Fall 2018

Identifying Barriers to Teacher Implementation of Evidence-Based Practices in Middle-School Reading

Brenda Fortson
University of Southern Mississippi

IDENTIFYING BARRIERS TO TEACHER IMPLEMENTATION OF EVIDENCE-BASED PRACTICES IN MIDDLE-SCHOOL READING

by

Brenda K. Fortson

A Dissertation
Submitted to the Graduate School,
the College of Education and Human Sciences
and the School of Education
at The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

Approved by:

Dr. Richard Mohn, Committee Chair
Dr. David Lee
Dr. Thomas Lipscomb
Dr. Thomas O'Brien

Dr. Richard Mohn Committee Chair	Dr. Sandra Nichols Director of SoE	Dr. Karen S. Coats Dean of the Graduate School

December 2018

Published by the Graduate School

THE UNIVERSITY OF SOUTHERN MISSISSIPPI®

ABSTRACT

This study explores factors that may be related to Mississippi's 2015 eighth-grade reading scores, which rank the state in 50th place (Nation's Report Card, 2016). Whereas there are likely several factors that contribute to middle-school students' poor performance on the high-stakes tests, this study examines teachers' reported knowledge and use of evidence-based teaching practices, sense of self-efficacy in implementing the practices, and concerns regarding high-stakes testing and possible relationship with their implementation of the practices.

All public schools in Mississippi were invited to participate in an online survey of sixth-, seventh-, and eighth-grade teachers. After data were screened, 187 teachers were selected. The online survey was used to collect information about teachers' 1. Awareness of evidence-based practices; 2. Sense of self-efficacy; 3. Sense of self-efficacy in implementation of evidence-based teaching practices; 4. Path to certification; 5. Concerns regarding high-stakes testing; 6. Implementation of evidence-based practices. Structural equation modeling was used to determine the presence of direct and/or indirect effects of the factors considered. The findings show direct effects of teachers' preparation for teaching on their implementation of some of the practices examined. Additionally, the path coefficients for the individual practices were larger for teachers whose preparation was through an elementary or secondary education program. Regarding sense of self-efficacy, direct effects on implementation of practices were found with slightly more than half of the practices considered. There was no effect of high-stakes testing concern on teachers' implementation of evidence-based practices. These findings indicate possible relationships between teachers' sense of self-efficacy and implementation of evidence-

based practices, as well as a possible relationship between a teacher's path to certification and implementation of evidence-based practices.

Keywords: reading teachers, middle-school, teacher self-efficacy, evidence-based practices.

ACKNOWLEDGMENTS

As this journey comes to an end, I must thank the people who provided assistance and support. First, thanks to Dr. Kyna Shelley for serving as a mentor, answering numerous questions, and offering encouragement. I am also thankful for the committee members who shared their knowledge and insight, which helped me determine what I really wanted to know.

Tremendous thanks to Dr. Mohn for fast responses to even more questions and for helping me stay on track. During this process I had many flashbacks to stats classes and your words of wisdom. Some of those words have begun to make sense! I appreciate your extreme knowledge of statistics and your help with the entire dissertation process.

DEDICATION

This dissertation is dedicated to my family. Thanks, mom, for paving the way by overcoming great obstacles and demonstrating what hard work and determination can do. Elise and Jessie, thanks for enduring many years of your mom being a student, and for your encouragement and support. When I grow up, I want to be like you.

My dear husband, Joe, thank you for coping with a long-term college student and for being patient, kind, and understanding about classes and school work for many years. You're the best!

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ILLUSTRATIONS

CHAPTER I

Students in Mississippi consistently score lower than other students across the nation on a variety of standardized tests that measure reading comprehension and vocabulary knowledge (Nation's Report Card, 2016). The test results reveal that fourth-grade students in Mississippi rank 48th and eighth-graders come in at 50th (Washington DC is included). There are likely to be many variables contributing to low scores for these eighth-graders and other middle-school students. Some variables may be student interest, transition to middle school, cultural, socioeconomic, and academic diversity, adolescent development, and class size (Alspaugh, 1998; Little, McCoach, & Reis, 2014; Tomlinson, Moon, & Callahan, 1998). However, much of the responsibility to raise these scores is placed on teachers. Middle-school teachers, who come from different educational backgrounds and teacher preparation programs, face many challenges, internal and external, that affect how and what they teach, but they have options inside and outside the classroom. A few of the options include helping students see reading as an appealing activity, providing students access to books and other reading materials, offering them classroom reading time, and providing differentiated instruction (Blanton, Wood, & Taylor, 2007; Ivey & Broaddus, 2000) .

Teachers' instructional styles and strategies, as well as their ability and/or willingness to create an environment conducive to authentic meaningful reading experiences, play a part in students' attitude, motivation, and learning (De Naeghel, Valcke, Meyer, Warlop, van Braak, Van Keer, 2014; Ivey & Broaddus, 2000). However, some teachers may not establish this type of environment because they do not have adequate expertise in reading instruction (Blanton et al., 2007; Darling-Hammond, 2000,

Darling-Hammond, Holtzman, Gatlin, & Heilig, 2005, Darling-Hammond, 1996). Many middle-school teachers receive minimum preparation in the area of reading, and alternate route certified teachers receive even less preparation (Blanton, et al., 2007; Darling-Hammond, 2000; Darling-Hammond, et al., 2005; National Commission on Teaching and America's Future [NCTAF], 1996).

Problem Statement

Concerning the field of public education in K-12 schools, there is a strong emphasis on student reading ability. When students read well, they have a foundation that allows them to add to their knowledge and understanding. The experience of reading and achieving, reading more, and achieving more is sometimes described as the rich get richer and the poor get poorer, or the "Matthew Effect" (Stanovich, 1986). The more students read, the better they are able to read and increase their proficiency. The less students read, the less able they become. If struggling students are to improve their reading skills, they may depend on teachers to help them. However, teachers may be limited in what they can do to help because of a number of factors, some of which this project explores.

One possible limitation for teachers is their mindset regarding teaching reading. For example, content-area teachers may resist teaching students to read because they do not view themselves as reading teachers. However, in reality, they *are* reading teachers because of specialized vocabulary in their content-areas and required specialized reading activities such as interpreting charts, graphs, and maps. Students often must synthesize information from different sources in order to gain a full understanding of concepts being taught, which may include scientific processes or cultural, social, and historical events

(Blanton et al., 2007). Other limitations may be a content area teacher's insufficient knowledge of *how* to teach reading, lack of time, and use of scripted programs without integration of various reading materials that could support and enhance student learning (Blanton et al., 2007).

Research suggests that students tend to do well academically in classrooms when three conditions exist, when they: (1) have access to a variety of reading materials; (2) are allowed to choose what they read; and, (3) have time to read (Krashen, Lee, & McQuillan, 2008). In these classrooms students are better able to improve their reading skills, and in these classrooms struggling students benefit even more with the addition of specific reading instruction (Falk-Ross, 2009). These studies suggest that teachers can create reading environments for students to be successful. A number of studies has found that there are effective practices for helping students improve their reading motivation, reading skill, and subsequent improvement in learning (Pittman & Honchell, 2014; Salembier, 1999; Vaughn, Klinger, Swanson, Boardman, Roberts, Mohammed, & Stillman-Spisak, 2011; Veerkamp, Kamps, & Cooper, 2007). Despite this knowledge, many teachers do not create ideal reading environments or implement evidence-based practices in their classrooms (Moon, Tomlinson, & Callahan, 1995; Tomlinson, Moon, & Callahan, 1998). The reasons for this disconnect are noticeably absent from the literature. Research has not explored why this problem exists—that effective practices are underutilized. Is it due to teachers' lack of knowledge? Is it due to teachers' low sense of self-efficacy in implementing the practices? Is it due to lack of preparation for teaching reading? Is it due to an emphasis on high-stakes testing? Or could it be due to a combination of these factors and/or other unknown factors?

Purpose of the Study

There are two purposes for conducting this study. First, the study aims to add to the literature regarding barriers to implementation of evidence-based practices for teaching reading in middle-school classrooms. If barriers are identified, statistical analysis may allow for inferences to be made, which leads to the second purpose, to provide the impetus for teachers and administrators to change the manners in which reading is currently being taught. This study and the potential information gained from it are important because middle-school students are particularly at risk for failure, and as they progress, they are at risk for dropping out of school (Balfanz, 2009; Roderick, 1994; Rockoff & Lockwood, 2010). In a research brief addressing middle-school education, Bottoms, Hertl, Mollette, and Patterson (2014) declare that the middle-grades years are crucial to a students' future. They go on to assert that middle school is a "make-or-break point" for students (p. 3). Even though teachers are presented with such a formidable task as influencing their students' futures, they may be able to contribute to student success and retention by implementing evidence-based practices that help students in reading classes and in content-area classes as well (Bottoms & Timberlake, 2012).

Research questions and hypotheses. This study aims to discover if there are barriers to teacher implementation of evidence-based practices in middle school and what they may be. It is hypothesized that there may be a number of internal and external factors contributing to this occurrence for middle-level educators. This study seeks to answer six research questions. After each question a parallel hypotheses is stated.

RQ1: Are middle-school teachers aware of the variety of evidence-based practices that have been shown to be effective in middle-school reading and content area classes?

RQ2: Is there a relationship between teachers' preparation for teaching and their implementation of evidence-based practices in middle-school reading and content areas?

RQ3: Does teachers' preparation for teaching have a relationship with their sense of self-efficacy in implementing evidence-based practices in teaching reading in middle-school reading and content area classes?

RQ4: Does teachers' sense of self-efficacy in implementing evidence-based practices in reading have a relationship with their implementation of evidence-based practices in teaching reading in middle-school reading and content area classes?

RQ5: Is there a relationship between teachers' preparation for teaching and their concerns regarding student performance on high-stakes tests?

RQ6: Is there a relationship between teachers' concerns regarding high-stakes testing and their implementation of evidence-based practices in middle-school reading and content area classes?

Justification. This study is important because middle-school students' reading ability affects every area of learning and performance. Those who are not proficient in reading are at risk to fall behind in academics (Fulmer & Frijters, 2011). As students transition from elementary to middle school, they undergo many changes as they become accustomed to a different kind of learning environment and, in many cases, a new

campus (Eccles, Midgley, Wigfield, Buchanan, Reuman, Flanagan, & MacIver, 1993). This stage of life for students may be incredibly challenging as they adjust to a reduction of support while at the same time they experience increased autonomy in this new setting (Eccles et al., 1993; Guthrie & Davis, 2003; Humphrey, 2002). Furthermore, adolescence is often a complicated period for many students as they begin to question themselves and others. Adolescents may experience changes in self-esteem, and they may struggle with their identity (Eccles et al., 1993; Rhodes, Roffman, Reddy, & Fredriksen 2004). Decline in self-esteem affects academic performance, and when students begin to experience puberty along with the issues they already face, they are especially at risk for disengagement from school work altogether (Rhodes, Roffman, Reddy, & Fredriksen 2004).

Middle-school teachers may need to be extraordinarily resourceful if they want to gain and keep their students' attention. There are a number of ways teachers can capture the interest of their middle-school students, particularly in the area of reading. Studies have demonstrated a variety of approaches, strategies, and teaching practices that win middle-schoolers' attention and help them to become better readers while also learning about themselves and others. For example, the Southern Regional Educational Board (SREB) has published a number of reports providing recommendations for teachers. The SREB's initiative, Making Middle Grades Work (MMGW), provides guidance designed to assist middle schools with overall improvement (SREB, nd).

Addressing improvement, a recent study by Scogin, Kruger, Jekkals, & Stienfeldt (2017) offers promising information. Seventh-grade students who participated in the STREAM program (Science, Technology, Reading, Engineering, Arts, & Mathematics)

showed slight increases in ACT scores. The students participated in many authentic and hands-on activities which they said enhanced their learning experience, as well as their attitude about learning. Students reported that they were excited to go to school and that they enjoyed the collaboration with peers (Scogin, et al., 2017). Although the students' scores did not show statistically significant improvement, the scores were not *worse* when compared to the other students. These findings may indicate that the students who participated in test-prep activities fared no better than others.

The focus of the current study is to determine barriers that prevent teachers from implementing evidence-based practices that benefit the reading abilities of middle-school students. Benefits from this study may be discovery of policies, procedures, and pressures that prohibit teachers from implementing evidence-based practices in their classrooms. Additionally, there may be other impediments such as teacher unpreparedness, teacher attitude, teacher efficacy, lack of training, or lack of professional development. Although elementary and high-school teachers have been represented well in studies of self-efficacy, there is a gap in the literature regarding teachers in middle school (Klassen, Tze, Betts, & Gordon, 2011). Teachers and administrators may benefit from learning more about evidence-based practices regarding reading, but the ultimate beneficiaries may be the students who may improve their academic performance in content areas as well as their reading course. Students may also begin to develop positive relationships with peers, faculty, and staff if a culture of reading could be established in the school (discussing books and other reading materials may promote dialogue among students and include faculty and staff).

Short-term benefits of this study may be limited to awareness that changes are necessary or desirable, but the long-term benefits may be a renewed sense of community in the school and more meaningful relationships between all involved. Student performance and achievement may increase short-term, but there could be long-term academic outcomes as well. If barriers to implementation of evidence-based practices for reading instruction were to be discovered and removed, middle-school students may experience a smoother transition from the elementary grades, and self-esteem issues may be less prevalent in general for at-risk adolescents.

Limitations. This study is limited to middle-school (grades 6-8) teachers in Mississippi who choose to participate in the survey. The researcher sent an electronic link to the questionnaire via email. All middle-school teachers, including those who teach exceptional students (gifted, special education, alternative), had the option of participating. Because the teachers were be self-reporting, there was potential for inaccurate responses.

Middle-school grade location may influence this study. There is evidence that students who attend middle-school grades at a different geographic location from their elementary school fall behind their peers who attend middle school on the same campus (Rockoff & Lockwood, 2010). It is not known if this phenomenon is related to possible differences in instruction.

The studies reviewed for this project that pertain to teachers' sense of self-efficacy were conducted over a period of 31 years from 1984 to 2015, and eight different instruments were used to measure teachers' efficacy. Because of the possible variation in

the instruments used, there may be error within the studies that could have affected the measures and outcomes reported.

Delimitations. This study focuses on teaching practices used in sixth-, seventh-, and eighth-grade reading classes and the practices of teaching reading in content area classes. Because there could be differences among school districts as to which grades are designated as middle school, this study includes grades 6-8 without making a distinction of campus make up. For example, if a middle-school campus included fifth-grade students, they were included in the study. If eighth-grade students were housed on a junior high or high-school campus, they were included in the study.

Definition of Terms. Adolescence: Adolescence is a time of physical and psychological change which begins at the onset of puberty (Eccles, et al., 1993).

Autonomy (in teaching): a teacher's perception of the control he has over the working environment (Pearson & Hall, 1993).

High-stakes test: an accountability test that may be used for making decisions concerning students, educational personnel, and communities (Madaus, 1988).

Middle schoolers: In this study, the term *middle schoolers* refers to students in grades six, seven, and eight.

Self-efficacy: Self-efficacy is a person's belief in his/her ability to complete certain tasks and bring about an intended outcome (Bandura, 1977).

Assumptions. It was presumed that teachers would provide truthful responses to the items found in the questionnaire. Additionally, it was presumed that the personnel at the schools chosen for participation would be comprised of a diverse group of teachers whose students are also diverse in ethnicity/race and socio-economic level.

CHAPTER II – REVIEW OF THE LITERATURE

In an effort to identify elements related to teacher implementation of evidence-based practices, this project explores the possible relationship between teacher awareness of the practices, teacher sense of self-efficacy, the manner in which teachers are prepared to teach at the middle-school level, and teacher concerns regarding high-stakes testing. These factors may individually affect implementation of teaching practices. As well, a combination of these factors and/or others could influence teaching practices.

High-stakes Testing

Some teachers have to overcome many challenges to stimulate their students' interest in reading while providing classroom support to help them increase their reading proficiency. Some of the challenges teachers face are due to internal influences, and some are external. For example, an external factor may be high-stakes testing that could influence teachers' practices in several ways. One of the most salient issues for teachers is the amount of time they dedicate to preparing students for high-stakes tests (Blanton et al., 2007; Smith 1991). While working with and observing teachers, Barry (2002) encountered a teacher who lamented that covering so much test-preparation material had limited her time to plan and prepare meaningful lessons. Time spent on test preparation, reported another teacher, prevents opportunities to implement new ideas and practices (Boardman & Woodruff, 2004; Musoleno & White, 2010). In addition to test preparation, teachers have to administer practice tests in their entirety, and this exercise takes place many times during the school year, leaving less time (or no time) for other activities.

Considering classroom activities, Musoleno & White (2010) reported a decline in the use of developmentally appropriate practices (DAP) in middle schools because of the

time spent on high-stakes testing. Teachers who were accustomed to using flexible grouping, heterogeneous grouping, discovery learning, and cooperative learning reported a decrease in the amount of time students were able to spend engaging in these activities because of test preparation (Musoleno & White, 2010). Students are required to learn unrelated facts and isolated skills that promote proficiency in test-taking, but they are unable to make connections in subject matter that could foster higher-order thinking (Crocco & Costigan, 2007). Additionally, much more time was spent on drill, practice, and teacher instruction or lecture. Regarding time spent, Nichols and Berliner (2008) report that students also routinely take tests to predict how well they will score on future tests.

In many cases where time for meaningful activities has become limited because of testing, curriculum has also become limited. Crocco & Costigan (2007) conducted interviews with teachers who said they have to cover specific material that causes them to omit other important items. Teachers explained that they felt limited in what and how they could teach (Boardman & Woodruff, 2004; Smith 1991), and some teachers stopped teaching anything that was not on the high-stakes test (Smith, 1991). Teachers feel they must "cover" (p. 38) material that will be tested, which prevents students from gaining deeper knowledge and understanding, as well as opportunities to think critically (Gallager, 2010). This over-emphasis on testing, says Gallager, creates a factor she calls "readicide,"which "kill[s] students' love of reading" because of all the practices associated with testing (p. 37).

Students are affected by the prevalence of high-stakes testing issues and teachers are, too. Some say the purpose of high-stakes tests is to gain control over what happens in

schools and classrooms (Moe, 2003). One teacher commented that even the space in her classroom had become limited because she was told what types of artifacts to have, how to arrange desks, and how to arrange and label books (Crocco & Costigan, 2007). Because of testing, another teacher explained that she had been given a script and was told not to deviate from it even if a student asked a question. If a student were to ask a question, she was told to repeat the previous paragraph in the script (Crocco & Costigan, 2007). When teachers are forced to deal with situations that limit their autonomy, their sense of self-efficacy may be affected. Teacher self-efficacy may be a key component of teaching and is explored in more detail later in this paper.

When teachers are required to follow the types of directives listed above, they become "disempower[ed] and deskill[ed]" (Au, 2011). An additional concern is the pressure teachers feel because of the testing and the disappearing sense of autonomy (Boardman & Woodruff, 2004). Instead of teachers incorporating various activities and practices of teaching, many are instructed to follow strict procedures, or they may be subject to penalty or dismissal (Jaeger, 2006). There may be situations in which teachers would prefer to implement evidence-based practices, but they refrain because they fear losing their jobs.

Some teachers would argue that the stress placed on testing may inhibit student learning and good teaching (Berube, 2004). Moreover, too much emphasis on testing may impede professional development (Boardman & Woodruff, 2004). School policy, the focus of a report by the U. S. Department of Education (Dozier & Bertotti, 2000), listed six barriers to improvement in teaching such as teacher recruitment, quality, certification, retention, effective leadership, and professional development. Through

professional development, teachers learn new teaching practices and strategies, as well as how to modify existing strategies so that they are effective and meet the needs of their students (Boardman & Woodruff, 2004). When teachers learn together, they are more likely to continue a new practice because they can support one another and provide feedback (Boardman & Woodruff, 2004), but an emphasis on testing could limit this type of collaboration.

Evidence-based Practices.

In addition to teachers being supportive, a principal's support could make a substantial difference in an entire school's attitude about reading. For example, a middle-school principal in Southern California created a "culture of reading" (p. 4) by making reading a priority (Daniels & Steres, 2011). When the principal provided training for teachers and designated time (fifteen minutes per day) and resources for reading, students became more engaged in reading (Daniels & Steres, 2011).

Some teachers and principals may not understand that many middle schoolers value their independent silent reading time, and Ivy and Broaddus (2000) indicate that middle schools often fall short in providing dedicated time for students to read. For students to become skilled readers, they have to spend a lot of time reading (Krashen, 2004, 2009; Rasinski, 2003). In fact, Krashen (2009) suggests there is only one way to improve reading ability: a student must engage in a great deal of reading. However, in addition to having time to read, it is necessary for the reading material to be comprehensible and stimulating. Correspondingly, researchers have found that when students are faced with difficult reading tasks, students are more likely to persist if they

find the subject matter interesting (Baker & Wigfield, 1999; Fulmer & Frijters, 2011; Mucherah & Yoder, 2008; Wang & Guthrie, 2004).

Krashen (2004) maintains that students who have more access to books will read more than students who do not, and when teachers allow students to choose what they read along with providing adequate time for reading, they are intrinsically motivated to read. When students have material of their choice and time to read, they are better able to think and learn (Ivey & Broaddus, 2001). To help students read extensively, school personnel may consider providing students access to books and other types of reading material such as newspapers, magazines, graphic novels, and comics that students may find interesting (Brozo & Flynt, 2008; Ivey & Broaddus, 2001; Krashen, 2009). Increasing the number of books available to students may be correlated to an increase in student achievement (Oberg, 1999). Krashen (1995), too, found a correlation between the number of books available and reading comprehension scores. One way to increase the number of books and other reading materials is for a teacher to have a classroom library (Shuman, 1975). Ivey and Broaddus (2001) provide an abbreviated list of suggested books for middle schoolers, which includes various genres, interests, and reading levels. A classroom library offering many choices can rouse student curiosity and interest, as well as motivation to read, and teachers can support students by helping them explore books (Catapano, Fleming, & Elias, 2009). When choosing books and materials for a classroom library, teachers should keep in mind that boys and girls have different preferences. Farris, Werderich, Nelson, and Fuhler, (2009) found that when fifth-grade boys were asked about their reading preferences, they listed science, sports, and animals. They also expressed interest in magazines, comic books, and scary stories (Farris et al.,

2009). Books that appeal to boys and girls alike often deal with current and relevant issues that may promote discussion and the opportunity for students to connect on a deeper level as they explore diverse viewpoints (Moley, Bandré, & George, 2011).

There is some disagreement among experts as to how to go about improving middle-school students' reading abilities. Krashen (2009) reports that students need only time and good books to improve their reading skills. Furthermore, several studies show that when teachers allow students to choose what they read, their attitude about reading improves and so does their motivation (Daniels & Steres, 2011; Hinchman, 1917; Hughes-Hassel & Rodge, 2007; Ivy & Broaddus, 2001; McKenna, Conradi, Lawrence, Jang, & Meyer, 2012; Whittingham & Huffman, 2008). However, Ivey and Broaddus (2000) suggest that in addition to time and choice, middle-school students need skill-specific reading instruction. They posit that middle-school reading teachers may be ill-equipped (internal challenge) to provide this type of instruction (specifically for reading skills), and teaching students strategies to improve their skills is often absent from content area classes as well. Ivey and Broaddus (2000) have asserted that current practice, a "one-size-fits-all" approach that lacks differentiated instruction and attention to the variation in student ability (p. 70), is ineffective and may lead students to give up when they are faced with challenging material, partly because they are not receiving the extra support they were accustomed to in elementary school (Fulmer & Frijters, 2001; Mucherah & Yoder, 2008).

Although many middle-school teachers may recognize the wide range of ability among their diverse students, many acknowledge that they do not provide differentiated instruction (Moon, Tomlinson, & Callahan, 1995; Tomlinson, Moon, & Callahan, 1998).

Using research-based interventions to support middle-school students who struggle with reading could help them improve their ability, which could improve their test scores (Hunley, Davies, & Miller 2013).

Contrary to Krashen's (2004, 2009) view that reading instruction is not necessary, there are many research-based strategies and types of differentiated instruction, referred to as evidence-based practices, teachers can implement that are shown to be effective. Barry (2002) provides an annotated list that includes the following strategies: think-alouds, reciprocal teaching, DRTA (directed reading-thinking activity), guided imagery, discussion web, gloss, K-W-L, summarizing, previewing, QARs (question-answer relationships), student-developed questions, intra-act, graphic organizers, vocabulary activities, and anticipation guides. Among other strategies, CWPT (Classwide Peer Tutoring) has been shown to be an effective approach (Veerkamp & Kamps, 2007). Also, a study of Reader's Theater found significant differences (growth in reading level) in one group of participating students when compared to a control group that did not participate in the activity (Keehn, Harmon, & Shoho, 2008).

One often-implemented approach that is helping students become more motivated to read is participation in teacher-facilitated book clubs. In clubs, students choose what they want to read, and a variety of benefits from this practice are emerging (Hinchman, 1917; Whittingham & Huffman, 2008). Book clubs encourage students to engage in meaningful conversations about books, characters, and situations. This social interaction promotes understanding and appreciation of books, and students have an opportunity to make new friends and to receive and offer support. They spend more time reading, and the increased exposure to books positively affects students who have previously opposed

reading because they no longer view reading as a chore; rather, it becomes a pleasurable activity (Hinchman, 1917; Whittingham & Huffman, 2008; Pitcher, Albright, DeLaney, Walker, Seunarinesingh, Mogge, Headley, Ridgeway, Peck, Hunt, & Dunston, 2007). There are additional resources that may help teachers such as Laura Robb's (2000) *Teaching Reading in Middle School,* which offers a plethora of evidence-based practices for helping middle-school teachers provide excellent instruction for all students, including those who underperform when compared to their peers. Some of the practices include reader's chair, reading workshops, mini-lessons, journaling, clustering, teacher read-alouds, and free choice reading.

When it comes to teaching reading in content-area classrooms, there are many evidence-based practices teachers can implement in their lessons. Some of the practices listed above can be successfully incorporated such as the use of graphic organizers, vocabulary activities, and discussion webs (Alverman, 1991). Anticipation guides (pre-reading strategy) can be used to help students tap into prior knowledge and to draw them into lessons, making them active participants in their learning (Kozen, Murray, & Windell, 2006). Teachers can provide support for students as they navigate anticipation guides and use textbooks because content-area textbooks are often written at a level at least two years above students' grade level, and the text layout can be confusing and distracting (Budiansky, 2001). Other resource material of varying reading levels can be used in conjunction with textbooks to help students' understanding, and cooperative learning groups, partnering, and reciprocal teaching can also be beneficial (Spencer, Garcia-Simpson, Carter, & Boon, (2008).

As mentioned above, student interest and motivation are key components of their learning. One way to pique student interest in social studies and history is to integrate literature. Offering students a variety of books such as historical fiction allows them choice, which is a key component of motivation (Ivey & Broaddus, 2001; Krashen et al., 2008). Huftalin and Ferroli (2013) compiled an annotated list of historical fiction titles that teachers can use to enhance student learning. Using literature may help students make connections to events or cultures and allow them to achieve greater understanding. Increased exposure to vocabulary and teacher modeling of word-solving strategies to use when encountering unknown words can help students figure out word meanings (Fisher & Frey, 2014).

Another evidence-based practice that helps students make connections is the use of thematic units. Bolak, Bialach, and Dunphy (2005) describe a successful one-year pilot conducted in a Michigan middle school. The arts were integrated with the state's standards for all subject areas, and they applied Gardner's Theory of Multiple Intelligences (1983). In addition to math scores increasing 18%, reading scores increased 15%, and student engagement and parental involvement also improved (Bolak et al., 2005). The sixth-grade students, faculty, staff, parents, and members of the community participated in a closing event which was attended by 100% of the students (Bolak et al., 2005). The learning activities described in this project were a departure from the school's previous manner of teaching skills in isolation.

There are different purposes for reading, but some content area teachers may not fully realize this concept (Hall, 2005). For example, when considering science and history, students may read science texts with a purpose of discovering facts or theories,

but reading history is akin to reading a story (Perfetti, Britt, & Georgi, 1995). Students need to be able to read texts differently and for different purposes. Teachers should be experts in their discipline, and they must be skilled in providing guidance for students as they attempt to make meaning from text (Hall, 2005).

Teachers may place some students at risk if they do not offer guidance for struggling readers in middle school. For these students, academic motivation may begin to wane. Feeling inadequate and incapable, some students also may begin to feel helpless, which affects their motivation to read (Unrau & Schlackman, 2006; Kelley & Decker, 2009; Wolters, Denton, York, & Francis, 2014). As grades fall, students become trapped in a self-defeating series of behaviors that influences their academic performance (Kelly, 2008; Padron, Waxman, & Huang. 2014; Usher & Pajares, 2005; Whittingham & Huffman, 2008). Declining performance affects students' motivation, engagement, time devoted to reading, application of reading strategies, and comprehension (Wolters, Denton, York, & Francis, 2014; Daniels & Steres, 2011). As performance can affect motivation, so does attitude about reading. Although attitude, motivation, and interest are related, they are not the same (McKenna et al., 2012). Reading attitude refers to a student's tendency to respond in a certain manner regarding aspects of reading. Motivation involves the tendency to act, and interest can be a curiosity or an attraction. Nevertheless, these concepts are components of reading.

Some middle-school teachers may not consider that adolescence is a difficult period of life for students; socially, personally, and academically. Adolescents experience a number of challenges during their transition from elementary to middle school. Often they are not accustomed to the different teaching styles, instructional strategies, and level

of autonomy that are frequently found in middle-school settings (Mucherah & Yoder, 2008; Padron et al., 2014). Upon entering middle school, students' reading abilities vary greatly, and a large number of students read below grade level (Fulmer & Frijters, 2011; McKenna et al. 2012; Moley et al., 2011; Padron, et al. 2014). When students begin classes with weaker skills, they are less likely to be fully engaged in class activities. They do not participate in discussions as much as other students, and they do not put forth as much effort. This disengagement contributes to students' decline in academic achievement (Kelly, 2008).

When middle schoolers are allowed to choose books and reading material via other media that interest them, their intrinsic motivation is boosted and efficacy in reading increases (Ivey & Broaddus, 2001). Furthermore, when students feel they are in control, their intrinsic motivation increases. Therefore, teachers' autonomy support also influences student motivation, and interestingly enough, this is particularly true when girls are concerned (De Naeghel et al., 2014).

Constructive teacher behavior, (encouragement, involvement in reading activities, attention to students' questions) as well as autonomy support, positively influences students' motivation to read (De Naeghel et al., 2014; Guo, Conner, Yang, Roehrig, & Morrison, 2012). Moreover, the emotional atmosphere and general feeling of a classroom as being a safe and positive environment may influence favorable outcomes in reading achievement as demonstrated by a study of fifth-graders (Pianta, Belsky, Vandergrift, Houts, & Morrison (2008).

As mentioned above, teachers are not the only group to contribute, either negatively or positively, to student success. When teachers and school personnel are

unable to provide sufficient support for students, parents may be left to intervene and work with their children at home so they will not fall behind, or farther behind. However, lack of parental involvement may be a factor that is associated with diminished student performance, as well as motivation (Fan, Williams, & Wolters, 2012; Unrau & Schlackman, 2006; Whitaker, Graham, Severtson, Furr-Holden, & Latimer, 2012). Neighborhood conditions and family function/dysfunction are likewise linked to student motivation. When exposed to economic and racial segregation, dense population, and illegal substance abuse, students are particularly at risk for lack of motivation to learn (Whitaker et al., 2012). On the other hand, the presence of support, family harmony, and favorable neighborhood surroundings promote motivation for students to learn. Race and social class are additional factors associated with student achievement and reading motivation; however, there may be less of a connection to race and class and more of a connection to engagement and environment (Whitaker et al., 2012). Even in the midst of negative community influences, parents may mitigate the effects on their children by providing support, encouragement, and positive interaction (Whitaker et al., 2012). A nurturing, caring home atmosphere may be an adequate defense against undesirable outside influences.

Teachers' sense of self-efficacy. In addition to the home environment, a classroom atmosphere may influence student outcomes. The teacher sets the tone in the classroom, and Holzberger, Philipp, and Kunter (2013) found a relationship between teachers' sense of self-efficacy, instructional quality, and personal support for students and their learning. Middle-school settings offer more student autonomy and less individual attention for students, but teachers who have a higher sense of self-efficacy are

able to provide an environment that is beneficial for students (Bandura, 1993). When Ryan, Kuusinen, and Bedoya-Skoog (2015) looked at middle-school teacher self-efficacy, they discovered it positively correlated with classroom organization and classroom management. The teachers with higher efficacy showed more instructional support for students, as well as emotional support (Ryan et al., 2015). Conversely, when teachers doubt themselves, they may create an environment for students that weakens their sense of self-efficacy (students) and affects their cognitive development (Bandura, 1993). For example, in a study conducted by Gibson & Dembo (1984), which included observations of teachers, the researchers noticed several instances of students giving incorrect answers and low-efficacy teachers responding with criticism, in contrast to similar situations occurring in high-efficacy teachers' classrooms where students were not criticized (Gibson & Dembo, 1984).

Another study of teachers' efficacy beliefs suggested that teachers with low self-efficacy may convey low expectations to students who are lower achievers, which could be connected to their performance (Midgley, Feldlaufer, & Eccles, 1989). This study, which was conducted with math teachers and students, revealed that as the year progressed, students of low-efficacy teachers showed more negativity, but students who had high-efficacy teachers became more positive (Midgely et al., 1989). This suggests that teachers' attitudes and outlooks could be imposed onto their students.

Teachers who have a high sense of self-efficacy who also believe that they are successful are able to encourage and motivate students as well as to help to bring about essential outcomes (Bandura, 1993), which is reiterated by Sezgin & Erdogan (2015), who found that teachers with a high sense of self-efficacy are likely to provide more

encouragement and support for their students. In a study of Italian teachers, researchers found that teachers with high efficacy were more likely to establish classroom environments in which they, themselves, were satisfied and encouraged as well as their students, and with regard to student achievement and high teacher efficacy, they discovered a reciprocal effect (Caprara, Barbaranelli, Steca, & Malone, 2006). Moreover, efficacious teachers influenced student enthusiasm and personal growth (Caprara, et al., 2006). A reciprocal effect was also discovered in a longitudinal study by Holzberger et al., (2013). They found that teachers' self-efficacy influenced their instruction, and as they provided higher-quality instruction, their sense of self-efficacy increased.

There is also a reciprocal effect regarding collective efficacy. Collective efficacy is the entire school faculty's belief that as a group, they can bring about the desired outcome of student achievement and success (Tschannen-Moran & Barr, 2005). A school's environment can influence teachers' collective efficacy to help students improve achievement, and when student achievement improves, teacher's collective efficacy increases (Goddard, Hoy, & Hoy, 2000; Tschannen-Moran & Barr, 2005).

When a school implemented a new history curriculum for seventh- and eighth-graders, Ross (1992) compared student scores based on measures of teacher efficacy. Teachers had access to three resources: curriculum and instruction materials, interactive workshops that included specific strategies teachers could implement, and coaches who were also teachers who were available for face-to-face contact and conversations via telephone. The teachers who communicated with their coaches more showed a correlation between their higher sense of self-efficacy and students with higher achievement.

Teachers with a lower sense of self-efficacy correlated with students with lower achievement.

The study detailed above deals with students of history, but in another study of teacher efficacy influences with fifth-graders, Guo et al. (2012) found that teachers with high self-efficacy beliefs had students who were more likely to achieve higher literacy scores. Specifically, classroom practices and student support may be influenced by the teachers' sense of efficacy, which may determine the amount of effort they put forth to help students learn. In a study of ESL (English as a Second Language) teachers and students, a significant correlation was found between teacher efficacy and student scores (Mojavezi & Tamiz, 2012).

As briefly summarized above, several studies have discovered a correlation between teachers' sense of self-efficacy and student outcomes. Teachers who report higher efficacy spend more time encouraging, teaching, re-teaching, and supporting their students. In addition to these teacher behaviors, Rose & Medway (2001) found that teachers who have an internal locus of control (LOC) draw upon a variety of teaching strategies when students fail, and they are more likely to implement evidence-based teaching practices. This internal LOC is somewhat similar to a teacher's sense of self-efficacy, in that having internal LOC means teachers feel in control of their desired outcomes and teachers who have a high sense self-efficacy believe they are able to achieve their desired outcomes. Students respond by being motivated, having a positive attitude, persisting, and ultimately achieving, which then contributes to their own self-efficacy as well as their teachers'.

Teacher preparation. Teachers' sense of self-efficacy could be due, in part, to their confidence in being prepared to teach (Darling-Hammond, Chung, & Frelow, 2002). Because there are a number of routes that lead a person to a classroom, teachers could have varying levels of training such as no college degree, a bachelor's, a master's, a specialist, or possibly a doctorate degree (Darling-Hammond et al., 2002). Some middle-school teachers have an elementary education degree with additional certification for teaching older students (which may be referred to as being highly qualified); some have a secondary education degree; some have an alternate route degree; some have a teaching certificate; some have an emergency teaching license; and some teachers lack educational preparation or background for teaching (Darling-Hammond, 2000).

Because of conflicting research findings, there is some debate among educational researchers as to the importance of teacher qualification as it relates to student achievement (Darling-Hammond et al., 2005). Some studies show higher levels of student achievement when their teachers are graduates of teacher education programs, yet other studies do not, and some of the relationships are found only in particular subject areas and particular grade level. The current study does not seek to identify a relationship between teacher preparation and student achievement, rather if there is a relationship between teacher preparation and implementation of evidence-based practices.

A study of fifth-grade alternatively-certified (AC) science teachers revealed an overall lack of teaching quality due to several issues (Linek, Sampson, Gomez, Linder, Torti, Levingston, & Palmer, 2009). One problem was the dependence on state issued text-books which were used almost exclusively for vocabulary worksheet activities. Another problem was the lack of integration and alignment of materials (that could have

helped students understand the state-specified objectives) and the inclusion of materials and/or activities that were completely unrelated to science. Yet another dilemma was the fact that the teachers did not utilize the school library as a resource. Finally, the teachers emphasized memorization of facts and did not provide opportunities for students to think deeply about scientific concepts. This study highlighted a complete lack of implementation of evidence-based practices that may have correlated to the students' performance on the state-mandated test; 52% of them passed it (Linek et al., 2009).

Although the Linek et al., (2009) study described above suggests poor performance by AC teachers, there are also reports that AC teachers can perform as well as some traditionally certified (TC) teachers. For example, Goldhaber & Brewer (2000) found conflicting information regarding high-school students of math and science. The students whose teachers were "out of field" (p. 139) performed worse than students who had TC teachers. However, the students whose teachers were emergency-certified did *not* perform worse than TC teachers.

These two examples of conflicting research results are the only ones that are presented here because they will suffice as representative of the many studies showing contradictory findings. It may be that, for each study providing positive outcomes for students of TC teachers, there could be a study revealing that AC teachers' students demonstrate higher achievement. Kaplan & Owings (2003) describe research of teacher quality as "a political battleground, and so it is difficult to know what to believe" (p. 689). Whereas the studies' findings may be accurate, some of them could fail to present the setting or circumstances in their entirety. Perhaps there are factors not fully considered or reported such as situations where more experienced and/or qualified

teachers are assigned upper level/advanced courses. Furthermore, the research fails to identify teaching practices and strategies teachers use, which is the component of teaching explored in this study.

Overview of theoretical foundation. Social cognitive theory (SCT) (Bandura, 1986), which stems from social learning theory (Bandura, 1971), posits that there are three main contributors to human behavior. Bandura (1986) suggests that the interaction of personal factors, the self-checking of one's behavior, and the environment influence a person's functioning. This three-part relationship explains teachers' behavior as they work in a school setting. Furthermore, self-efficacy, which is included in personal factors, plays an important role in a person's motivation (Bandura, 2001). In other words, people learn by observing others, and they evaluate their own behavior and abilities in comparison. Their behavior is influenced by what others do and from input provided by people and situations around them. As people behave in a certain way, they rely on interaction from others to guide them to continue or modify a behavior. People motivate themselves and set goals based on their anticipation and forethought of possible outcomes. They continue behaviors and actions they feel will bring about the desired outcomes or results (Bandura, 1986).

Because self-efficacy is related to teacher instructional behavior and work outcomes, social cognitive theory provides a lens through which teacher behavior can be viewed (Holzberger, Philipp, & Kunter, 2014). Bandura's (1999) triadic "model of reciprocal causality" (p. 23) describes the aforementioned three factors and how they contribute to human functioning: people interact with their environment, influence it, and, in return, are influenced by it. Similarly, personal factors influence behavior and the

environment, and environmental factors influence behavior, as well as personal factors. Within personal factors, self-efficacy affects and is affected by this interactive relationship. An example of this effect was discovered by Holzberger, et al., (2014); teachers who delivered high-quality instruction in a specific school year showed growth in their sense of self-efficacy in the following school year.

As teachers interact with students they gain experience. When their experiences are positive, teachers develop a sense of confidence in their ability to bring about student learning, which is often a result of teachers' efforts. It may be that teachers who achieve positive results with their students tend to work harder because they realize the positive outcome of their efforts. This cycle of having confidence in bringing about the desired outcomes, seeing the outcomes take place, and observing other teachers' actions and the outcomes of their behaviors is Bandura's (1999) triadic model in action.

According to Bandura's theory, (1997) teachers who believe in their own ability are motivated to implement effective practices, put forth more effort when planning lessons, and incorporate more learning activities (Ross, 1998). Personal factors (which include self-efficacy) influence teacher behavior, affect the classroom environment, and positively or negatively affect student learning and achievement (Schunk, 2012). It may be that teachers who feel confident and competent are motivated to discover and implement evidence-based teaching practices. When teachers are allowed to act on their intrinsic motivation, they could experience more freedom and more interest in their job, affecting motivation (Gagné & Deci, 2005). However, when a teacher works in an environment that is negative, whether it is caused by coworkers who are apathetic, burned-out, or incompetent, or because of students who are particularly challenging

because of behavior or academic readiness, teachers could experience a lack of confidence in being able to bring about any change or positive outcome. An unpleasant work situation may affect a teacher's desire to do a good job.

Motivation is a key component of self-determination theory (Gagné & Deci, 2005), which provides an additional viewpoint for examining teacher behavior. Motivation is related to SCT (Bandura, 2001) because efficacy plays a role in a person's motivation. Efficacy affects motivation such that when efficacy is high, so is motivation (Bandura, 2001). Intrinsic motivation may be explained as someone engaging in an activity because it is interesting and/or because there is merit in the activity, which makes it appealing (Gagné & Deci, 2005). For example, teachers may plan lessons using evidence-based practices and strategies or conduct research on innovative teaching strategies because they are confident they can carry out the lessons or implement new strategies. Students may respond by doing well or enjoying the learning activity. The teachers' efforts may be received well, thereby motivating them to continue with similar activities. In this way, a sense of self-efficacy and motivation work in a positive cycle that benefits the student and the teacher.

Teachers with high self-efficacy beliefs demonstrate distinct behavior in the classroom. High-efficacy teachers spend more time in academics, demonstrate a confident and flexible attitude (as opposed to becoming nervous or agitated if the normal class routine is interrupted), re-direct students who are off-task, frequently answer questions, and participate in more whole-class instruction than small group instruction (Gibson & Dembo, 1984). Teachers who have a high sense of self-efficacy are open to new ideas and are more willing to work with students who need extra help. Also, high-

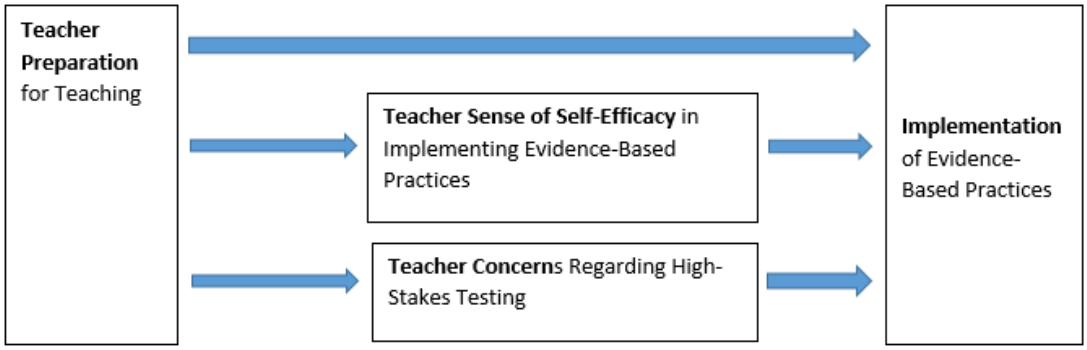
efficacy teachers are more organized and make more complex plans than others. Teachers who have a low sense of self-efficacy experience more stress, more problems teaching, and less contentment with their job than do higher-efficacy teachers (Betoret, 2006). Additionally, Betoret (2006) found that stressors such as school policies, workload, lack of teaching strategies, etc. affect teacher motivation, and factors that hinder teaching may cause anxiety and possibly affect job satisfaction.

In a disagreeable work environment, teachers who are familiar with evidence-based teaching practices could choose not to implement them in their classes if they considered that the use would not be effective or worth the effort. Furthermore, a teacher could be knowledgeable of evidence-based practices and implement them with some classes but not with others based on the students in the classes. For example, a teacher could have the attitude that some students cannot or will not learn, no matter what type of instruction is used. In this type of situation, the teacher does not have a sense of self-efficacy in using evidence-based practices in that particular class, meaning implementation of specific practices would not produce the desired outcomes of student success.

CHAPTER III – METHODOLOGY

This was a correlational study seeking to identify a relationship between the following independent variables: teacher preparation for teaching; teacher sense of self-efficacy; teacher sense of self-efficacy in implementation of evidence-based teaching practices; teacher concerns regarding high-stakes testing, teacher concerns regarding high-stakes testing in the implementation of evidence-based practices; and the dependent variable: implementation of evidence-based practices (see Figure 1 for a proposed model). These variables came from the literature review on the dependent variable: implementation of evidence-based practices. This study also looked for other factors that may hinder teachers' implementation of evidence-based practices in middle-school reading classes and in content area classes such as social studies, history, and science. One possible hindrance to teachers' implementation of evidence-based teaching practices is that teachers may not be aware of the practices. Thus, as a second dependent variable, awareness of evidence-based teaching practices was measured by a frequency count of practices known to teachers. They chose practices with which they were familiar from a list of several evidence-based practices.

Figure 1. Model of Proposed Relationships



Participants

The population for this study was all middle-school teachers in Mississippi (eighth-grade students in Mississippi come in 50th place when compared to the nation in reading scores). At the beginning of the project, the intent was to use convenience sampling to select teachers from grades six, seven, and eight and to recruit teachers from several public school districts in Mississippi (see Appendix A for a list of all school districts in Mississippi with the areas initially chosen highlighted. Appendix B is a map showing the counties in which the districts are located). Because 56.5% of Mississippi students are enrolled in rural districts, a cross section of the state was chosen in an attempt to have a balanced representation of rural and urban schools (files.eric.ed.gov). A definition of the locale designations is found in Appendix C, and Appendix D displays the counties by per capita income. However, because of a low response rate, the sample area was extended to include the entire state.

Some school districts consider sixth grade as elementary, and some include fifth grade in their middle schools, but for the purpose of this study, grades six through eight

were referred to as middle school. The number of students in rural schools is growing, and, according to Mader (2014), more than half of the students in Mississippi attend rural schools, and they come from low-income families (see Appendix E for a map showing rural and urban areas).

Instrument. The researcher created a questionnaire that was reviewed by USM faculty and slight revisions were made. The questionnaire was pilot-tested at four middle schools in one Mississippi county. The pilot study did not reveal any changes needed before conducting the main study.

The first section of the questionnaire (items 2-46) addressed RQ1, teachers' awareness of evidence-based practices and asked teachers to provide information regarding teaching practices they implement and with what frequency. Teachers were asked to choose practices, strategies, and activities of which they were aware from a list. A frequency count of the number of evidence-based practices of which teachers were aware was calculated, providing descriptive statistics. Also, teachers used a frequency scale to indicate how often they implement the practices. These numbers were summed, thereby providing information regarding the practices implemented and the frequency of their use, which is a key dependent variable of this project. This section was created by the researcher. Information from this section of the questionnaire was also used to address RQ2, a possible relationship between teachers' preparation for teaching and implementation of the practices.

The second section of the questionnaire (items 48-59) addressed RQ3 and RQ4, teachers' sense of self-efficacy and sense of self-efficacy's relationship with implementation of evidence-based practices, using the short version of the instrument

created by Tshannen-Moran and Woolfolk Hoy (2001). After considering several instruments (Armor, Conroy-Oseguera, Cox, King, McDonnell, Pascal, Pauly, & Zellman, 1976; Ashton , Olejnik, Crocker, & McAuliffe, 1982; Ashton, Buhr, & Crocker, 1984; Gibson & Dembo, 1984; Guskey, 1981; Midgley, et al, 1989; Rose & Medway, 1981) to measure a teacher's sense of self-efficacy, the Tshannen-Moran and Woolfolk Hoy (2001) scale was chosen because, according to Ross and Bruce (2007), "it is becoming a standard instrument in the field" (p. 10) and because of the authors' extensive research and work with this construct. Tschannen-Moran and Woolfolk Hoy evaluated a number of instruments and found inconsistencies among measures of different aspects of teacher efficacy and ultimately created a new instrument, which is commonly called Teachers' Sense of Efficacy Scale (TSES). The authors conducted three studies with pre-service and in-service teachers and found the instrument reliable; with α ranging from 0.72 to 0.91. Validity was established after the confirmatory factor analyses were conducted for each study, with some items being added and some factors being removed.

A study conducted by Klassen, Bong, Usher, Chong, Huan, Wong, and Georgiou (2009) provides additional discussion regarding the validity of the TSES. Their study compares results from several cultures and tests validity as they compared various grade levels. The authors found internal consistency in four cultural settings in addition to American settings, even though teachers came from different grade levels, spoke different languages, and had different cultural practices. Sezgin and Erdogan (2015) used the TSES in their study of teachers, which looked at factors that predicted self-efficacy, and they, too, found the scale to be valid and reliable.

Permission to use the TSES is granted via anitawoolfolkhoy.com (see Appendix F for a copy of the permission letter. The questionnaire is found in Appendix G, and the scoring scale and criteria are found in Appendix H.). The instrument contains 12 items and is preferred for this study over the long version containing 24 items in an effort to keep the questionnaire as brief as possible. A confirmatory factor analysis was conducted, which is recommended by the authors, to look at participants' responses to the items and to determine if factor loadings are in line with previous results showing support for the items tested. The TSES contains three subscales that contribute to the overall score. The subscales are self-efficacy in student engagement; self-efficacy in instructional strategies; and self-efficacy in classroom management. The total score and its relationship with other variables are the main focus of this project.

The next section (items 61-70) collected demographic information. Route to certification was used as a measure of preparation for teaching. Finally, the last section (items 73-77) focused on RQ5 and RQ6, teachers' concerns regarding high-stakes testing.

Procedure. Upon receipt of approval from the USM IRB, the researcher contacted the superintendent of the school district chosen to do the pilot study. The superintendent forwarded the Qualtrics link to the sixth- through eighth-grade principals and/or teachers. After one week, the researcher sent a reminder email to the superintendent, which was forwarded to the teachers. After one more week, the questionnaire was closed and analysis began. The pilot study participants did not indicate issues regarding the survey instrument nor any concerns with computer related problems or accessibility. Data were reviewed, and no revisions were necessary.

The researcher used SPSS (Version 25, IBM, 2017) to conduct reliability statistics on the pilot study, $n = 30$. The classroom management subscale consisted of four items ($\alpha = .89$), the instructional strategies subscale consisted of four items ($\alpha = .78$), and the student engagement subscale consisted of four items ($\alpha = .78$), with an overall measure of $\alpha = .87$.

Next, permission was received to begin the main study. An introductory letter detailing informed consent and assuring participants of confidentiality was emailed to school superintendents and/or principals in the main study with a request that the email be forwarded to all middle-school teachers (see Appendix I for the superintendents' letter for the pilot study and Appendix J for the superintendents' letter for the main study; see Appendix K for the teachers' letter for the pilot and Appendix L for the teachers' letter for the main study). The email informed participants that they must be at least 18 years of age to take part in the study, as well as additional information about the study and a link to the questionnaire. After one week, the researcher sent a reminder/follow-up email to the superintendents, asking them to forward it to the teachers. After one more week, the researcher sent a last reminder email.

During the time data were being collected, additional permission letters were received from school districts. A modification form was submitted to the IRB to request permission to add the additional schools to the study, and when approval was received for the additional participants, the process above was repeated. All of the electronic data were password protected, as well as any notes and/or correspondence regarding the project.

Teacher characteristics. The sample was composed of 187 participants (19.3% male, 79.1% female, and 1.6% not identified). The racial make-up of the participants was 12.8% African American, 84% White, 1.1% Asian, 1.1% Other, and 1.1% not identified. Regarding number of years teaching, 24% of the teachers reported 20 or more years, 37% reported 9-19 years of teaching, and 37% reported 1-8 years. The teachers reported the following earned degrees: 50.3% had a B. S. or B. A. (94 people), 40.6% had a Master's degree (76 people), 7% had an Educational Specialist degree (13 people), and .5% had a doctorate degree (one person).

CHAPTER IV – RESULTS

Data Analysis

Data were screened, and Little's MCAR test showed missing values were completely at random. The values were imputed for the missing self-efficacy items after deleting the cases that showed many missing responses to the items regarding teaching practices. Multiple imputation was used for the missing self-efficacy items in an effort to simulate the values and have the best information available from which to draw inferences. The case deletion was done in an effort not to introduce bias into the sample. The sample size of 243 was reduced to 187, which was adequate for conducting the analysis. SPSS version 25 (IBM Corp., released 2017) was used to run descriptive statistics, and AMOS version 25 (Arbuckle, 2017) was used to conduct the confirmatory factor analysis and path analysis.

Confirmatory factor analysis was conducted on the questionnaire section measuring teacher self-efficacy (as recommended by the authors) to determine how the participants responded to the items because the authors have usually found moderately correlated factors. The analysis provided satisfactory factor loadings with no factors being added or removed. Fit indices were acceptable: $\chi^2 = 123.77$, df = 51, RMSEA = .088, CFI = .920, TLI = .878 (see Table 1 for factor loadings). The TSES is divided into three subscales, which assess teachers' perceptions of their abilities in the following areas: efficacy in classroom management; efficacy in instructional strategies; and efficacy in student engagement. Reliability analyses indicated satisfactory internal consistency in each of the three areas respectively: .826; .735; and .828; with an overall measure of .881.

Table 1

Factor Loadings for Teacher Sense of Efficacy Scale

TSES Items	Efficacy for student engagement	Efficacy for instructional strategies	Efficacy for classroom management
How much can you do to motivate students who show low interest in school work?	.751		
How much can you do to help your students value learning?	.793		
How much can you do to get students to believe they can do well in school work?	.850		
How much can you assist families in helping their children do well in school?	.584		
To what extent can you craft good questions for your students?		.609	
To what extent can you use a variety of assessment strategies?		.661	
To what extent can you provide an alternative explanation or example when students are confused?		.662	
How well can you implement alternative teaching strategies in your classroom?		.633	
How much can you do to control disruptive behavior in the classroom?			.594
How much can you do to calm a student who is disruptive or noisy?			.761
How much can you do to get students to follow classroom rules?			.787
How well can you establish a classroom management system with each group of students?			.794

A frequency count was used to address RQ1, teacher awareness of evidence-based practices. Table 2 shows twenty-two evidence-based instructional practices for teaching reading and the number of teachers who reported awareness. This includes teachers from all subject areas. Tables 3 - 6 show selected evidence-based practices and the frequency of their implementation as reported by reading, ELA, social studies, and science teachers.

Table 2

Teachers' Awareness of Evidence-Based Practices Frequency Count

Instructional Practice	Number of teachers who reported awareness of the practice	Percent of teachers reporting awareness
Reader's Theater	108	57.8
Literature Circles	125	66.8
Book Clubs	155	82.9
Sustained Silent Reading	134	71.7
Book Reports	178	95.2
Book Trailer	66	35.3
Author Study	117	62.6
Character Analysis	155	82.9
Anticipation Guide	100	53.5
Question-Answer Relationship	92	49.2
KWL (Know, Want-to Know, Learned)	144	77
Class-Wide Peer Tutoring	77	41.2
Think-Aloud	149	79.7
DRTA (Directed Reading Thinking Act)	102	54.5
Gloss	8	4.3
Discussion Web	72	38.5
Intra-Act	6	3.2
Story Impression	36	19.3
Repeated Reading	92	49.2
Guided Reading	172	92
Echo Reading	92	49.2
Partner Reading	156	83.4

Table 3

Frequency of Implementation Reported by Reading Teachers

Practice	Never	2 to 3 times per year	2 to 3 times per month	2 to 3 times per week	Daily or almost Daily
Reader's Theater	12	10	3	0	0
SSR	2	2	8	10	8
Book Trailer	9	6	1	0	0
Author Study	10	13	2	1	0
QAR	2	1	5	4	8
Gloss	0	0	0	2	0
Discussion Web	4	1	6	3	2
Intra-Act	0	2	0	0	0
Story Impression	0	2	2	2	1
Echo Reading	7	0	4	7	6
KWL	7	4	10	5	5
Book Club	17	10	3	1	0

Table 4

Frequency of Implementation Reported by ELA Teachers

Practice	Never	2 to 3 times per year	2 to 3 times per month	2 to 3 times per week	Daily or almost Daily
Reader's Theater	23	21	3	2	0
SSR	6	5	13	14	13
Book Trailer	21	15	2	0	1
Author Study	20	17	5	1	1
QAR	4	7	11	7	9
Gloss	2	1	0	3	0
Discussion Web	8	4	9	8	4
Intra-Act	0	3	0	1	1
Story Impression	1	6	4	3	2
Echo Reading	17	5	6	7	5
KWL	12	10	23	7	5
Book Club	29	20	3	1	1

Table 5

Frequency of Implementation Reported by Social Studies/History Teachers

Practice	Never	2 to 3 times per year	2 to 3 times per month	2 to 3 times per week	Daily or almost Daily
Reader's Theater	10	9	1	0	0
SSR	3	3	3	8	8
Book Trailer	6	5	0	0	0
Author Study	9	7	3	0	0
QAR	1	5	6	3	5
Gloss	0	0	0	1	0
Discussion Web	2	2	4	2	4
Intra-Act	0	1	0	0	0
Story Impression	0	4	1	2	2
Echo Reading	7	0	1	3	2
KWL	6	9	7	2	3
Book Club	21	2	1	1	0

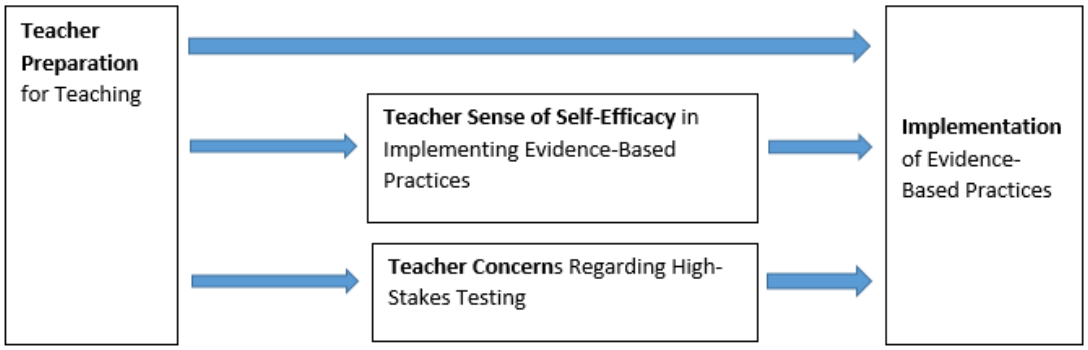
Table 6

Frequency of Implementation Reported by Science Teachers

Practice	Never	2 to 3 times per year	2 to 3 times per month	2 to 3 times per week	Daily or almost Daily
Reader's Theater	22	5	0	0	0
SSR	6	2	5	11	7
Book Trailer	7	5	0	0	0
Author Study	14	5	4	0	0
QAR	5	3	8	1	3
Gloss	0	0	0	1	0
Discussion Web	6	3	5	0	3
Intra-Act	0	1	0	0	0
Story Impression	3	2	1	1	1
Echo Reading	13	1	0	5	1
KWL	8	3	15	2	4
Book Club	25	5	1	1	0

It should be noted that the frequency of implementation of the practices listed in tables 3 – 6 may be content area specific. For example, book club, reader's theater, and author's study are likely to never be used in a science class (Table 6) but, as the table shows, KWL, discussion web, and gloss are underutilized and could be valuable tools for students. Considering Table 3 and the frequency at which reading teachers reported use of practices, it may be illogical that teachers reported never using practices such as reader's theater, SSR, and book club in a class specifically addressing reading. These three practices, among others listed, are underutilized. Path analysis conducted with AMOS version 25 was used to address RQ2-RQ6 to determine if there were predictive relationships between the independent variable, teachers' preparation for teaching, and implementation of evidence-based teaching practices, as well as direct and/or indirect effects on teachers' sense of self-efficacy; teachers' sense of self-efficacy in implementing evidence-based practices; and teachers' preparation for teaching and teachers' concerns regarding high-stakes testing, and teachers' concerns about testing in relation to implementing the practices. As a reminder, the proposed model is shown again below (see Figure 2).

Figure 2. Model of Proposed Relationships



A separate analysis was run for each of the 22 evidence-based practices. Table 7 shows the direct effects of teacher preparation on implementation of the practice; direct effects of sense of self-efficacy on implementation, indirect effects of teacher preparation through sense of self-efficacy; direct effects of teacher preparation on testing concerns; and indirect effects of teacher preparation through testing concerns. The direct effect of teacher preparation on teachers' sense of self-efficacy is -.01 for every practice, and the direct effect of teacher preparation on testing concerns is .10 for every practice. Table 8 provides chi-square values for each of the separate models run for the 22 individual practices. Because the models have one or two degrees of freedom, traditional SEM fit statistics are not meaningful.

Table 7

Standardized Direct and Indirect Effects

Teaching Practice	Direct Effects of Teacher Preparation on	Direct Effects of Sense of Self- Efficacy	Indirect Effects of Teacher Preparation	Direct Effects of Testing Concerns on Implementation	Indirect Effects of Teacher Preparation

	Implementation of the Practice	on Implementation	through Sense of Self-Efficacy		through Testing Concerns
Reader's Theater	.46*	.07	-.000	-.11	-.009
Literature Circles	.02	.12	-.001	.14	.014
Book Clubs	-.04	.10	-.001	.10	.01
Sustained Silent Reading	.29*	.09	-.000	-.04	-.0004
Book Reports	-.02	.04	-.000	.06	.00
Book Trailers	.11*	.08	-.000	.04	.00
Author Study	-.12*	.23*	-.002	-.03	-.003
Character Analysis	.09	.14	-.001	.08	.008

(continued)

Table 7 (continued)

Anticipation Guides	.04	.12	-.001	.09	.009
Question/Answer Relationship	-.21*	.31*	-.003	.13	.01
KWL	-.02	.10	-.001	.14	.01
Class-Wide Peer Tutoring	-.03	.15	-.001	.13	.01
Think Aloud	.08	.12	-.001	.21*	.02
Directed Reading Thinking Activity	-.04	.13	-.001	.05	.005
Gloss	.96*	.28*	-.003	-.61*	-.055
Discussion Web	-.13*	.08	-.0008	.02	.002
IntraAct	. 75*	-.04	.00	-.61	-.055
Story Impression	-.11*	-.09	.00	.29*	.03
Repeated Reading	-.06	-.01	.00	.27*	.027
Guided Reading	-.02	.17	-.001	.19	.019
Echo Reading	-.29*	.04	-.000	.10	.01
Partner Reading	-.08	-.06	.000	.11	.011

*p < .05

Table 8

Model Fit Indices

Practice	χ^2	*df*	*P*
Reader's Theater	31.270	2	.000*
Literature Circles	.659	1	.417
Book Clubs	.716	1	.398
Sustained Silent Reading (SSR)	7.656	2	.022*
Book Reports	.701	1	.403
Book Trailers	.689	1	.407
Author Study	.700	1	.403
Character Analysis	.714	1	.398
Anticipation Guides	.747	1	.387

(continued)

Table 8 (continued)

Question/Answer Relationship (QAR)	.728	1	.393
Know/Want to Know/Learned (KWL)	.694	1	.405
Class-Wide Peer Tutoring (CWPT)	.737	1	.391
Think Aloud	.747		.387
Directed Reading Thinking Activity (DRTA)	.713	1	.399
Gloss	.698	1	.403
Discussion Web	.699	1	.403
IntraAct	.698	1	.403
Story Impression	.695	1	.404
Repeated Reading	.722	1	.396
Guided Reading	.725	1	.395
Echo Reading	.685	1	.408
Partner Reading	.696	1	.404

*$p < .05$

Reader's theater showed a significant path coefficient (.46) indicating a direct effect of teachers' preparation via teacher education program on the use of the practice. SSR also showed as significant path coefficient (.29), as well as gloss (.96), book trailer (.11), and intra-act (.75) Additional significant path coefficients show direct effects of teacher preparation by way of a different route to teaching certification on the use of the evidence-based practices: author study (-.12), QAR (-.21), discussion web (-.13), story impression (-.11), and echo reading (-.29).

Regarding direct effects of teachers' sense of self-efficacy, path coefficients were as follows: gloss (.28) and QAR (.31), which showed direct effects by participants who were prepared through teacher education programs. Direct effects were also found in four of the models run for testing concerns: think-alouds (.21), story impression (.29), repeated reading (.27), and gloss (-.61).

Indirect effects of teacher sense of self-efficacy on implementation of the evidence-based practices were not present, nor were there indirect effects of testing concerns on the implementation of the practices.

CHAPTER V – DISCUSSION

The purpose of this study was to investigate several possible relationships associated with teachers' implementation of evidence-based instructional practices for teaching reading in all content areas. The results demonstrate correspondence with prior research as well as contradiction. Beginning with the first research question, "Are middle-school teachers aware of the variety of evidence-based practices that have been shown to be effective in middle-school reading and content area classes?", the findings revealed that many teachers were aware of most of the practices examined. At least 50% of teachers reported having knowledge of all but six (16 of 22) of the practices, and this percentage includes teachers from all content areas as well as teachers whose preparation was through an elementary education program, a secondary education program, or alternate route certification program. However, it is possible that teachers over endorsed their awareness of some of the teaching practices. There is a difference between having heard of a practice and knowing how it is implemented in a classroom, in comparison to casually having heard the name of a practice but not being aware of how it functions or is carried out with students. The questionnaire did not address the possible levels of being aware of a practice.

This research project focused on relationships among variables, and even though direct and indirect effects are discussed, this is not a mediation model, but rather a path analysis was used to describe correlations between variables. The findings for research question 2, "Is there a relationship between teachers' preparation for teaching and teachers' implementation of evidence-based practices in middle-school reading and content areas?", showed direct effects for eight of the practices (see Table 7). Furthermore, the path coefficients are larger for teachers who completed a teacher

certification program such as elementary or secondary education when compared to alternate route prepared teachers. This outcome is in keeping with prior research showing that teachers prepared through traditional education programs may be better equipped for teaching than alternate-route prepared teachers (Blanton, et al., 2007; Darling-Hammond, 2000; Darling-Hammond et al., 2005; National Commission on Teaching and America's Future [NCTAF], 1996).

Concerning the possibility of teacher preparation affecting implementation of practices through sense of self-efficacy (research question 3), no significant path coefficients were found for indirect effects. However, when looking at direct effects of sense of self-efficacy on implementation of practices (research question 4), 12 of 22 paths (54.5%) showed significance (see Table 7), meaning there was a correlation between the two. These outcomes, that sense of self-efficacy may be connected to teachers' implementation of the practices, but that sense of self-efficacy may not be connected to the teachers' preparation, are also aligned with previous studies revealing that a teacher's higher sense of self-efficacy is correlated with better teaching (Gibson & Dembo, 1984; Holzberger et al., 2013).

Research question 5, "Is there a relationship between teachers' preparation for teaching and their concerns regarding student performance on high-stakes tests?", showed significant path coefficients for 13 of 22 practices (59%). Two of the practices, gloss and reader's theater, showed direct effects relating to alternate route prepared teachers, indicating that alternate route prepared teachers used the two practices more than traditionally prepared teachers when testing concerns were present. The remaining 11 practices showed direct effects by elementary and/or secondary education program

prepared teachers. This result may indicate that teachers are concerned about high-stakes testing without regard to their preparation route.

The final research question in this project, "Is there a relationship between teacher concerns regarding high-stakes testing and their implementation of evidence-based practices in middle-school reading and content area classes?", showed four significant path coefficients: think aloud .21, story impression .29, repeated reading .27, and gloss -.61, indicating that teacher preparation may have affected implementation of the practices through their testing concerns, i. e., because of their concerns regarding testing, traditional education program trained teachers implemented these practices. Some teachers may have implemented certain practices because they believed the practices would help students prepare for testing, yet there is also the possibility that some teachers chose not to implement practices because they chose (or were instructed) to spend time on test-prep activities. In previous research, teachers reported that testing concerns (review, practice, emphasis on testing) interfered with their teaching, but in the studies reviewed no distinction was made as to their preparation route (Crocco & Costigan 2007). This research project focused on relationships among variables, and even though direct and indirect effects are discussed, this is not a mediation model, but rather a path analysis was used to describe correlations between variables.

Reviewing the results as a whole, the findings show that many of the participating teachers reported some awareness of the evidence-based practices specified. However, there was also unawareness of some practices, which could be a teacher's never having heard of practices altogether or having only a superficial knowledge of a practice and not full awareness of how it is implemented, how it functions, and the research supporting its

use. Teachers' lack of knowledge of practices is a barrier to the practices being implemented. It may be logical that math and/or algebra teachers, and possibly others, could be less aware than other content area teachers. Likewise, science and social studies/history teachers may not be aware of practices such as reader's theater, book trailers, character studies, etc., and those practices may not be appropriate for subject matter, but it seems reasonable that reading and ELA teachers could incorporate these practices, but the findings show that many do not. Additionally, science and social studies/history teachers could make use of KWL, gloss, anticipation guides, think-aloud, discussion web, CWPT, and DRTA, but many do not.

A review of the previous research revealed differences in implementation of evidence-based practices based on manner of teacher preparation, and this study shows some agreement based on direct effects, but only with some of the practices (Linek, Sampson, Gomez, Linder, Torti, Levingston, & Palmer, 2009). Likewise, prior research shows that sense of self-efficacy may influence teachers' implementation of practices, and this study reveals direct effects with approximately one-half (54%) of the practices. However, there were no indirect effects of teacher preparation through sense of self-efficacy on implementation of the teaching practices. Regarding prior research, teachers have reported feeling pressured to focus on high-stakes test preparation (Boardman & Woodruff, 2004; Musoleno & White, 2010), which may have influenced them to refrain from implementing evidence-based practices for teaching reading. However, this study showed that, no matter the path to teaching, there appears to be a relationship between testing concerns and implementation of evidence-based teaching practices for the participants in this study. A potential barrier to teachers' implementation of practices not

explored in this study is the possibility that school administration officials periodically could instruct teachers to dismiss all normal teaching activities so that test-preparation can take place.

Because Mississippi 8th graders are ranked 50th in the nation in reading scores and evidence-based practices for teaching reading have been established and are available for teachers to use, this study looked at teachers' awareness of the practices and factors that may affect their implementation of them because they could be used to improve students' scores. Among the factors investigated, two showed correlations. First, teachers who were prepared through elementary or secondary education programs showed correlations regarding the use of some of the evidence-based practices. This finding agrees with the literature review presented above regarding various grade-level teachers, and it demonstrates similar findings when limited to middle-school teachers. Thus, alternate route preparation could itself be a barrier to a teacher's implementation of evidence-based practices. Secondly, a higher sense of self-efficacy was correlated with use of the evidence-based practices outlined in this study of middle-school teachers. Hence, a teachers' lack of efficacy may be a barrier to implementation of practices. This possibility coincides with studies conducted with other grade levels. These two outcomes are consistent with previous research, but this study is limited to middle-school teachers because of a variety of unique challenges they face.

Near the completion of this project, and because of the differences found in implementation of practices according to teachers' path to teaching, the decisions was made to investigate possible differences between elementary trained teachers as compared to the other routes to teaching. Therefore, each of the 22 statistical models was

run again and included the different make-up of groups: elementary education trained teachers in one group and all other manners of training in the other (see Appendix N for breakdown of teacher training categories). Table 9 is a reproduction of Table 7 with the addition of the values after running the models again. The new values are listed in bold so that a comparison can be made regarding the isolation of elementary trained teachers. It should be noted that running the models 22 times could have introduced familywise error. No steps were taken to control for or adjust family-wise error.

The comparison of values in Table 9 shows little or no differences for some of the practices, yet others revealed considerable differences. For example, the bolded value, -.067 for reader's theater shows that non-elementary trained teachers did not use the practice as much as was indicated by the .46 direct effect associated when the group contained secondary and elementary trained teachers as one category. Isolating the elementary education trained teachers revealed that they used the practice more than the secondary education trained teachers and the alternate route teachers. Think aloud and intra-act showed notable differences as well.

Table 9

Standardized Direct and Indirect Effects with Elementary Education Teacher Comparison

Teaching Practice	Direct Effects of Teacher Preparation on Implementation of the Practice		Direct Effects of Sense of Self- Efficacy on Implementation		Indirect Effects of Teacher Preparation through Sense of Self-Efficacy		Direct Effects of Testing Concerns on Implementation		Indirect Effects of Teacher Preparation through Testing Concerns		Direct effect of teacher prep on sense of SE	Direct effect of teacher prep on testing concerns
Reader's Theater	.46*	**-.067**	.07	**.115**	-.000	**.000**	-.11	**-.077**	-.009		**.048**	**.115**
Literature Circles	.02	**-.051**	.12	**.117**	-.001	**.000**	.14	**.147**	.014	**.000**	**.048**	**.219**
Book Clubs	-.04	**-.036**	.10	**.098**	-.001	**.000**	.10	**.102**	.000	**.01**	**.048**	**.219**
Sustained Silent Reading	.29*	**.022**	.09	**.110**	-.000	**.000**	-.04	**-.032**	-.0004	**.000**	**.048**	**.220**
Book Reports	-.02	**-.073**	.04	**.045**	-.000	**.000**	.06	**.072**	.000	**.00**	**.048**	**.219**
Book Trailers	.11*	**-.069**	.08	**.066**	-.000	**.000**	.04	**.053**	.000	**.00**	**.048**	**.219**
Author Study	-.12*	**-.182**	.23*	**.231**	-.002	**.000**	-.03	**-.005**	.000	**-.003**	**.048**	**.220**
Character Analysis	.09	**.058**	.14	**.133**	-.001	**.000**	.08	**.068**	.000	**.008**	**.048**	**.219**
Anticipation Guides	.04	**-.199**	.12	**.119**	-.001	**.000**	.09	**.111**	.000	**.009**	**.048**	**.218**
Question/Answer Relationship	-.21*	**-.149**	.31*	**.330**	-.003	**.000**	.13	**.107**	.000	**.01**	**.048**	**.219**
KWL	-.02	**-.082**	.10	**.104**	-.001	**.000**	.14	**.150**	.000	**.01**	**.048**	**.219**

(continued)

Table 9 (continued)

Class-Wide Peer Tutoring	-.03	**-.067**	.15	**.157**	-.001	**.000**	.13	**.139**	.000	**.01**	**.048**	**.219**
Think Aloud	.08	**.30**	.12	**.121**	-.001	**.000**	.21*	**.211**	.000	**.02**	**.048**	**.219**
Directed Reading Thinking Activity	-.04	**-.139**	.13	**.117**	-.001	**.000**	.05	**.064**	.000	**.005**	**.048**	**.219**
Gloss	.96*	**.233**	.28*	**-.354**	-.003	**.000**	-.61*	**-.749**	.000	**-.055**	**.048**	**.219**
Discussion Web	-.13*	**232**	.08	**.050**	-.0008	**.000**	.02	**-.045**	.000	**.002**	**.048**	**.219**
IntraAct	. 75*	**.462**	-.04	**-.519**	.00	**.00**	-.61	**.576**	.000	**-.055**	**.048**	**.219**
Story Impression	-.11*	**.026**	-.09	**-.114**	.00	**.000**	.29*	**.298**	.000	**.03**	**.048**	**.219**
Repeated Reading	-.06	**-.093**	-.01	**-.012**	.00	**.000**	.27*	**.27**	.000	**.027**	**.048**	**.217**
Guided Reading	-.02	**-.074**	.17	**.176**	-.001	**.000**	.19	**.204**	.000	**.019**	**.048**	**.218**
Echo Reading	-.29*	**-.301**	.04	**.044**	-.000	**.022**	.10	**.089**	.000	**.01**	**.048**	**.219**
Partner Reading	-.08	**-.088**	-.06	**-.056**	.000	**.000**	.11	**.121**	.000	**.011**	**.048**	**.219**

Challenges

Middle-school aged children are sometimes called *tweenagers*. Indeed, they are in-between, "stuck in the middle" (Rockoff & Lockwood, 2010). Many of them undergo considerable changes in self-esteem because of a change in school setting, puberty, and peer pressure. Prior studies, along with parent, teacher, administrator, and mental health professionals give accounts of middle-school students' daily struggles with self and others. The middle-school years can be very difficult for some students. In essence, middle-school students are a tough crowd. Often times, they lack motivation to do school work but they may be given more responsibility to complete it on their own (Eccles et al., 1993; Guthrie & Davis, 2003; Humphrey, 2002; Rhodes, Roffman, Reddy, & Fredriksen 2004). Because of their particular challenges, educators have a duty to do all within their power to create an environment that will be conducive to teaching and learning so that no middle-school student will be left-behind.

Recommendations. The information gained from this study provides impetus to look more closely at issues middle-school teachers face when teaching reading. For example, should first-year middle-school teachers who do not have experience working with adolescents be required to attend workshops providing information about students' social, behavioral, and emotional challenges? Should veteran middle-school teachers whose students score poorly on high-stakes tests be required to remediate and demonstrate growth or mastery in their knowledge of content and teaching skills?

Teachers who lack a sense of self-efficacy, which is established as a critical component to student success, may need a mentor or mentors who could provide support

and encouragement. Mentors could also model teaching practices, co-teach lessons, or observe in the classroom to provide feedback. Controlled studies could reveal whether such efforts may translate into improvement in students' reading ability, which is established above as a significant predictor of students dropping out of school. Some struggling students are required to receive interventions; perhaps, it is time for struggling teachers to receive interventions so they could be more prepared for what can sometimes be overwhelming daily tasks. Teachers may need more knowledge and/or more confidence in their efforts and abilities (sense of self-efficacy) and a renewed commitment if they expect to move Mississippi up from the bottom.

Bandura (1986) discovered that people continue actions that bring about the results they want, and they discontinue actions or behaviors that do not produce the results they seek. Some teachers may become frustrated and/or disappointed when their teaching actions do not produce successful students, and they may give up, feeling as if there is nothing they can do. They could lack a sense of self-efficacy in helping certain students or all of their students. In addition to a teacher's sense of self-efficacy and its possible relationship with implementation of evidence-based teaching practices, collective sense of efficacy should be explored further to determine if it is related to implementation of evidence-based practices. If a school's faculty and staff have a low sense of efficacy and believe that their efforts will not bring about improvement in their students, a self-fulfilling prophecy may become manifest, such as a quote attributed to Henry Ford: "If you think you can or think you cannot, you are right."

More research is needed to determine the factors leading to Mississippi's poor ranking regarding 8th-grade reading scores. It seems reasonable that the problem lies not only with eighth-graders, but likely begins in earlier grades and is revealed in the eighth-grade scores. Are Mississippi students less intelligent than students in the other 49 states? Are Mississippi teachers incompetent? Surely the answer to these questions is no, but what is the root of the problem? Could it be that some teachers are not receiving adequate training to help struggling readers? After discovering differences in implementation based on teacher preparation route, the researcher reviewed and compared the curriculum for secondary, elementary, and alternate route education programs at three universities in Mississippi. At one of the universities, the elementary education students are required to complete five courses related to reading with two of them specifically addressing reading in middle school. Secondary education and alternate route students at the same university are required to complete one course. Another university requires four courses for elementary education students and no reading related courses for secondary or alternate route. The third university showed three courses required for elementary education students that are related to reading and no specific reading courses required for secondary education. Alternate route courses were not listed on the website.

The differences in university requirements for the manner in which teachers are prepared for teaching could create barriers to teachers' use of evidence-based practices. Research has established there is improvement in students' scores when the practices are used, but if teachers do not become aware of the practices during their training, they may never learn about the valuable teaching practices. If university officials are not aware of

Mississippi's poor eighth-grade (and fourth-grade) students' performance on standardized tests, they may not understand the need for all teachers to be prepared to help students with reading issues. Thus, an additional recommendation would be for university personnel to evaluate teacher education programs to determine if the curriculum should be altered so that *all* teacher training would include an emphasis on how to help students improve their reading skills.

APPENDIX A – Mississippi School Districts

Highlighted schools indicate those originally intended for the study.

1. Aberdeen School District
2. Alcorn School District
3. Amite County School District
4. Amory School District
5. Attala County School District
6. Baldwyn Public School
7. Bay St. Louis -Waveland School District
8. Benton County School District
9. Biloxi Public School District
10. Booneville School District
11. Brookhaven School District
12. Calhoun County School District
13. Canton Public School District
14. Carroll County School District
15. Chickasaw County School District
16. Choctaw County School District
17. Claiborne County School District
18. Clarksdale Municipal School District
19. Cleveland School District
20. Clinton Public School District
21. Coahoma Agricultural High School
22. Coahoma County School District
23. Coffeeville School District
24. Columbia School District
25. Columbus Municipal School District
26. Copiah County School District
27. Corinth School District
28. Covington County School District
29. DeSoto County School District
30. Durant Public School District
31. East Jasper School District
32. East Tallahatchie School District
33. Enterprise School District
34. Forest Municipal School District
35. Forrest County AHS
36. Forrest County Schools
37. Franklin County School District
38. George County School District
39. Greene County School District
40. Greenville Public School District
41. Greenwood Public School District

42. Grenada School District
43. Gulfport School District
44. Hancock County School District
45. Harrison County School District
46. Hattiesburg Public School District
47. Hazlehurst City School District
48. Hinds County School District
49. Hollandale School District
50. Holly Springs School District
51. Holmes County School District
52. Houston School District
53. Humphreys County School District
54. Itawamba County School District
55. Jackson County School District
56. Jackson Public School District
57. Jefferson County School District
58. Jefferson Davis County School
59. Jones County School District
60. Kemper County School District
61. Kosciusko School District
62. Lafayette County Schools
63. Lamar County School District
64. Lauderdale County Schools
65. Laurel School District
66. Lawrence County School District
67. Leake County School District
68. Lee County Schools
69. Leflore County School District
70. Leland School District
71. Lincoln County School District
72. Long Beach School District
73. Louisville Municipal School District
74. Lowndes County School District
75. Lumberton Public School District
76. Madison County School District
77. Marion County School District
78. Marshall County School District
79. McComb School District
80. Meridian Public School District
81. Mississippi School for Mathematics & Science
82. Mississippi School for the Blind
83. Mississippi School for the Deaf
84. Mississippi School of the Arts
85. Monroe County School District

86. Montgomery County School District
87. Moss Point School District
88. Natchez-Adams School District
89. Neshoba County School District
90. Nettleton School District
91. New Albany School District
92. Newton County Schools
93. Newton Municipal School District
94. North Bolivar Consolidated School District
95. North Panola School District
96. North Pike School District
97. North Tippah School District
98. Noxubee County School District
99. Ocean Springs School District
100. Okolona School District
101. Oxford Public School District
102. Pascagoula School District
103. Pass Christian School District
104. Pearl Public School District
105. Pearl River County School District
106. Perry County Schools
107. Petal Public School District
108. Philadelphia Public School District
109. Picayune School District
110. Pontotoc City Schools
111. Pontotoc County Schools
112. Poplarville School District
113. Prentiss County School District
114. Quitman Consolidated School District (Clarke County)
115. Quitman County School District
116. Rankin County School District
117. Richton School District
118. Scott County School District
119. Senatobia Municipal School District
120. Simpson County School District
121. Smith County School District
122. South Delta School District
123. South Panola School District
124. South Pike School District
125. South Tippah School District
126. Starkville Oktibbeha Consolidated School District
127. Stone County School District
128. Sunflower County Consolidated School District
129. Tate County Schools

130. Tishomingo County Schools
131. Tunica County School District
132. Tupelo Public School District
133. Union County School District
134. Union Public School District
135. Vicksburg-Warren School District
136. Walthall County School District
137. Water Valley School District
138. Wayne County School District
139. Webster County School District
140. West Bolivar Consolidated School District
141. West Jasper School District
142. West Point School District
143. West Tallahatchie School District
144. Western Line School District
145. Wilkinson County School District
146. Winona School District
147. Yazoo City Municipal School District
148. Yazoo County School District

http://www.mde.k12.ms.us/map?ShowList=1

APPENDIX B – Counties Originally Chosen for the Study

https://www.waterproofpaper.com/printable-maps/mississippi/printable-mississippi-county-map-labeled.pdf

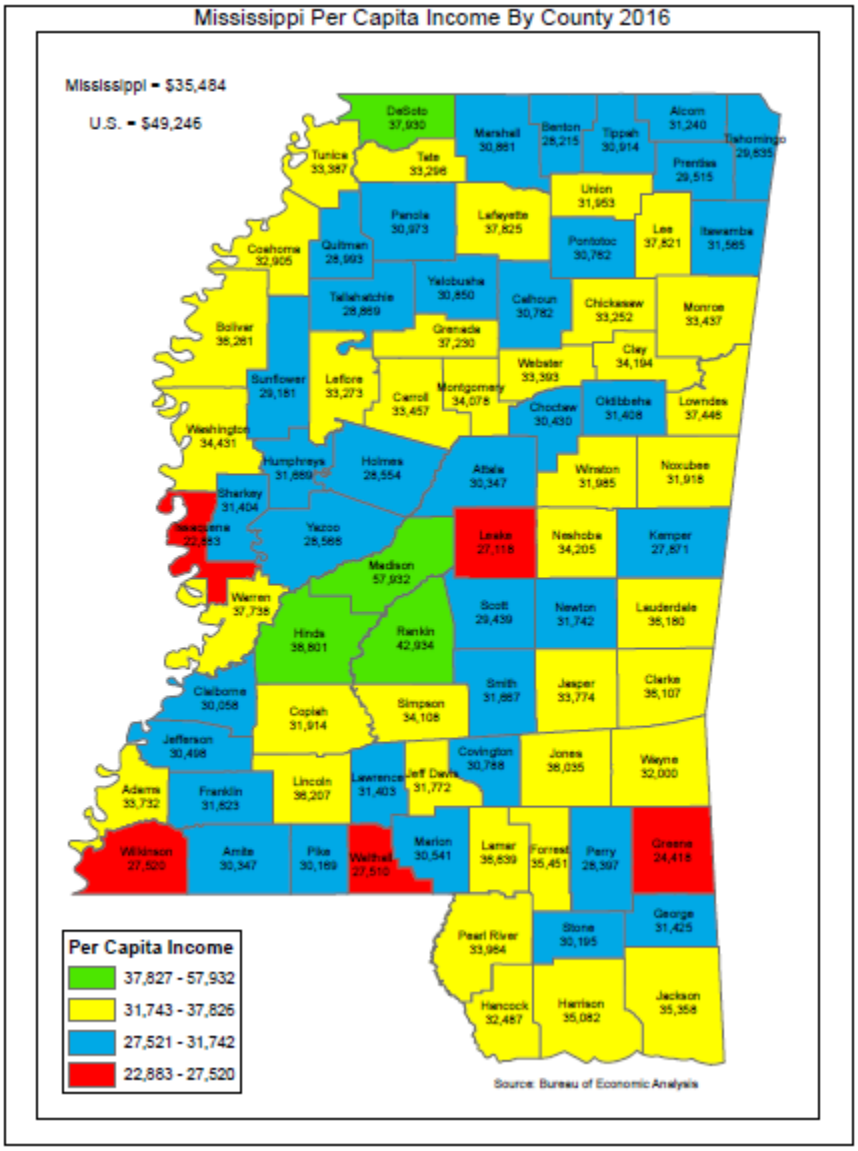
APPENDIX C Locale Designations

Locale, Urban-Centric: An indication of school's location relative to a populous area. The locales assigned to school districts are based on the locale code of their schools, weighted by the size of the schools' membership. The urban-centric locale assignment system has been used starting in 2006-07. The locale code categories are defined below.

Locale Code, Urban-Centric	Code Name	Definition
11	City, Large	Territory inside an urbanized area and inside a principal city with population of 250,000 or more.
12	City, Midsize	Territory inside an urbanized area and inside a principal city with population less than 250,000 and greater than or equal to 100,000.
13	City, Small	Territory inside an urbanized area and inside a principal city with population less than 100,000.
21	Suburb, Large	Territory outside a principal city and inside an urbanized area with population of 250,000 or more.
22	Suburb, Midsize	Territory outside a principal city and inside an urbanized area with population less than 250,000 and greater than or equal to 100,000.
23	Suburb, Small	Territory outside a principal city and inside an urbanized area with population less than 100,000.
31	Town, Fringe	Territory inside an urban cluster that is less than or equal to 10 miles from an urbanized area.
32	Town, Distant	Territory inside an urban cluster that is more than 10 miles and less than or equal to 35 miles from an urbanized area.
33	Town, Remote	Territory inside an urban cluster that is more than 35 miles of an urbanized area.
41	Rural, Fringe	Census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster.
42	Rural, Distant	Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster.
43	Rural, Remote	Census-defined rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster.

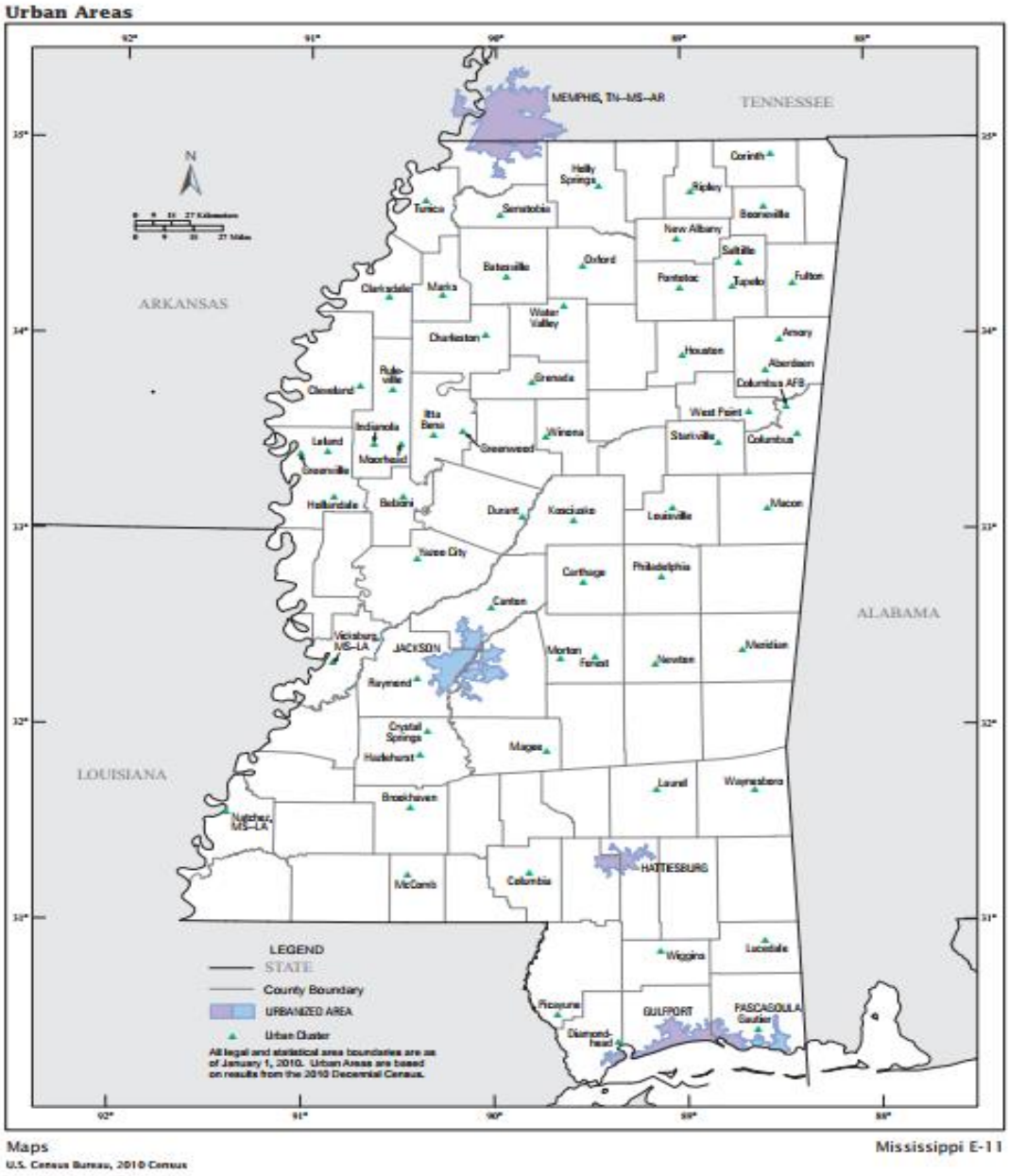
https://nces.ed.gov/ccd/commonfiles/glossary.asp

APPENDIX D – Mississippi per Capita Income by County 2016



http://mdes.ms.gov/media/8639/pci.pdf

APPENDIX E – Rural and Urban Areas



https://www.census.gov/prod/cen2010/cph-2-26.pdf

APPENDIX F – Permission Letter from Dr. Hoy

Permission Letter from Dr. Hoy

Anita Woolfolk Hoy, Ph.D.
Professor
Psychological Studies in Education

Dear

You have my permission to use the *Teachers' Sense of Efficacy Scale* in your research. A copy the scoring instructions can be found at:

http://u.osu.edu/hoy.17/research/instruments/

Best wishes in your work,

Anita Woolfolk Hoy

Anita Woolfolk Hoy, Ph.D.
Professor Emeritus
College of Education
29 West Woodruff Avenue
Columbus, Ohio 43210-1177
www.coe.ohio-state.edu/ahoy

Phone 614-292-3774
FAX 614-292-7900
Hoy.17@osu.edu

APPENDIX G – Teachers' Sense of Efficacy Scale

http://anitawoolfolkhoy.com/wp-content/uploads/2015/04/TSES-scoring-zted8m.pdf

Teachers' Sense of Efficacy Scale[1] (short form)

	Teacher Beliefs Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.	How much can you do? Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
1.	How much can you do to control disruptive behavior in the classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2.	How much can you do to motivate students who show low interest in school work?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
3.	How much can you do to get students to believe they can do well in school work?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
4.	How much can you do to help your students value learning?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
5.	To what extent can you craft good questions for your students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
6.	How much can you do to get children to follow classroom rules?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
7.	How much can you do to calm a student who is disruptive or noisy?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
8.	How well can you establish a classroom management system with each group of students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
9.	How much can you use a variety of assessment strategies?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
10.	To what extent can you provide an alternative explanation or example when students are confused?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
11.	How much can you assist families in helping their children do well in school?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
12.	How well can you implement alternative strategies in your classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

APPENDIX H – Directions for Scoring the Teachers' Sense of Efficacy Scale

Developers: Megan Tschannen-Moran, College of William and Mary
Anita Woolfolk Hoy, the Ohio State University

Construct Validity

For the information on the construct validity of the Teachers' Sense of Teacher Efficacy Scale, see:

Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17,* 783—805.

Factor Analysis

It is important to conduct a factor analysis to determine how your participants respond to the questions. We have consistently found three moderately correlated factors: *Efficacy in Student Engagement, Efficacy in Instructional Practices,* and *Efficacy in Classroom Management*, but at times the make-up of the scales varies slightly. With preservice teachers, we recommend that the full 24-item scale (or 12-item short form) be used because the factor structure often is less distinct for these respondents.

Subscale Scores

To determine the *Efficacy in Student Engagement, Efficacy in Instructional Practices,* and *Efficacy in classroom Management* subscale scores, we compute unweighted means of the items that load on each factor. Generally these groupings are:

Long Form

Efficacy in Student Engagement:	Items 1, 2, 4, 6, 9, 12, 14, 22
Efficacy in Instructional Strategies:	Items 7, 10, 11, 17, 18, 20, 23, 24
Efficacy in Classroom Management	Items 3, 5, 8, 13, 15, 16, 19, 21

Short Form

Efficacy in Student Engagement	Items 2, 3, 4, 11
Efficacy in Instructional Strategies:	Items 5, 9, 10, 12
Efficacy in Classroom Management	Items 1, 6, 7, 8

Reliabilities

In Tschannen-Moran, M., & Woolfolk Hoy, A. (2001).Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17,* 783-805, the following were found:

	Long Form			**Short Form**		
	Mean	SD	Alpha	Mean	SD	Alpha
OSTES	7.1	.94	.94	7.1	.98	.81
Engagement	7.3	1.1	.87	7.2	1.2	.86
Instruction	7.3	1.1	.91	7.3	1.2	.86
Management	6.7	1.1	.90	6.7	1.2	.86

1 Because this instrument was developed at the Ohio State University, it is sometimes referred to as the *Ohio State Teacher Efficacy Scale*. We prefer the name, *Teachers' Sense of Efficacy Scale.*

http://anitawoolfolkhoy.com/wp-content/uploads/2015/04/TSES-scoring-zted8m.pdf

APPENDIX I – Superintendent Letter for Pilot Study

Dear _____(school superintendent-pilot study),

I am a former middle-school reading teacher and current Ph. D. candidate at the University of Southern Mississippi. I am conducting a study of middle-school teachers regarding their implementation of evidence-based teaching practices for teaching reading. I am asking for your permission to conduct the pilot study for this project in schools under your supervision. Time and travel constraints do no permit me to visit the schools in person, so I would like to distribute the questionnaire via email. I would like to email you a link that could be forwarded to teachers, or I could send it directly to teachers depending on your preference.

The questionnaire contains 29 items and may be completed in approximately 8 minutes.

This research is under the supervision of Dr. Richard Mohn. He may be contacted via email, richard.mohn@usm.edu or by phone, 601-266-6179. At the completion of the study, a full report will be available to you upon request.

Thank you,

Brenda Fortson

601-527-5693

brenda.fortson@eagles.usm.edu

APPENDIX J – Superintendent Letter for the Study

Dear _____(school superintendent),

I am a former middle-school reading teacher and current Ph. D. candidate at the University of Southern Mississippi. I am conducting a study of middle-school teachers regarding their implementation of evidence-based teaching practices reading. I am asking for your permission to conduct the study in schools under your supervision. Time and travel constraints do no permit me to visit the schools in person, so I would like to distribute the questionnaire via email. I would like to email you a link that could be forwarded to teachers, or I could send it directly to teachers depending on your preference.

The questionnaire contains 29 items and may be completed in approximately 8 minutes.

This research is under the supervision of Dr. Richard Mohn. He may be contacted via email, richard.mohn@usm.edu or by phone, 601-266-6179. At the completion of the study, a full report will be available to you upon request.

Thank you,

Brenda Fortson

601-527-5693

brenda.fortson@eagles.usm.edu

APPENDIX K – Teacher Letter for the Pilot Study

Dear _____(teacher-pilot study),

I am a doctoral student at the University of Southern Mississippi, and I am inviting you to participate in a pilot study for research I am conducting that involves middle-school reading. As a former middle-school reading teacher, I am particularly interested in the challenges teachers face when trying to improve students' reading skills. I would like to learn more about how you approach teaching reading in your classroom no matter which subject you teach.

In addition to the information you will provide regarding teaching, I would appreciate your feedback on the questionnaire. If there are any items that are confusing or that you feel should be deleted or modified, please contact me at brenda.fortson@eagles.usm.edu.

The questionnaire has 29 items and will only take about 8 minutes to complete. You may begin by clicking on the link below. All data obtained from this study are confidential, and no identifying information can be linked to you. The final results will be organized in a manner that no schools or teachers will be identified.

I understand that you are busy, and I really appreciate your willingness to participate in this project. If you would like to receive a copy of the results, please email me at brenda.fortson@eagles.usm.edu.

This research has been approved by the University of Southern Mississippi's Institutional Review Board (IRB) and is being conducted under the supervision or Dr. Richard Mohn. He may be reached via email, richard.mohn@usm.edu or 601-266-6179.

Thank you,

Brenda Fortson

Please click the link below to access the questionnaire.

https://usmep.co1.qualtrics.com/SE/?SID=SV_bBjmrirCX7gsMAd

in your classroom no matter which subject you teach.

APPENDIX L – Teacher Letter for the Study

Dear _____(teacher),

I am a doctoral student at the University of Southern Mississippi, and I am inviting you to participate in research I am conducting that involves middle-school reading. As a former middle-school reading teacher, I am particularly interested in the challenges teachers face when trying to improve students' reading skills. I would like to learn more about how you approach teaching reading in your classroom no matter which subject you teach.

The questionnaire has 29 items and will only take about 8 minutes to complete. You may begin by clicking on the link below. All data obtained from this study are confidential and anonymous, and no identifying information can be linked to you. The final results will be organized in a manner that no schools or teachers will be identified.

I understand that you are busy, and I really appreciate your willingness to participate in this project. If you would like to receive a copy of the results, please email me at brenda.fortson@eagles.usm.edu.

This research has been approved by the University of Southern Mississippi's Institutional Review Board (IRB) and is being conducted under the supervision or Dr. Richard Mohn. He may be reached via email, richard.mohn@usm.edu or 601-266-6179.

Thank you,

Brenda Fortson

Please click the link below to access the questionnaire.

https://usmep.co1.qualtrics.com/SE/?SID=SV_bBjmrirCX7gsMAd

APPENDIX M IRB Approval

THE UNIVERSITY OF SOUTHERN MISSISSIPPI.

INSTITUTIONAL REVIEW BOARD
118 College Drive #5147 | Hattiesburg, MS 39406-0001
Phone: 601.266.5997 | Fax: 601.266.4377 | www.usm.edu/research/institutional.review.board

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
  Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 17111603
PROJECT TITLE: Identifying Barriers to Teacher Implementation of Evidence Based Practices in Middle School Reading-Pilot Study
PROJECT TYPE: New Project
RESEARCHER(S): Brenda Fortson
COLLEGE/DIVISION: College of Education and Psychology
DEPARTMENT: Educational Research and Administration
FUNDING AGENCY/SPONSOR: N/A
IRB COMMITTEE ACTION: Exempt Review Approval
PERIOD OF APPROVAL: 11/17/2017 to 11/16/2018
Lawrence A. Hosman, Ph.D.
Institutional Review Board

APPENDIX N Breakdown of Teacher Group

Table A 1

Breakdown of Teacher Group by Preparation

Type of Teacher Preparation	Number of Teachers
Elementary Education	78
Secondary Education	68
Alternate Route	37
Other	4

REFERENCES

Alvermann, D. E. (1991). The discussion web: A graphic aid for learning across the curriculum. *The Reading Teacher*, *45*(2), 92-99.

Alverman, D. E., Young, J. P., Green, C., & Wisenbaker, J. M. (1999). Adolescents' perceptions and negotiations of literacy practices in after-school read and talk clubs. *American Educational Research Journal, 36*(2), 221-264.

Andrews, C., & Bishop, P. (2012). Middle grades transition programs around the globe: Effective school transition programs take a comprehensive approach to ensuring student success in the middle grades. *Middle School Journal, 44*(1), 8-14.

Arbuckle, J. L. (2017). Amos (Version 25.0). Chicago: IBM SPSS.

Au, W. (2011). Teaching under the new Taylorism: High-stakes testing and the standardization of the 21st century curriculum. *Journal of Curriculum Studies, 43*(1), 25-45.

Baker, L., & Wigfield, A. (1999). Dimensions of children's motivation for reading and their relations to reading activity and reading achievement. *Reading Research Quarterly, 34*(4), 452-477.

Balfanz, R. (2009). Putting middle grades students on the graduation path. *Policy and Practice Brief.*

Barry, A. (2002). Reading strategies teachers say they use. *Journal of Adolescent & Adult literacy, 42(2),* 132-141.

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191.

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall, Inc.

Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, *50*(2), 248-287.

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, *28*(2), 117-148.

Bandura, A. (1997). Editorial. *American Journal of Health Promotion*, *12*(1), 8-10.

Bandura, A. (1999). Social cognitive theory: An agentic perspective. *Asian Journal of Social Psychology*, *2*(1), 21-41.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, *52*(1), 1-26.

Barry, A. L. (2002). Reading strategies teachers say they use. *Journal of Adolescent & Adult Literacy*, *46*(2), 132-141.

Betoret, F. D. (2006). Stressors, self-efficacy, coping resources, and burnout among secondary school teachers in Spain. *Educational Psychology*, *26*(4), 519-539.

Berube, C. T. (2004). Are standards preventing good teaching? *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, *77*(6), 264-268.

Blanton, W. E., Wood, K. D., & Taylor, D. B. (2007). Rethinking middle school reading instruction: A basic literacy activity. *Reading Psychology*, *28*(1), 75-95.

Boardman, A. G., & Woodruff, A. L. (2004). Teacher change and "high-stakes" assessment: what happens to professional development? *Teaching and Teacher Education*, *20*(6), 545-557.

Bolak, K., Bialach, D., & Dunphy, M. (2005). Standards-based, thematic units integrate the arts and energize students and teachers. *Middle School Journal*, *36*(5), 9-19.

Brozo, W. G., & Flynt, E. S. (2008). Motivating students to read in the content classroom: Six evidence-based principles. *The Reading Teacher*, *62*(2), 172-174.

Budiansky, S. (2001). The trouble with textbooks. *ASEE Prism*, *10*(6), 24.

Caprara, G. V., Barbaranelli, C., Steca, P., & Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of School Psychology*, *44*(6), 473-490.

Catapano, S., Fleming, J., & Elias, M. (2009). Building an Effective Classroom Library. *Journal of Language and Literacy Education*, *5*(1), 59-73.

Crocco, M. S., & Costigan, A. T. (2007). The narrowing of curriculum and pedagogy in the age of accountability urban educators speak out. *Urban Education*, *42*(6), 512-535.

Daniels, E., & Steres, M. (2011). Examining the Effects of a School-Wide Reading Culture on the Engagement of Middle School Students. *RMLE Online: Research in Middle Level Education*, *35*(2), 1-13.

Darling-Hammond, L. (2000). Teacher quality and student achievement. *Education Policy Analysis Archives*, *8*, 1.

Darling-Hammond, L. (1996). What matters most: Teaching for America's future. *National Commission on Teaching and America's Future*.

Darling-Hammond, L., Chung, R., & Frelow, F. (2002). Variation in teacher preparation: How well do different pathways prepare teachers to teach? *Journal of teacher education*, *53*(4), 286-302.

Darling Hammond, L., & Holtzman, D., & Gatlin, S., & Vasquez Heilig, J. (2005) Does Teacher Preparation Matter? Evidence about Teacher Certification, Teach for America, and Teacher Effectiveness. *Education Policy Analysis Archives, 13*, 1-48.

De Naeghel, J., Valcke, M., De Meyer, I., Warlop, N., van Braak, J., & Van Keer, H. (2014). The role of teacher behavior in adolescents' intrinsic reading motivation. *Reading and Writing*, *27*(9), 1547-1565.

Dozier, T., & Bertotti, C. (2000). *Eliminating barriers to improving teaching*. Washington DC: Teacher Quality Initiative, US Department of Education. Washington DC: www.ed.gov/teacherquality

Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., & Mac Iver, D. (1993). Development during adolescence: The impact of stage-environment fit on young adolescents' experiences in schools and in families. *American Psychologist*, *48*(2), 90.

Falk-Ross, F. (2009). Instructional Approaches in Middle-Level Reading Programs: A State-Wide Profile of Focus and Support. *Mid-Western Educational Researcher*, *22*(2).

Fan, W., Williams, C. M., & Wolters, C. A. (2012). Parental involvement in predicting school motivation: Similar and differential effects across ethnic groups. *The Journal of Educational Research, 105*(1), 21-35.

Farris, P. J., Werderich, D. E., Nelson, P. A., & Fuhler, C. J. (2009). Male Call: Fifth-Grade Boys' Reading Preferences. *The Reading Teacher, 63*(3), 180-188.

Fisher, D., & Frey, N. (2014). Content area vocabulary learning. *The Reading Teacher*, *67*(8), 594-599.

Freire, P. (1970). *The pedagogy of the oppressed*. New York: Seabury Press.

Fulmer, S. M., & Frijters, J. C. (2011). Motivation during an excessively challenging reading task: The buffering role of relative topic interest. *The Journal of Experimental Education, 79*(2), 185-208.

Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational behavior*, *26*(4), 331-362.

Gallagher, K. (2010). Reversing readicide. *Educational Leadership, 67*(6), 36-41.

Gardner, H. (1993). *Frames of mind: The theory of multiple intelligences* (10th anniversary ed.). New York: Basic Books.

Gibson, S., & Dembo, M. H. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology, 76*(4), 569.

Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal*, *37*(2), 479-507.

Goldhaber, D. D., & Brewer, D. J. (2000). Does teacher certification matter? High school teacher certification status and student achievement. *Educational Evaluation and Policy Analysis*, *22*(2), 129-145.

Guo, Y., Connor, C. M., Yang, Y., Roehrig, A. D., & Morrison, F. J. (2012). The effects of teacher qualification, teacher self-efficacy, and classroom practices on fifth graders' literacy outcomes. *The Elementary School Journal*, *113*(1), 3-24.

Guthrie, J. T., & Davis, M. H. (2003). Motivating struggling readers in middle school through an engagement model of classroom practice. *Reading &Writing Quarterly*, *19*(1), 59-85.

Hall, L. A. (2005). Teachers and content area reading: Attitudes, beliefs and change. *Teaching and Teacher Education*, *21*(4), 403-414.

Heilig, J. V. (2005). Does Teacher Preparation Matter? Evidence about Teacher Certification, Teach for America, and Teacher Effectiveness. *Education Policy Analysis Archives*, *13*(42), n42.

Hinchman, W. S. (1917). Reading clubs instead of literature classes. *The English Journal*, *6*(2), 88-95.

Holzberger, D., Philipp, A., & Kunter, M. (2013). How teachers' self-efficacy is related to instructional quality: A longitudinal analysis. *Journal of Educational Psychology*, *105*(3), 774.

Holzberger, D., Philipp, A., & Kunter, M. (2014). Predicting teachers' instructional behaviors: The interplay between self-efficacy and intrinsic needs. *Contemporary Educational Psychology*, *39*(2), 100-111.

Huftalin, A., & Ferroli, L. (2013). Literature that increases social studies knowledge and skill in text reading. *Illinois Reading Council Journal*, *41*(1), 10-29.

Hughes-Hassell, S., & Rodge, P. (2007). The leisure reading habits of urban adolescents. *Journal of Adolescent & Adult Literacy*, *51*(1), 22-33.

Hunley, S. A., Davies, S. C., & Miller, C. R. (2013). The relationship between curriculum-based measures in oral reading fluency and high-stakes tests for seventh grade students. *RMLE Online*, *36*(5), 1-8.

IBM Corp. Released 2017. IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp.

Ivey, G., & Broaddus, K. (2000). Tailoring the fit: Reading instruction and middle school readers. *The Reading Teacher*, 68-78.

Ivey, G., & Broaddus, K. (2001). "Just plain reading": A survey of what makes students want to read in middle school classrooms. *Reading Research Quarterly*, *36*(4), 350-377.

Jaeger, E. (2006). Silencing teachers in an era of scripted reading. *Rethinking Schools*, *20*(3), 39-41.

Kamps, D. M., Veerkamp, M. B., & Cooper, L. (2007). The effects of classwide peer tutoring on the reading achievement of urban middle school students. *Education and Treatment of Children*, *30*(2), 21-51.

Keehn, S., Harmon, J., & Shoho, A. (2008). A study of readers' theater in eighth grade: issues of fluency, comprehension, and vocabulary. *Reading & Writing Quarterly, 24*(4), 335-362.

Kelley, M. J., & Decker, E. O. (2009). The current state of motivation to read among middle school students. *Reading Psychology*, *30*(5), 466-485.

Kelly, S. (2008). Race, social class, and student engagement in middle school English classrooms. *Social Science Research*, *37*(2), 434-448.

Klassen, R. M., Bong, M., Usher, E. L., Chong, W. H., Huan, V. S., Wong, I. Y., & Georgiou, T. (2009). Exploring the validity of a teachers' self-efficacy scale in five countries. *Contemporary Educational Psychology*, *34*(1), 67-76.

Klassen, R. M., Tze, V. M., Betts, S. M., & Gordon, K. A. (2011). Teacher efficacy research 1998–2009: Signs of progress or unfulfilled promise? *Educational Psychology Review*, *23*(1), 21-43.

Kozen, A. A., Murray, R. K., & Windell, I. (2006). Increasing all students' chance to achieve: Using and adapting anticipation guides with middle school learners. *Intervention in School and Clinic*, *41*(4), 195-200.

Krashen, S. D. (2004). *The Power of Reading: Insights from the Research: Insights from the Research*. ABC-CLIO.

Krashen, S. D. (1995). School Libraries, Public Libraries, and the NAEP Reading Scores. *School Library Media Quarterly*, *23*(4), 235-37.

Krashen, S., Lee, S., & McQuillan, J. (2008, August). Is the library important? Multivariate studies at the national and international level. In *Proceedings of the International Association for School Librarianship 37th Annual Conference: World Class Learning and Literacy through School Libraries* (pp. 3-7).

Krashen, S. (2009). Anything but reading. *Knowledge Quest*, *37*(5), 18.

Langer, J.A. (1999). Beating the odds: Teaching middle and high school students to read and write well. *American Educational Research Journal*, *38*(4), 837-880.

Linek, W. M., Sampson, M. B., Gomez, K. A., Linder, P. E., Torti, C., Levingston, C., & Palmer, J. (2009). Middle school alternatively certified science teachers: Resources, teacher choices, and student achievement. *The Journal of Educational Research*, *102*(6), 403-414.

Madaus, G. E. (1998). The influence of testing on the curriculum. *Yearbook-National Society for the Study of Education*, *2*, 71-112.

Mader, J. (2014). Report: Mississippi's rural schools growing in diversity, poverty. *The Hechinger Report*. Retrieved from http://hechingerreport.org/report-mississippi-rural- schools-growing-diversity-poverty/

Making Middle Schools Work [Brochure]. (n.d.) Atlanta, GA: SREB.

McKenna, M. C., Conradi, K., Lawrence, C., Jang, B. G., & Meyer, J. P. (2012). Reading attitudes of middle school students: Results of a US survey. *Reading Research Quarterly*, *47*(3), 283-306.

Midgley, C., Feldlaufer, H., & Eccles, J. S. (1989). Change in teacher efficacy and student self- and task-related beliefs in mathematics during the transition to junior high school. *Journal of educational Psychology*, *81*(2), 247.

Moe, T. M. (2002). Politics, Control, and the Future of School Accountability.

Mojavezi, A., & Tamiz, M. P. (2012). The impact of teacher self-efficacy on the students' motivation and achievement. *Theory and Practice in Language Studies*, *2*(3), 483.

Moley, P. F., Bandré, P. E., & George, J. E. (2011). Moving beyond readability: Considering choice, motivation and learner engagement. *Theory into Practice, 50*(3), 247-253.

Moon, T., Tomlinson, C. A., & Callahan, C. M. (1995). Academic Diversity in the Middle School: Results of a National Survey of Middle School Administrators and Teachers. Research Monograph 95124.

Mucherah, W., & Yoder, A. (2008). Motivation for reading and middle school students' performance on standardized testing in reading. *Reading Psychology, 29*(3), 214-235.

Musoleno, R. R., & White, G. P. (2010). Influences of high-stakes testing on middle school mission and practice. *RMLE Online, 34*(3), 1-10.

Nation's Report Card. (2016). Retrieved from http://www.nationsreportcard.gov/reading_math_2015/#reading/state/acl?grade=8

Newmann, F. M., Rutter, R. A., & Smith, M. S. (1989). Organizational factors that affect school sense of efficacy, community, and expectations. *Sociology of Education, 62*(4), 221-238.

Oberg, D. (1999). A library power case study of Lakeside Elementary School, Chattanooga, Tennessee. *School Libraries Worldwide, 5*(2), 63.

Padrón, Y. N., Waxman, H. C., & Huang, S. Y. L. (2014). Classroom learning environment differences between resilient, average, and nonresilient middle school students in reading. *Education and Urban Society, 46*(2), 264-283.

Pearson, L. C., & Hall, B. W. (1993). Initial construct validation of the teaching autonomy scale. *The Journal of Educational Research*, *86*(3), 172-178.

Perfetti, C. A., Britt, M. A., & Georgi, M. C. (2012). *Text-based learning and reasoning: Studies in history*. Routledge.

Pianta, R. C., Belsky, J., Vandergrift, N., Houts, R., & Morrison, F. J. (2008). Classroom effects on children's achievement trajectories in elementary school. *American Educational Research Journal*, *45*(2), 365-397.

Pitcher, S. M., Albright, L. K., DeLaney, C. J., Walker, N. T., Seunarinesingh, K., Mogge, S., & Dunston, P. J. (2007). Assessing adolescents' motivation to read. *Journal of Adolescent & Adult Literacy*, *50*(5), 378-396.

Pitcher, S. M., Martinez, G., Dicembre, E. A., Fewster, D., & McCormick, M. K. (2010). The literacy needs of adolescents in their own words. *Journal of Adolescent & Adult Literacy*, *53*(8), 636-645.

Pittman, P., & Honchell, B. (2014). Literature Discussion: Encouraging Reading Interest and Comprehension in Struggling Middle School Readers. *Journal of Language and Literacy Education*, *10*(2), 118-133.

Ransom, K. A., Santa, C. M., Williams, C. K., & Farstrup, A. E. (1999). High-stakes assessments in reading: A position statement of the International Reading Association. *Journal of Adolescent & Adult Literacy*, *43*(3), 305.

Rasinski, T. V. (2003). Parental involvement: Key to leaving no child behind in reading. *The New England Reading Association Journal*, *39*(3), 1-5.

Rhodes, J., Roffman, J., Reddy, R., & Fredriksen, K. (2004). Changes in self-esteem during the middle school years: A latent growth curve study of individual and contextual influences. *Journal of School Psychology, 42*(3), 243-261.

Robb, L. (2000). *Teaching reading in the middle school*. Scholastic Inc.

Rockoff, J. E. & Lockwood, B. B. (2010). How and why middle schools harm student achievement. *Education Next*. *10*(4), 68-75.

Roderick, M. (1994). Grade retention and school dropout: Investigating the Association. *American Educational Research Journal, 31*(4), 729-759.

Rose, J. S., & Medway, F. J. (1981). Measurement of teachers' beliefs in their control over student outcome. *The Journal of Educational Research, 74*(3), 185-190.

Ross, J. A. (1992). Teacher efficacy and the effects of coaching on student achievement. *Canadian Journal of Education/Revue canadienne de l'education*, 51-65.

Ross, J. A. (1998). The antecedents and consequences of teacher efficacy. *Advances in Research on Teaching*, *7*, 49-74.

Ross, J., & Bruce, C. (2007). Professional development effects on teacher efficacy: Results of randomized field trial. *The Journal of Educational Research, 101*(1), 50-60.

Ryan, A. M., Kuusinen, C. M., & Bedoya-Skoog, A. (2015). Managing peer relations: A dimension of teacher self-efficacy that varies between elementary and middle school teachers and is associated with observed classroom quality. *Contemporary Educational Psychology*, *41*, 147-156.

Salembier, G. B. (1999). SCAN and RUN: A reading comprehension strategy that works. *Journal of Adolescent & Adult Literacy*, *42*(5), 386-394.

Schunk, D. H. (2012). *Learning theories: An educational perspective* (6th ed.). Boston: Pearson.

Schwarzer, R., Schmitz, G. S., & Daytner, G. T. (1999). The teacher self-efficacy scale. *www. fu-berlin. de/gesund/skalen/t_se. htm*.

Scogin, S. C., Kruger, C. J., Jekkals, R. E., & Steinfeldt, C. (2017). Learning by Experience in a Standardized Testing Culture: Investigation of a Middle School Experiential Learning Program. *Journal of Experiential Education*, *40*(1), 39-57.

Sezgin, F., & Erdogan, O. (2015). Academic Optimism, Hope and Zest for Work as Predictors of Teacher Self-Efficacy and Perceived Success. *Educational Sciences: Theory and Practice*, *15*(1), 7-19.

Shuman, R. B. (1975). A school-wide attack on reading problems. *The Clearing House*, *49*(2), 76-80.

Smith, M. L. (1991). Put to the test: The effects of external testing on teachers. *Educational Researcher*, *20*(5), 8-11.

Spencer, V. G., Garcia-Simpson, C., Carter, B. B., & Boon, R. T. (2008). If You Teach--You Teach Reading. *International Journal of Special Education*, *23*(2), 1-7.

Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading research quarterly*, 360-407.

Tomlinson, C. A., Moon, T. R., & Callahan, C. M. (1998). How Well Are We Addressing Academic Diversity in the Middle School? *Middle School Journal*, *29*(3), 3-11.

Tschannen-Moran, M., & Barr, M. (2004). Fostering student learning: The relationship of collective teacher efficacy and student achievement. *Leadership and Policy in Schools*, *3*(3), 189-209.

Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, *17*(7), 783-805.

Unrau, N., & Schlackman, J. (2006). Motivation and its relationship with reading achievement in an urban middle school. *The Journal of Educational Research*, *100*(2), 81-101.

Usher, E. L., & Pajares, F. (2006). Sources of academic and self-regulatory efficacy beliefs of entering middle school students. *Contemporary Educational Psychology*, *31*(2), 125-141.

Vanlaar, G., Reardon, S. F., & Kalogrides, D. (2014). How Does Transition from Elementary to Middle School Affect the Racial Achievement Gap? *Society for Research on Educational Effectiveness*.

Vaughn, S., Klingner, J. K., Swanson, E. A., Boardman, A. G., Roberts, G., Mohammed, S. S., & Stillman-Spisak, S. J. (2011). Efficacy of collaborative strategic reading with middle school students. *American Educational Research Journal*, *48*(4), 938-964.

Veerkamp, M. B., Kamps, D. M., & Cooper, L. (2007). The effects of classwide peer tutoring on the reading achievement of urban middle school students. *Education and Treatment of Children*, *30*(2), 21-51.

Wang, J. H. Y., & Guthrie, J. T. (2004). Modeling the effects of intrinsic motivation, extrinsic motivation, amount of reading, and past reading achievement on text comprehension between US and Chinese students. *Reading Research Quarterly, 39*(2), 162-186.

Whitaker, D., Graham, C., Severtson, S. G., Furr-Holden, C. D., & Latimer, W. (2012). Neighborhood & family effects on learning motivation among urban African American middle school youth. *Journal of Child and Family Studies*, *21*(1), 131-138.

Whittingham, J. L., & Huffman, S. (2009). The effects of book clubs on the reading attitudes of middle school students. *Reading Improvement*, *46*(3), 130.

Wolters, C. A., Denton, C. A., York, M. J., & Francis, D. J. (2014). Adolescents' motivation for reading: group differences and relation to standardized achievement. *Reading and Writing*, *27*(3), 503-533.

Worthy, J., Moorman, M., & Turner, M. (1999). What Johnny likes to read is hard to find in school. *Reading Research Quarterly*, *34*(1), 12-27.

Worthy, J., Turner, M., & Moorman, M. (1998). The precarious place of self-selected reading. *Language Arts*, *75*(4), 296-304.