reading score reports based on ethnicity from the state's website, participants concluded that ethnicity was not a factor associated with reading performance unless as related to English language learners. Haynes (2012) suggested that English language learners have more difficulty in reading. Some participants suggested that any gap in achievement among students was not related to race as in one comment that summarized expressed opinions: "Race doesn't have anything to do with it because some of my African American students perform as well or better than some Whites."

Language does contribute to lower performance in reading; thus, an achievement gap among some learners. One participant captured this conclusion as follows:

> If I had to say there was a gap it would be with the ELL population because of the language barrier. They work hard, and these are students who excel in math, but not in reading because they don't understand the language.

This research complements other studies where findings illustrated that tracking or ability grouping between-classes is not beneficial for closing the achievement gap between low and high achieving students or students with low literacy English skills. Among studies is an analysis of the Early Childhood Longitudinal Study–Kindergarten cohort data where Garrett and Hong (2016) determined that homogenous grouping is not beneficial for language minority kindergartners.

In general, findings from the study suggest that ability grouping between classes is not the most productive grouping pattern for the population of students included in the study represented by reading test scores. The findings show teachers and school principals are committed to the goal of student improvement; however, several comments revealed that practices were not always consistent with this commitment for various reasons. A principal's explanation that the ability grouping pattern existed prior to her appointment suggested that expectations of higher authorities factored in the practice continuing. However, comments indicating that efforts were being made to change some practices also suggested that most participants recognized that grouping students by ability was not creating the best environment to encourage students to construct their own knowledge by learning from others. Implicit in findings are that diverse learning styles,

cultural, and socio-emotional needs are not considered to the extent necessary for best performance (Fiske & Taylor, 2013; Pritchard, 2013; Riding & Rayner, 2013; Rosenthal & Zimmerman, 2014) for the ability-grouped students. This implication is in direct observation of what participants identified as needed in their practice of differentiating instruction. For example, participants identified student behavior as a major problem because large numbers of low-achieving students were placed in the same class. Directions from the literature on classroom management and learning theory emphasize motivating students to learn through instruction that considers their learning styles and needs. Some participants indicated that their practice of differentiation was limited.

Differences in reading scores on the state's MCT2 exam were more positive for students at the non-ability sites than those of students at the ability-grouped site. Higher percentages of students scored at the proficient level than students at the ability site; further the upward trend reflecting movement toward proficiency over two years was also more evident for the non-ability sites. The non-ability sites reported frequent use of small groups, tutoring, peer assistance, and using strategies for motivating students to want to succeed.

Consistent with the conceptual framework based on social learning (Vygotsky, 1978) and studies of grouping patterns, participants determined that ability grouping had negative implications related to reading performance, self-concept, motivation, and social development. In a focus group, one teacher stated that "between class (homogeneous groups) ability grouping breeds intolerance and even contempt toward the lower achievers." Participants viewed that students tended to demonstrate negative classroom

behaviors and poor relationships with peers when grouped by achievement. Similarly, Flashman (2012) found differences in students developing friendships when grouped as high and low achievers. Participants in this study favored the position of researchers who oppose homogeneous grouping: all students benefit from being taught in an environment with mixed ability students (Esposito, 1973; Loveless, 2013). In this regard, participants believe that students are motivated and have models of achievement goals they can aspire to attain when the instructional setting represents a mixture of abilities.

Limitations of the Study

The study is limited to certain schools and their locations. The site of the study consisted of four elementary schools located in two rural school districts in the same state that practice school wide non-ability within-class grouping and between-classes ability grouping. Three schools that were closer in SES levels were all non-ability grouped; and just one school, with a much lower SES level was the only ability grouped setting. The results of the study may have been different if the number of schools had approximately the same number of students and teachers to compare ability and non-ability grouped settings. The location of the study may have some influences on the transferability of results as reading performance and participants' perceptions may represent a vast difference in socioeconomic, ethnicity, or other variables from other populations in the state. Further, the site was selected through convenience sampling and procedures were not completed to determine whether any differences in school demographics were significant.

Participating teachers and principals represented a purposeful sample. Although participant demographics revealed some similarities, procedures were not employed to determine if any differences in demographics, such as teaching experience, were significant. However, the power of the sample was addressed through using 70% of the entire population of third and fourth grade teachers of reading and language arts for the schools in the two districts as the study's sample. Participants' perceptions may have differed based on the total years of experience; thus, influencing their descriptions of appropriate instructional strategies for grouping arrangements. A further limitation is the possibility of participant bias in responding to the self-report instruments, in interviews, and focus groups. Their responses may not be accurately or adequately presented.

The results of the study can be generalized to the participating school sites**.** Because this study is limited to these rural elementary schools and is a perception study, the findings cannot be automatically generalized to other areas in rural elementary schools. Findings may be generalized beyond these sites based on their appropriateness as determined by the reader. For example, assessments used to measure reading performance or to determine grouping patterns may not be appropriate for schools beyond the state of Mississippi.

Recommendations

This study was limited to a small population of elementary schools in two school districts. A larger population is recommended for future investigations of the influences of ability grouping on student achievement. Also recommended is that these studies include additional forms of data collection such as field observations and both formative

and summative student evaluations. An interesting finding of this study is that most participants in the school-wide between classes ability group setting did not agree with between-classes ability grouping. Given this finding, additional research might focus on the practices of classroom teachers in ability-group settings and any policies that might govern their practices. The results may lead to studies that identify the types and frequency of professional development and the influence on professional practice and student achievement.

A replication of this study within other small populated school districts may be helpful in identifying and establishing more flexible grouping practices within classes, even if the schools chose to group students by ability between classes. With the continued practice of accelerated classes and tracking, further studies designed to measure student achievement in schools implementing full differentiated instruction and those schools practicing school wide between class ability grouping may reveal advantages and disadvantages that were not identified in this study. An added study that would investigate the perceptions of parents on separating higher performing and lower performing students may also provide information that could be considered in establishing organizational patterns involving ability grouping.

Implications

The findings of the study support the implications for social change identified in Chapter 1 and provide a rich context for the implications based upon participants' responses. The findings have several implications that could impact the behavior of various stakeholders in a school. Changes in grouping practices, especially for low

performing students, have implications for social change in the form of student behavior and their total development. The student, when non-ability grouped through separate classes, experiences self-worth/self-esteem and develops self-confidence when he/she is not labeled or distanced from peers of different abilities and learns in a mixed level environment. The student enjoys the benefits of being valued as an intricate part of the learning community, taught with higher expectations and held accountable to perform at his optimal level.

A contrast in this study's finding from the research Lu et al. (2011) reported from examining the relationship between academic achievement and motivation has implications for this study's results. Lu et al. found children's reports on perceived ability, intrinsic value, and academic achievement were not related. However, participants in my study believed that students' perceptions of their abilities, in part, are derived from their parents' perceptions and these negatively impacted their performance. Low expectations of self and having little or no motivation to learn result from such parents' comments as "He/she is slow learning because I was slow." Implications from the study suggest that ability grouping adds to the students' negative perception and actions that tend to mirror and even guide the low expectations of parents.

The negative influence of ability grouping has implications for practice. The perception derived from findings for the overall school setting is that mixed ability grouping is instrumental in dispelling the notion of a self-fulfilling prophecy of automatic failure when the student has successful models (an "I can" attitude; if he/she can do it, I can too). According to Vygotsky (1978), understandings from these models help to build

a stronger aspiration to succeed. Changes in grouping practices imply the establishment of a stronger community of practice whereby teachers and administrative personnel develop a passion for sharing data, teaching strategies, and ideas intended to promote their own professional development and student learning. This sharing may extend to developing networks with other schools, including those with a successful status. Strategies deemed successful may be tried for possible integration in the school's curriculum design.

Implications for practice are also derived in view of the nature of the study's problem associated with the reading achievement of third graders. According to Sloat et al. (2002), the upward mobility of skill deficient third graders require long term support, and decreases the likelihood of their competing with more literate counterparts. The problem addressed in my study involved the inability of many students to score at the proficient level in reading and ultimately had a negative impact on the success of the school and district. The lack of reading achievement has implications for a state-wide mandate requiring third graders pass a test of literacy skills to be promoted to the next grade (Simms, 2012). Mixed ability grouping or modifications to grouping practices in school-wide ability grouping settings may assist in the success of third graders meeting the criteria of this mandate.

Implications from participant’s comments regarding who makes decisions for grouping patterns suggest that policies may need to be established in order that some social changes are realized. These changes may necessitate the creation of or amending polices governing professional development to be provided through the district,

assessment processes for identifying reading performance, and establishing ability groups that go beyond scores and consider other student demographics such as learning styles. Implications from the literature and this study's findings suggest the importance and need for policies that consider all influences on reading development to include the home, school, and classroom. Findings from the UNC (2007) study are among those opposing grouping low achievers without considering all factors that would enhance or detract from the student's ability to perform. The research illustrated the value and need of policies related to improving reading through comprehensive reading instruction and exposed the negative influences of large numbers of poor readers placed together in classrooms on the reading ability of all students in the classroom. Participants spoke of this practice and the subsequent implementation of a 90/90/90 program (Reeves, 2003) designed to dispel the myth that children's socioeconomic background or home-life negatively influences their academic success. Some characteristics of the program are the following:

> More than 90 percent of the students are eligible for free and reduced lunch, a commonly used surrogate for low-income families. More than 90 percent of the students are from ethnic minorities. More than 90 percent of the students met or achieved high academic standards, according to independently conducted tests of academic achievement. (Reeves, 2003, p.2)

Reeves (2003) explained that characteristics suggested that an assumption was made that there is a relationship between poverty, ethnicity, and academic achievement. However, Reeves found that the data showed a different result. In individual schools,

there were several poor and ethnic minority students who were also academically proficient. Therefore, the relationship between poverty and low student achievement did not conform to the data. Berliner (2013) suggested that the source of America's education problems may be outside the schools and is influenced by the country's income inequality. These observations imply the need for identifying policies and programs that would assist in decreasing the negative influences of grouping practices on lower performing students.

Other implications derived from the study's results center on instructional services that may promote student achievement, thus help to close achievement gaps between students, despite the grouping pattern. Consistent with recommendations from the literature (Collopy, Bowman & Taylor, 2012), participants identified mentoring programs and tutoring among techniques that may assist in closing the achievement gap between Black, White, and ELL students, and students with different socioeconomic status. This observation suggests that schools modify grouping and instructional practices that may improve students' reading performance school-wide. Modification of instructional practices also implies that professional development may be necessary for teachers and leaders. Desimone, Smith, and Phillips (2013) reported research that revealed third grade teachers who engaged in professional development over time could provide instruction that aided students' achievement. Both implications for modifying assessment and instructional practices are founded in the conceptual framework of this study that provides theoretical bases for enhancing learning.

Conclusion

The results of this study show that teachers' perception that the reading performance scores of third and fourth grade students enrolled in a between classes school-wide ability grouping setting are lower than those of students enrolled in non-ability grouping school settings is supported by reading reports found on the state's website. The results support findings cited in the literature that ability grouping that separates students by classes is especially detrimental to the academic performance and social and emotional development of lower achieving students. Confirmed through participants' comments is that best practices in grouping students dictate the use of instructional strategies in the form of mentoring, tutoring, and differentiated alternatives including the use of small groups.

Reading achievement of elementary learners is influenced by several factors. Although ethnicity was not viewed as influencing reading achievement in this study, SES was a perceived as a significant influence on student performance scores. Socioeconomic status is frequently linked to the type and frequency of parental involvement as an influence on student achievement. Educators associate disadvantages caused by socioeconomic and cultural background with barriers to academic achievement (Rothman, 2012). For example, Fan, Williams and Wolters (2012) concluded from their study that participants perceived parental involvement in school functions and having high goals for their children were essential to academic success. Participants' perceptions of the nature and benefits of parental involvement were consistent with the findings of LaRocque, Kleiman, and Darling (2011) and Karbach, Gottschling, Spengler, Hegewald,

and Spinath (2013) that involvement such as helping their child with homework, attending school functions, visiting the child's classroom helps students to improve their scores in reading. However, Gollnick and Chinn (2013) found that some families put securing basic functional needs as priority over giving learning support for their children. Despite the varying views on parental involvement and the influence of SES, parental involvement has shown to positively impact student learning. ELL and other students who have difficulties with English skills are helped through their parents participating in self-improvement services provided in school districts. The literature reviewed in this study, the theoretical and conceptual frameworks, and the study's findings illustrate that schools have a responsible role in assisting parents with resource needs and preparing them as resources themselves to assist in student learning. The needs of parents and students can be identified and addressed through professional development aimed at enhancing teacher knowledge of the diversities characterizing students they teach; therefore, how flexible grouping may promote reading and content area performance.

The overall conclusion of the study is reading achievement, like student achievement in any content area, requires the use of diversity in instructional arrangements, teaching styles, and the selection of resources based on the diversities students bring to the school and classroom. Attention to a composite of student characteristics, including their diverse learning styles and experiences, better equips teachers to motivate and teach a more diverse range of achievers. This knowledge permits teachers to use differentiated instruction regardless of the grouping pattern; however, I suggest that through its use and in view of the many drawbacks associated with ability

grouping, there should not be a need to separate students by ability groups between-classes school wide. The information obtained through this study can be useful in promoting positive social change through using appropriate instructional arrangements that can help to increase student achievement in reading. This change can open the doors to a world of opportunities for the individual student and ultimately for communities at large.

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Appendix A: Survey of Grouping Practices and Influences

Directions. This survey is composed of 10 open-ended questions that ask your opinion about grouping practices based on your experience as an elementary teacher. Please respond to items in as much detail as possible. Your answers will become a part of a summarized description of the influences of grouping on students' performance with emphases on reading performance; therefore, your responses will not be able to identify you. The e-mail address provided for the returned responses is my personal address. Please e-mail any questions you may have. Thank you for your time and assistance with this research that is exploring "Ability Grouping and Student Achievement in Four Rural Elementary Mississippi Schools."

DEMOGRAPHICS

Please check the item that best describes you.

Gender: Male ☐ Female ☐ Other ☐

Grade Level of Present Teaching Assignment: Third ☐ Fourth ☐ Other_____

Number of students in one class: _____

Years Teaching Experience: 0 - 2☐ 3- 5 ☐ 6 - 10 ☐ Other_____

Years of Experience with Ability Grouping: 0 - 2 ☐ 3 - 5 ☐ 6 - 10 ☐

Other_____

Training in Last 5 Years: Grouping: Yes ☐ No ☐

Differentiated Instruction: Yes ☐ No☐

Do you have a Teacher Assistant? Yes ☐ No ☐

QUESTIONS

1. In what ways do MCT2 test scores determine what groups of students are placed in classes?

2. How much do previous MCT2 test scores influence what group a student will be placed? Explain your answer.

3. In your opinion, how is grouping students by ability (academic level) an advantage or disadvantage? What are the advantages and disadvantages of mixed ability grouping?

4. How much, if any, does the achievement gap between minority and majority students exist in your school?

5. How important is the socioeconomic level of students to their achievement? What leads you to this opinion?

6. In your opinion, has differentiated instruction replaced ability grouping to the extent that all levels of instruction are met successfully without the stigma of inequality?

7. In your opinion, does your school promote mixed ability grouping regardless of MCT2 test scores from previous years?

8. In your opinion, is it a fair practice to separate the top (scoring) 50 students into an accelerated class away from low-end performers. Please explain.

9. In what ways do you think predictive reading test (i.e. Star, Common assessment, etc.) and the MCT2 test scores of minimal, basic or proficient ratings help or hinder teacher's prescribed ways in the future success of students?

10. Does your school provide tutoring service for low achieving students? What percentage of these students attend classes together?

Appendix B: Interview Protocol

Administrators Individual Interview Protocol

Date: _____ Participant: _____

Place: _____

Introduction

Introduce researcher. Thank participant for agreeing to participate in the interview. Establish rapport. Briefly review the study and consent form to ensure participant is aware of rights including not responding to any question that presents discomfort in responding.

Instructions

I will begin the interview with a few questions that relate to your experience, demographics of the school, and responsibilities as principal. Then I will ask five questions associated with the research questions for this study. These questions inquire about factors associated with grouping practices that are implemented or are being considered for your school. Responses will be determined by your own personal and individual experiences. Your candid responses are appreciated. There are no correct or incorrect responses. As you respond, I will be tape recording the interview and writing notes on your comments. To ensure that I fully understand your intended meaning, I may at times ask additional questions for clarity using such statements as "please explain," or "can you give an example." Please be reminded that you may elect not to respond to any question asked that you feel uncomfortable in answering. At the end of the interview you

will be given the opportunity to review my notes to ensure I have accurately captured your comments. Do you have any questions before we begin?

DEMOGRAPHICS

1. How long have you served as principal of this school?

2. What is the approximate number of students served in third and fourth grades?

3. What is the current projection of the percentage of third graders being able to pass to the next grade?

4. What role do you play in decisions for whole-school or non-whole school grouping practices at the school?

INTERVIEW ITEMS

1. What are the grouping patterns currently practiced at your school?

2. What is the rationale for practicing ability grouping at your school?

3. How has ability grouping (if practiced) impacted student reading achievement at your school?

4. If there is a reading achievement gap between minority and majority students at your school, what factors do you think have contributed to this gap?

5. Have grouping practices led to closing the gap?

Appendix C: Focus Group Protocol

Date/Time

Location

Purpose

Group Demographics

Opening Statements: Introduction of Researcher; Build Rapport; Ensure Relaxed Setting; Thank Participants for Attending

Sharing/Clarifying Information: Review purpose of research; review consent forms and distribute copy of signed form to participants; note that the group interview is designed to gain additional information/clarity to responses received from surveys and administrative interviews.

Directions: Establish procedures (i.e., respecting others' ideas although you may disagree; giving each an equal chance to speak; providing an opportunity for participants to clarify notes taken of responses). Note that there are three - four basic questions, but other questions may be posed as a result of responses. At the end of the session I will review with you notes taken of comments to ensure I have captured them accurately. This will not take any longer than about 5 minutes.

Tentative Questions:

Opener: What are some ways do you or your school group students? Do students respond differently to instruction when they are grouped by ability, for example? Can you describe their behavior/performance?

- In your opinion, how does mixed ability grouping or similar ability grouping within one learning environment affect the success of student achievement scores on the MCT2?
- Do students at your school attend advanced placement or accelerated classes? If so, what are the methods used for grouping or placement into these classes?
- Based on your experience, what do you perceive as the advantages of students placed in a learning environment where there are all similar abilities?

Note. Prompts will be used to ensure information flows and all will feel a part of the process. The session will conclude with providing participants opportunities to add information that may not have been revealed in the interview. The researcher will inform participants that this data will be incorporated in a document that can be shared once the study is completed.

Appendix D: Interview Transcription

Non-Ability Group School

DEMOGRAPHICS

1. How long have you served as principal of this school?

Six months

2. What is the approximate number of students served in third and fourth grades?

270

3. What is the current projection of the percentage of third graders being able to pass to the next grade?

Initially it was 86.3% now it is 97.6%

4. What role do you play in decisions for whole-school or non-whole school grouping practices at the school?

Solely my decision with some collaboration with School counselor and lead teachers, after this year it will be solely my role. With the next year we will have more new teachers and I will have a greater role in that decision.

INTERVIEW ITEMS

1. **What are the grouping patterns currently practiced at your school?**

   Last semester 3rd grade, all of this was in place when I got here, they did have one class with lower students were in that one class and the other three classes were probably evenly mixed. For our 4th grade it appeared a couple classes of a higher

level of students and other classes were also evenly mixed. I am not sure that is what they intended to do but that's how it ended up.

What criteria was used to group these students? Was there a ranking sheet, were the parents involved?

They went on the Star scores from the second grade and those students were projected to do well they just kind of evenly distributed those but the lower students they grouped them together with that one teacher in hopes that she would get them to the next level.

For that higher class, I think that happened because of our state auditors and we had five fourth grade class and there were two teachers that team taught and then there were three that they divided up into other groups and in an effort to keep the sped classes together they placed them in a group of three so they could get subjects in smaller chunks and those classes that were team taught. Schedule-wise it worked out better for them to be in those three classes even though they did have inclusion.

Do you think there was an advantage or disadvantage in grouping like th at and will you do that in the future? There is an advantage if you have a teacher who is going to set the expectations high for the lower group and not allow those students to use excuses as a reason to not succeed. It really takes an inspiring teacher.

The disadvantages are if you have a lower group and say on reading level the highest child in your class is reading at higher level there is no one there to

challenge. There is a disadvantage for the teacher as well with it being so data driven and our jobs and the level of accountability because of test score. You have that one teacher who is seeing the growth of her students even though they are low but the overall outcome is you could have over half of your class not passing the gate but those children may be just inches away from the gate and the outside does not see the hard work that is going on in the classroom.

So, it is kind of a disadvantage to for that teacher that has that burden of trying to bring all of those children up and the other teacher who works just as hard, but her students were on level when they got there. Data wise it looks like that is the better teacher and that is not necessarily true. The teacher that works hard but doesn't see good gains but just doesn't make it over the hump. That's one disadvantage. I will probably do that for the year because I was able to see just how hard that teacher worked. It took some extra because they felt disappointed and didn't think they were going to make it so I came in being motivational.

It took a lot of motivation.

2. **What is the rationale for practicing ability grouping at your school? (separating the higher students**)

   I'm not exactly sure what their rationale was but I guess for example the class that has the lowest student was they were focusing more on the deficits in order to meet the gaps that they were lacking.

   The classes that had the higher-level student I am guessing they could have them on the same level and focus on excelling with them on the same level.

3. **How has ability grouping (if practiced) impacted student reading achievement at your school**?

   There is a two-fold answer: when I got here in January it was projected that only 33% of 3rd graders would be passing the Gate test based on the Star scores and they were divided by class with that lower and the others evenly distributed. However, when I got here, I implemented centers into the classroom where they were able to ability group the students within the class and that seemed to help tremendously. Our students were able to receive small group instruction on the level where they were which helped them to build up where they needed to be. In my opinion, I think for the kids it was kind of like they had the mindset that 'I am low and I am going to be low and this is all I'm going to give you'. But to me it's just a matter of what the teacher's expectations are.

   What do you think about the parent's expectations are and do you think that it might have impacted their performance? The parent's expectation is always going to affect what the student believes and I know here we didn't have a whole lot of parents to participate but we did have a few that would participate. I just always encourage those parents that would participate to also take up some time with those students whose parents did not participate. We had a lot of community support from there and I did have an opportunity to meet with some of the parents of lower students and they really had high expectations for their children but they were not quite sure of what their child abilities were. I think the parents don't know what to expect because they have been told that their child is low or their

child is high or whatever the case may be so their expectation is projected from the school.

Do you think that the child kind of feels the projection of the parent's low expectation or low interest? I tell my teachers the child knows what you feel about them based upon your actions so if the parent is making that excuse for them, he is low, he's always been low, I was never good in that either, you know they kind of or tend to take that on and allow that to become their identity. (**like a self-fulfilling prophecy**).

4. **If there is a reading achievement gap between minority and majority students at your school, what factors do you think have contributed to this gap?**

   There is not necessarily a gap I think we have a good number of or subgroup that falls into each category, we have some ELL students that are higher, it's based on the number of the population. If I had to say there was a gap it would be with the ELL population because of the language barrier. They work really hard and these are students who excel in math but not in reading because they don't understand the language. With our black and white students, I would say it is about even. If there is a gap within the subgroups it would be disability wise. We have a lot of students who have diagnosed disabilities that prevent them from excelling.

5. **Have grouping practices led to closing the gap?** With the small group interventions and implementing centers it worked very well improving even with the ELL students, they were able to work on their deficit of language and culture.

Some teachers were able to pull ELL students aside and work with them on idiom so that they understand that some of our language are figurative.

Are there any tutoring

There was some afterschool tutoring by parents volunteering mostly with 4th grade students. We did offer tutoring in Booth camp prior to the gate test, we had good turn out with volunteers.

Non-ability School NW Joan

DEMOGRAPHICS

1. How long have you served as principal of this school?

2 years

2. What is the approximate number of students served in third and fourth grades?

145

3. What is the current projection of the percentage of third graders being able to pass to the next grade?

90%

4. What role do you play in decisions for whole-school or non-whole school grouping practices at the school?

It is a Collective decision one that I choose to allow teachers to have a part in but the final decision does rest with me. With this being an attendance center, we do have an attendance center principal that if there is something that needs to be further discussed in prior to going to central office it will go to him.

INTERVIEW ITEMS

1. **What are the grouping patterns currently practiced at your school?**

   We **don't have** a grouping pattern, if it is some behavior issues we will rearrange or put based upon inclusion how our teachers will service, the time of day because we have to share inclusion teachers so if it is language arts and we do language arts in the morning then we will make sure that that schedule is that way. Beyond that ability grouping we do not do. It's kind of a heterogeneous mixed group and in the room they have the autonomy of when they are doing small groups to group according to the data that they are teaching meaning if a child was very good at main ideas they don't have to be in the low group that week.

2. **What is the rationale for practicing ability grouping at your school? N/A Are they mixed at the beginning of the year?** Yes randomly

3. How has ability grouping (if practiced) impacted student reading achievement at your school? (Within class) That allows students with the same deficits to work on the same area and focus on the same skills set. That allows the teacher the ability to focus on that (those students with the same deficits to work on the same) skill instead of having to do four or five different skills in a group and we do encourage that, when you are looking at data for you to group your children if there are skills set is say on inference then you create a group to work on inference in that way I don't have to do five different groups. I don't have to do five different tasks with this one group I can focus in on this topic. Another way that we do group is basically with their reading level. We have leveled

readers do we encourage them to use Read works.org, ELA news, where it takes a passage and if you say you got a child in the room that is on 8th grade level you can put that same article in an 8th grade level text and take the same article with the same information and put it in a third or second grade level. And that's free and that is something simple that you are able to give each child what they need or each group of children what they need without one feel more inferior than the other children.*

Do you all use the Star test? Yes. Is that another means for class grouping? We use Star to do that but not so much we use star for the data where it has the four progressions and we look at that to see what they need to get to that point.

4. If there is a reading achievement gap between minority and majority students at your school, what factors do you think have contributed to this gap?

> *I don't think there is that much of an achievement gap because all of our students' socioeconomic status is basically the same. Believe or not ironically the majority of our African Americans have parents who are affluent or have decent jobs more so than the other races. To me most of them are on the same playing field on the economic level.

5. Have grouping practices led to closing the gap? I think we are able to achieve more the data speaks that it works because at Christmas time we were at 50% or more that was not reading at grade level so then that improved to about 75 almost 80%. It increased because we were able to focus on what that child needed in a group setting. Last year we had something what we called power hour and in that power hour we took the star scores

and grouped then according to star and we brought in an outside tutor, she was a certified teacher. But we created groups that were 10 or less to we pulled everyone (sped teachers, interventionist, and third grade teachers) to work with them. Smaller groups based on the star score and what skills they needed and focused on those skills. It worked because at Christmas we had 30% of our children slated to pass 3rd Gate and by spring break I had 80% and we ended up with 85% passed and the second go around we were at 90%.

Is it an advantage between class ability grouping? (homogeneous) * (worked in the school that ability grouped using gender and ability. They had a girls high group and a boys low and a boys- on grade level group and I hated it because the children were in a whole class that knew they were low and you have parents acting silly because my child is not in the higher group because as a teacher do you teach differently to my high group and low group, don't you want all of them to receive the same quality of education. I don't agree with the separation.

Appendix E: Focus Group Transcription

Questions posed for clarity

4.How much, if any, does the achievement gap between minority and majority students exist in your school?

M-I didn't know which one would be majority and which one is majority because here the minority here would be the Whites and the majority would be the Hispanics and Blacks.

W- I don't see a gap between the races because we have low kids who are white as well so to me that is an even thing. It's not related to the race its more related to the grade and….

R-**Let me clarify the achievement gap is the range between the high scoring and low scoring; the accelerated and the lower groups. It would be the subgroups which are the Hispanics and low socioeconomic and other ethnic minority.**

W-I don't see a gap because in the accelerated group we do have some AA who do just as well or advanced.

- M-Ours are low and average.
- L-It was a big difference between classes that have the advanced classes and then the extremely low, they couldn't do anything they would say' I don't know, what do you want me to do with this'?

- J-Was it lack of knowledge or what? The higher classes know what to do and they will do it. The difference in ability is extreme.
- Jn-In my lowest group I got more effort out of them than the average group because they are supposed to be from the year before. The lowest groups didn't try, they didn't follow directions. The lack of care in the lowest group. The average cared but struggled and were willing to try.
- M+ Jb-The class labelled lowest knew more than they were showing so I organized some motivational strategies and they ended up in the middle and some high.

5. How important is the socioeconomic level of students to their achievement? What leads you to this opinion?

M- I have noticed that we have a lot parents who do not work, they depend on the government, some are on food stamps and they see their parents at home doing nothing cause I'm going to get paid by the government too I think that has something to do with it so they don't have anything to strive for. (a self-fulfilling prophecy) The parents don't care anything about their discipline. Parents are support the child in bad habits. Teachers are the ones to have to balance what the parents what, what the administration says and what we want. Just because they are socioeconomic levels doesn't mean they are not going to do well. A lot of the students come from the same kind of background. Students are not pushed at home or not challenged at home so why should they try to do anything at school.

W- It's sad between both schools county and city schools that share the same socioeconomics but I can definitely see the difference in the academic level here because they have been put together. It is not normal for there to be so many low children, it's like its half the school.

- **6. In your opinion, has differentiated instruction replaced ability grouping to the extent that all levels of instruction are met successfully without the stigma of inequality?**

    - J-Between level are ability grouped so they are basically on the same level.
    - J-We don't have to differentiate instruction because they are ability grouped.
    - Jn-They are the same level but with between class the higher class we can let them work on their own and they can take it to another level but the lower class we have to go step by step and more whole class instruction.
    - L-Students realize they are in a low group and I taught something completely different by class. They know they are low performers. They have been told they can't do it and it hard to make them want to do if they have been told that all their lives. Students don't have to work hard so the child feels

7. In your opinion, does your school promote mixed ability grouping regardless of MCT2 test scores from previous years?

All teachers agree that they should be mixed, you can have peer tutoring.

TA- It's an overwhelming task to teach a whole class on the same level – an entire class.

Jb-If they are going to do grouping especially with lower groups they should be split up into smaller groups. If they would watch the numbers, I wouldn't mind having a low group but if you have a class of 25 and they are all struggling to read two syllable words, it's hard.

It's the first time I have seen this, it was such a shock

W-I thought it was illegal

-Jx-It is illegal, that's why they try to cover it up

-Jb- With the kids being so low it causes more discipline problems, because you have so many bad kids. Sometimes you can't teach at all and then they come with the testing and Teachers are busy trying to teach, trying to make them sit down and be quiet and get their work done. When we go to test and then they say your scores are so low and you have the low ones in the same group.

W- In (county school) every year we had 3 different groups; high average and low. We could group them in smaller groups. They never have so many discipline problems. I have never seen nothing like it.

A-And we are not strict enough

J -I wish they would use one of the test to help filter out those students who have no business passing the 3rd grade. The reading problems

J-Other schools mix them with high medium and low. I was shocked when I came, the students were low starting with 1st grade reading levels in the 4th grade.

J-Students are mirroring the expectation level of parents which is not very high.

J-They start in kindergarten in the same group or class and it has done something to them, their self-esteem.

A-Star scores don't match the grade and if you water down the material of course they are going to make As and Bs, you have to water it down or they are going to fail.

J- The ready gate test is on the basic reading level they will be able to pass it. It is a cycle Parents don't want their children mixed in

Av- Some parents are more interested in field day and sporting activities as priorities. The students need love and to be believed in.

J-If they don't ever change the way the school is set up, they will always have low achievement.

Av- My whole homeroom was on tier 3. It's the parents that don't want them mixed.

An- The advanced class want to help the lower students. It's been going on for so long that lower students begin to feel inferior and their behavior and academic ability suffers.

They are taught to fight if you hit me I'll hit you back

Does your school promote mixed ability?

No,

An- I wander how some student got into advanced class. Star test doesn't measure ability it changes their AR goals. They take it too often. It does not measure their ability. It dumbs them down a level. Students check out books below their level

Does Star test show accurate growth? – Star test is taken too often to measure.

All disagree with the law that if they pass the reading test and fail math and social studies they can go to the next grade.

Appendix F: List of Codes

Pre-Set Codes/Initial Codes

These codes denote information related to research questions, data collection instruments and conceptual framework: RQ# (research question number); SQ# (survey question number); II# (interview item plus the number); FG# (focus group item number); CF (conceptual framework).

Emergent Codes and Categories

Interview Data- Initial codes and categories established: GP (grouping patterns); GR (grouping rationale); GI (grouping impact); AGF (achievement gap factors); GDM (grouping decision making); and GC (gap closures).

Focus Group Data - Initial codes and categories established: AG (achievement gap); SEL (socioeconomic level); IM (instructional methodology); GP (grouping patterns); EAF (ethnic achievement factors); TSAI (test scores/assessments/instruction).

Survey Data - Initial codes and categories established; GDM (grouping decision making); ADAG (advantages/disadvantages of ability grouping); AG (achievement gap); SEAF (socioeconomic level/achievement factors); DIAG (differentiated instruction/ability grouping); GPITS (grouping patterns/ influence of test scores); MMAF (minority/majority achievement factors).

Emergent Codes Reduced to Themes From All Data Sources

GPR (grouping patterns and rationale); GP/TS/A (grouping patterns/test scores/ assessments); IGA (influences of grouping patterns on student achievement); SA (student achievement); AF (achievement factors); and SC (student characteristics).

Major Thematic Terms and Expressions: ASA (assessing student achievement); SCIP (student characteristics and implications for practice); FISA (factors influencing student achievement); and GPR (grouping patterns and rationale).