**The Effective Use of and Support for Instructional Strategies to Improve Literacy in the Middle Grades**

by

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## Abstract

The purpose of this quantitative study was twofold. First, the researcher identified researched-based strategies which improve reading comprehension and literacy in adolescent students. Second, the researcher determined if particular factors influenced teacher use of identified strategies. One hundred seventy-seven teachers who taught sixth through eighth grades were invited to be surveyed using an electronic instrument called the Teacher Inventory for Reading in the Middle Grades. The instrument was tested for validity and reliability and was found to be both valid and reliable.

The four research questions were answered based on an analysis of survey responses. In most instances, the chi-square testing methodology was chosen to test each research hypothesis. In addition, Phi and Cramer's V were analyzed to measures the strength of association between the two variables. The findings revealed that the grade level a teacher teaches does not influence if the teacher will employ the research-based reading strategies. Moreover, with one exception, the number of years of teaching experience a teacher has does not influence the teacher's use of the research-based reading strategies. A favorable finding was administrative support for the strategies does influence whether or not teachers use the research-based strategies. Implications for practice and recommendations for further research were addressed in chapter five.

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# CHAPTER I. INTRODUCTION

## Background

According to international assessments (Organization for Economic Co-operation and Development [OECD] (2003), fifteen-year-olds in the United States rank fifteenth in the world and are below the international average for engaging in reading and school. Thompson and Winking (2007) state America is experiencing an adolescent literacy crisis. Concerns about adolescent literacy are not new. Beginning in the early 1980s, A Nation at Risk (National Commission on Excellence in Education, 1983) warned of a crisis in adolescent literacy.

Teachers face many challenges as they are confronted with more and more instructional demands placed upon them by federal, state, and local policies. Often, the constraints which influence these requirements are unbalanced and often negatively influence student achievement especially in reading (Guthrie, 2008). Middle grade teachers are often overwhelmed by increasingly larger class sizes, more diverse student demographics, scheduling and time conflicts, lack of updated instructional technology, poorly maintained facilities, pressure of high-stakes assessments, and No Child Left Behind requirements. Daniel Perna and Sarah Mahurt (2009) suggest these restraints make it difficult for middle grade teachers to feel they possess the expertise and time to teach literacy skills and core content. Compounding the issue is that most middle and middle grade teachers have not been formally trained to be reading teachers specifically. Teachers expect students to have mastered literacy competencies prior to reaching middle grades. Herein is the problem and the focus of this study.

## Other Considerations Before Improving Literacy

Why is improving adolescent literacy such a concern? Carol Lee, a noted literacy researcher, suggests the answer to this question to be multifaceted. One contributing factor is the lack of understanding for what middle and high school students should do. The expectations are not clearly defined within disciplines. The goals are only recently becoming articulated through state and national reading standards. Also, little is known and practiced related to reading as a process in middle and high schools. In addition, there are limited resources for diagnosing the needs of adolescent struggling readers or for documenting their progress (2004).

Lee (2004) goes on to cite other reasons why combating adolescent illiteracy remains a difficult task. She cites research which indicates that struggling adolescents have internalized criteria by which they decide if a particular context or face-to-face interaction is threatening or poses risks to them and they have developed ways of responding to such perceived threats. This defense mechanism may interfere with adolescents' ability to process information being provided at school. Lee continues by acknowledging that adolescents are at a developmental crossroads of late childhood and early adulthood.

According to John Guthrie (2008), studies exploring reasons for the lack of implementation of research-based instructional practices in middle and secondary schools have uncovered a host of roadblocks that frustrate educators in their efforts toward curricular improvement. These include structural and contextual constraints within schools, including

- lack of time;
- large class sizes;
- the total numbers of students and classes taught by an individual teacher;
- the traditional secondary school curriculum;

• high-stakes assessments; and

• teachers' and administrators' long-held instructional knowledge and beliefs (Guthrie, 2008).

Lack of funding for professional development is another serious barrier. The interaction of these constraints often results in a constant juggling act for teachers and others who wish to make positive changes in reading instruction, as they struggle to balance competing demands (Sturtevant, 2004).

## The Importance of Literacy

Why is literacy important? How schools view literacy speaks to how they view their responsibility for developing it. Literacy encompasses a range of communication skills including reading and writing. Neuman and Rao view literacy as "engaging with and creating a range of texts, building on the languages experiences cultures, and other assets of students, and communicating and expressing understanding in multiple ways, both independently and with others" (2004, p. 7). They go on to state that the traditional view of literacy as simply decoding and comprehending is too constricting (2004). As Paulo Freire implies and Neuman and Rao state in their research (2004), the true value of literacy is not only the ability to read and write, rather it is one's ability to use those skills to shape and advocate in his or her own life, as well as the ability to improve one's knowledge, self, and situation through the use of texts.

## Problem Statement

Fairly recently, The Nation's Report Card: Reading 2007 (Lee, Grigg, & Donahue, 2007) stated that although the lowest performing students are making gains in reading achievement, no significant gains have been made in overall reading proficiency for eighth grade students. Additionally, significant gaps still exist between reading achievement of whites and minority

students. The report suggests adolescents lack the literacy skills necessary to participate in an increasingly complex world. Unfortunately, while much emphasis has been placed on reading in grades K–3, relatively little has been placed on struggling adolescent readers (Biancarosa & Snow, 2004). Yet, because the risks are too many, educators cannot afford to ignore the glaring statistics reminding us that students who are not able to read proficiently are at risk for failure, not only within the school culture but within society as well.

Significant research supports the premise that a majority of struggling adolescent readers can read words but find it difficult to comprehend increasingly complex academic texts as they progress through school (Biancarosa & Snow, 2004). Adolescents can and do read on a regular basis. They just are not reading academic texts at the level of proficiency required for achievement. However, they are quite comfortable reading for pleasure, to acquire information that interests them, or information that is related to social considerations. Thus, determining how to effectively modify instruction as a means of engaging students in academic reading becomes paramount to improving student achievement (Moje, Overby, Tysvaer, & Morris, 2008).

The complexity of literacy instruction moves beyond the basics (phonemic awareness, phonics, fluency, vocabulary, and comprehension) of teaching students how to read towards the goal of teaching students how to use reading as a tool for learning. According to the Southern Regional Education Board (SREB) (2009), the development of student reading skills beyond elementary grades should progress seamlessly into middle grades. This shift in thinking about the purpose of reading in middle and secondary schools also reinforces the concept that all teachers, not just reading and language arts teachers, must address the issue of literacy within their own content areas. Middle grade teachers not only require a deep understanding of the reading process, they must understand how to apply the process to their content reading. SREB

found that many teachers lack the experience to effectively teach reading skills to middle grade students. It seems that novice teachers are those who have had the most exposure to effectively teaching reading strategies. However, SREB research showed that most SREB states require the equivalent of only one course in reading strategies for initial teacher licenses (2010).

Moreover, in addition to the expectation the principal will be the budget director, head disciplinarian, facilities manager, and community liaison; administrators must be instructional leaders. School-based leadership focused on improving student achievement is central to any successful reform initiative. Successful schools are led by administrators who are members of the school community, who participate in the development and implementation of the plan, and who support the plan with resources. Surely, many principals are overwhelmed by the expectation that they become instructional leaders rather than business managers. However, this expectation is the shift in thinking and action that will need to happen if the needs of adolescent learners are to be met (Marzano, Walters, & McNulty, 2005). The literature review identifies best practices and specific strategies for improving adolescent literacy, other contributing factors (such as teacher grade level and experience), and necessary administrative practices to support literacy reforms.

## The Purpose Statement

Throughout the country, school systems are experimenting with innovative reforms and initiatives to improve student achievement and close achievement gaps especially in the area of reading (Mehigan 2005). All students, even those reading at grade level, need strategies for understanding what they read in school. However, those who have the most severe difficulties need the most help. According to AEE (2006), research supports a number of straightforward techniques that all teachers can learn to use with students to improve reading skills among

middle school students. To that end, the purpose of this study was to learn what reading comprehension strategies researchers view as the most effective for improving literacy among middle grade students. Also, this study sought to learn more about two factors (teacher grade level and experience) which may influence teacher use of reading strategies. In addition, administrative support for use of the reading strategies was investigated.

## Research Questions

1. What strategies have reading researchers identified as most effective for improving reading literacy among middle grade students?

2. To what extent, if any, does the grade level that a teacher teaches influence his/her use of the strategies?

3. To what extent, if any, does a teacher's years of experience in teaching influence his/her use of the reading literacy strategies?

4. To what extent, if any, does administrative support influence whether or not teachers use research-based reading literacy strategies?

## Assumptions of the Study

- Teachers know and understand how crucial it is for middle grade students to be literate.
- Teachers know and understand literacy skills must be taught within core content.
- Teachers recognize that middle grade approaches to literacy differ from elementary designs.
- Teachers are interested in improving literacy by learning and practicing strategies designed to meet the needs of adolescent learners.

- Although research-based, not all strategies are equally effective for all struggling adolescent readers.
- Administrative/leadership support is for literacy reform strategies to be effective.
- Building administrators will accurately identify teachers, forward survey link, and encourage teachers to complete survey.

## Limitations

This study will include teachers of non ARI-PALS schools containing grades six through eight. The schools are a mix of high poverty, high performing and those which are high poverty, low performing thereby making it difficult to generalize results to other schools with different demographics. The researcher recognizes that varied levels of teacher preparation exist; however, that fact is not a consideration for this study. The survey response rate is an anticipated limitation as all invited participants are not expected to complete the survey.

## Significance of the Study

Research related to adolescent literacy is relatively new. While much has been written about best instructional practices for adolescent literacy and some has been written related to leadership qualities necessary to facilitate literacy reform in the middle grades, not much has been examined to identify strategies practicing teachers believe are important and successful. This information is important because it can help educators understand which best practice strategies are widely used among teachers. Secondly, this study identified the degree to which teachers feel supported by building leadership and administration in the use of said strategies. This information will hopefully guide thought about ways in which administrators and building leaders could support literacy reform efforts at the middle school level.

## Organization of the Study

This study is organized into four remaining chapters, a bibliography, and appendices. Chapter Two presents a review of the related literature which first examines effective adolescent reading instruction, then identifies general and specific needs for improving adolescent literacy. Considerations for improving adolescent literacy are discussed before best practices and instructional models are explored. Next, the literature review examines how practices and models influence special populations and struggling readers, then summarizes Alabama's initiative to improve adolescent literacy. Last, models for effective intervention and leadership are discussed. Chapter Three identifies the methodology and research design of the study. The instrument used to gather the data, procedures followed, and selection of the sample size for the study are described. Chapter Four is an analysis of the data and study results and findings are discussed. The study summary, conclusions, and recommendations are given in Chapter Five. References and appendices conclude the study.

## Summary

America's schools have a goal of producing literate citizens who are prepared to participate in a competitive, global economy and who have the skills to pursue their own learning beyond high school. Educated, literate citizenry is vital to the continued success and prosperity of the United States. Biancarosa and Snow (2006) make this point well: As the world shifts to a more global approach to the world of work, the workforce must possess strong communication skills in general and be competent readers specifically. Students need to be able to perform well on local, state, and national assessments because the national focus is on educational accountability.

Additionally, while there are no silver bullets or magic formulas to improving literacy for middle grade students, reform efforts must be led by building administrators who are instructional leaders. Effective and engaged leaders add value to the work of teachers and leadership teams in improving student achievement. However, as Marzano, Waters, and McNulty (2005) state, when leaders concentrate on the wrong school and/or classroom practice, they can negatively impact student achievement. Ideally, according to Booth and Rowsell (2002), there is one key role of principal as the literacy leader. When principals learn to participate in shared leadership, they are supporting positive change in teacher performance. All students should graduate from high school able to read and write as to be able to earn a good living and lead richer educational lives.

# CHAPTER II: REVIEW OF LITERATURE

## Introduction

National concerns about adolescent literacy are not new. The report, A Nation at Risk, warned of an adolescent literacy crisis in the early 1980s. More recently, The Nation's Report Card: Reading 2007 (2007), pointed out that although the lowest performing students made gains in reading achievement, no significant gains have been made in overall reading proficiency for 8th grade students. While much emphasis has been placed on reading at grades K-3, unfortunately, relatively little has been placed on struggling adolescent readers. However, educators cannot ignore the glaring statistics which remind them that students who are unable to read proficiently are at risk of failure, not only in school but in life as well (Snow & Biancarosa, 2003).

America is experiencing an adolescent literacy crisis (Thompson & Winking, 2007). The crisis is so severe that a report of the Carnegie Corporation of New York's Council on Advancing Adolescent Literacy urged federal policymakers to take a more active role in promoting reading and writing. The same panel is seeking nothing short of a "literacy revolution" to keep students in and engaged in school (Gewertz, 2009, p. 1). Gewertz reports the federal government is being asked to address the structure to support adolescent literacy efforts including development of good data systems, improving low performing schools, designing new and more useful standards and assessments, and training teachers well. At the same time, the Committee to Improve Reading and Writing in Middle and High Schools is calling southern

states to action and encouraging them to set policies that will define the specific reading skills students need to master core content, identify the best teaching strategies to help middle and high school students improve comprehension, ensure a statewide application of training in these strategies, and provide the extra help struggling students need (SREB, 2009).

This literature review will first examine effective adolescent reading instruction, then identify general and specific needs for improving adolescent literacy. The importance of literacy will be discussed as will considerations for improving adolescent literacy before best practices and instructional models are explored. Next, the literature review will look at how practices and models influence struggling readers. It will also summarize Alabama's initiative to improve adolescent literacy then the influence teacher grade/subject level and experience may have. Last, models for effective leadership and the role of administrators in improving adolescent literacy will be discussed.

The Reading Next report recommends fifteen key elements of a balanced and effective adolescent literacy program which research supports as ways to improve middle and high school literacy achievement in the short term. They are as follows:

Instructional Improvements

- Direct and explicit reading comprehension instruction
- Effective instructional principles embedded in content
- Motivation and self-directed learning
- Text-based collaborative learning
- Strategic tutoring
- Diverse texts
- Intensive writing

- A technology component
- Ongoing formative assessments for students

Infrastructure Improvements

- Extended time for literacy
- Professional development
- Ongoing summative assessment of students and programs
- Teacher team
- Leadership
- A comprehensive and coordinated literacy program

The list functions as a foundation for instructional effectiveness, not an all-inclusive solution to address the diverse range of literacy issues experienced by adolescent struggling readers. The report explains that implementation of only one or two of these elements is unlikely to improve literacy for many students. Rather, it is recommended that practitioners try varied combinations of the elements to design the most effective overall program. Moreover, any combination should include, at a minimum, professional development, formative assessment, and summative assessment due to their importance in ensuring instructional effectiveness and measuring progress and effects (Reading Next, 2004).

The Reading Next report provides research based information on the tenants of each of the fifteen key elements, beginning with direct, explicit comprehension instruction. Approaches outlined in the report include comprehension strategies instruction, comprehension monitoring and metacognition instruction, teacher modeling, scaffolded instruction, and apprenticeship models. The report suggests that in addition to using and teaching students the strategies,

teachers should explain why a particular strategy is being taught and allow students to employ the strategy in multiple contexts (Reading Next, 2004).

The second element is for effective instructional principles to be embedded in content. This component applies to two forms of teachers. The first form relates to the language arts teachers teaching techniques using content-area materials to promote the transfer of skills into the context of content area materials and expanding instruction to facilitate comprehension and learning from texts. The second form relates to subject-area teachers providing or reinforcing instruction in the skills and strategies which are more effective for their subject areas. The researchers emphasize that the goal is not for subject-area teachers to become reading and writing teachers, but for them to emphasize reading and writing practices specific to their subject that will facilitate understanding. In addition, the use of tools such as graphic organizers, outlines, reviews, and guided discussions are suggested for subject-area teachers (2004).

Motivation and self-directed learning work together and is the third part of the Reading Next recommendation and is primarily concerned with promoting greater student engagement and motivation. The report suggests allowing choice as one way to "reawaken" student engagement and motivation for adolescents. Students should be provided with opportunities to self-select materials to read and topics to research and to read independently during the school day noting these practices often stop after elementary school. Another way to better engage students in literacy is to promote relevancy in what students are asked to read and learn. Teachers must first understand what students find relevant and why before helping students to understand relevance (Reading Next, 2004).

Another aspect is text-based collaborative learning, which means students should interact with each other in small groups when reading a text. The teacher designs learning opportunities

for pairs or small groups of students to collaborate to share and reading and writing skills. In this way, learning is decentralized because the meaning that is drawn from texts is negotiated through a group process. This approach promotes better oral language and content-area skills by giving students problems to discuss or solve through scaffolded engagement (Reading Next, 2004).

Strategic tutoring is the fifth facet and emphasizes that students need to be taught how to learn curriculum information while receiving tutorial help to acquire curriculum knowledge. Within strategic tutoring sessions, tutors teach learning strategies while helping students complete their content assignments. The goal of strategic tutoring is to empower adolescents to eventually complete similar tasks independently (Reading Next, 2004).

The sixth element, diverse texts, involves providing students with diverse texts that allow a range of topics at a variety of reading and difficulty levels. Students tend to become frustrated when they are forced to read books that are too difficult for them to comprehend and decode simultaneously. Texts must be below the frustration level of students if learning is to occur. Texts which are of high interest and low readability are better suited for struggling readers. Topical diversity is also important as it offers students more choices for self-selected reading and researching. Teachers should endeavor to have a range of texts in the classroom that meet the need related to multiple ability levels and background experiences (Reading Next, 2004).

Intensive writing is seventh on the list and a key component of an effective adolescent literacy program. A balanced literacy program contains opportunities for students to improve writing skills since research supports the idea that writing instruction improves reading comprehension and vice-versa. Students who are given the opportunity to write and read simultaneously show more evidence of critical thinking about reading. Moreover, many writing skills, such as grammar and spelling reinforce reading skills (Reading Next, 2004).

Due to the fact that technology plays such a dominate role in society, a technology component is crucial to an adolescent literacy program. Since technology facilitates literacy and is a medium of literacy, it should be used as both an instructional tool and topic. Technology can aide teachers in providing instructional reinforcement and opportunities for guided practice through the use of programs that help students with decoding, vocabulary, fluency and spelling. Technology has changed the reading and writing demands of today's society (Reading Next, 2004).

The ninth element is formative assessments. These assessments are often informal and occur on a daily basis. The progress monitoring data should be stored electronically as to provide easy access to teachers, administrators, evaluators and interventionists. These assessments are designed to inform instruction on a frequent basis so instructional adjustments can be made in a timely fashion to ensure students are on target to meet mastery targets (Reading Next, 2004).

Extended time for literacy is a crucial component of any adolescent literacy program. The Reading Next report strongly urges schools to provide two to four hours of "literacy connected" learning daily. It emphasizes this time is to be spent with texts and focused on reading and writing effectively and should be done in all content areas. The report suggests that teachers realize they are not just teaching content knowledge but also ways of reading and writing specific to a subject area. More professional development in this area is also recommended (Reading Next, 2004).

## Professional Development

Professional development for a literacy program is viewed as the kind of ongoing, long-term, and specific training which will more likely promote lasting, positive changes in teacher

knowledge and practice. The professional development should be systemic and include all professional staff in a school building. The training opportunities should be built into the regular school schedule and provide consistent information about new and best instructional research and practices with time to implement and reflect on the new ideas. This kind of professional development will help create and maintain a team oriented approach to improving instruction and structures that promote improved adolescent literacy (Reading Next, 2004).

Summative assessments are designed specifically for implementation with continuous progress monitoring systems. They allow teachers to track students throughout a school year and, ideally, over the academic career and allow for ongoing evaluation of implemented programs. These assessments are more formal that formative assessments and should go beyond state assessments to demonstrate progress specific to school and program goals while informing instruction (Reading Next, 2004).

Teacher teams ensure the school structure supports coordinated instruction and planning in an interdisciplinary fashion. Unlike elementary school, most middle and high school students see many teachers during the school day, causing a loss in consistency in literacy instruction. In this approach, teachers meet regularly and across disciplines to discuss students they have in common and to align instruction to meet the needs of those students. Teacher teams can be helpful in reestablishing coordinated instruction to decrease the likelihood of students falling through the cracks (Reading Next, 2004).

Leadership is imperative. The principal's clear commitment and enthusiasm to improving literacy must be visible. The principal has to be seen as the instructional leader who understands and has personal knowledge of how young people learn and struggle with reading and writing. This knowledge is needed to give the principal necessary understanding and

credibility to organize and coordinate changes in a school's literacy program. This element also applies to teacher leaders who organize curriculum improvements and professional development (Reading Next, 2004).

A comprehensive and coordinated literacy program is the last, but equally important, recommendation from Reading Next. Due to the fact that literacy needs of adolescents are diverse, the nature and intensity of instruction in a comprehensive and coordinated literacy program will vary considerably. While some students need their content teachers to make only slight accommodations, others need strategies embedded in content material, explicit strategy instruction, or basic skills and/or language elements that are the foundation of literacy competence (2004).

## The General Need for Adolescent Literacy

How many students might the Reading Next report be referencing? According to the Alliance for Excellent Education (2006), millions of middle and high school students do not have the reading and writing skills necessary to take them to the next level. Moreover, far too many students leave middle grades "disengaged and unprepared to meet the demands of higher and the world of work, much less the loftier goals of education: to participate effectively in one's community, make informed choices, and contribute to cultural well-being" (Neuman & Rao, 2004, p. 6). Almost seven thousand students drop out of high school every school day (Alliance for Excellent Education, 2006). One commonly cited reason students give is that they simply do not have the literacy skills to keep up with rigor of the high school curriculum as it becomes more complex (Kamil, 2003). In the wake of the No Child Left Behind Act (NCLB) of 2001, a lack of proficiency in reading may mean higher possibilities for retention and non-graduates. In

addition, the number of students who lack literacy skills in grades 4–12 stands at more than eight million in schools across the country (NCES, 2004).

The Nation's Report Card, as produced by the National Assessment of Educational Progress (NAEP), indicates that middle grades reading achievement is stagnant. About 70 percent of students entering the fifth and ninth grades in 2006 read below grade level. Reading Next (2004) estimates that up to 70 percent of U. S. middle and high school students require differentiated instruction. Eighth grade students who were proficient on the NAEP increased by no more than 1 percentage point from 2003 to 2007. Nationally, about a third of eighth grade students read at grade level; however, in SREB states only one in four eighth graders who took the NAEP scored at or above proficiency in reading (SREB, 2009).

Students who enter ninth grade in the lowest quartile of their class are twenty times more likely to drop out than the highest performing students (Carnevale, 2001). Moreover, approximately half of incoming ninth-grade students in high-poverty urban schools read at a sixth-grade or seventh-grade level or below (Belfanz et al., 2002). In addition, in SREB states, students repeat ninth grade more than any other grade (SREB, 2009). Poor reading ability affects every aspect of a struggling reader's options including college attendance.

Also, according to NAEP, the percentage of public high school seniors nationwide with reading competency has fallen 3 percentage points from 1992 to 2005, although two-thirds of seniors completed college prep courses (SREB, 2009). Research from ACT Inc. shows that only half of American high school students who took the ACT college admission test have the reading and writing skills they need to succeed in college and the workplace. In addition, for students who did not meet a college-readiness benchmark in reading, only 16 percent met the benchmark in mathematics and only 5 percent in science (ACT, 2006). An Achieve Inc. report (2005) on

recent high school graduates who entered college showed that 70 percent of college instructors were dissatisfied with studnets' ability to comprehend complex reading assignments.

## A More Specific Need for Adolescent Literacy

Elizabeth Sturtevant (2004) suggests what adolescent children need most are critical thinking skills, language-rich learning environments, and highly qualified teachers in order to begin to address adolescent illiteracy. Instruction in American middle and secondary schools traditionally has focused on developing students' content knowledge, emphasizing the memorization of facts. Higher-order thinking and reasoning, as well as development of reading and communication abilities, are given very limited attention in this type of instruction. Instruction that helps students build a depth of content knowledge and the ability to think critically about complex problems involves substantial interaction among teachers, learners, and text materials (including traditional materials such as books and newspapers, and information available technologically). Students cannot learn the skills they need by sitting passively and listening to their teachers lecture. They cannot learn to read critically by skimming textbooks for right answers. Students must engage in thoughtful reading, writing, problem solving, and discussion in all of their classes.

Within the instructional environment, teachers also must provide opportunities for students to complete structured observations, research, and experimentation. They must teach students strategies for effective learning (Sturtevant, 2004). Through these experiences, students can be encouraged to use language for learning in ways that are very similar to the ways that professionals use language in their work. For example, in history class, students can construct and analyze first-person accounts of events the way a historian would; in science class, students can make notes from their observations as a scientist would. Such a language-rich learning

environment is appropriate for all students in middle and secondary schools, whatever their level of previous achievement, ability or disability, or proficiency in communicating fluently in English (Ovando & Collier, 1998). However, to make this type of instruction effective, middle and high school teachers need to know and use specific teaching methods that help students successfully complete the reading, writing, and communication activities suggested above. Teachers need to know how to help their students achieve content literacy, or the ability to use reading and writing effectively for content learning (Vacca & Vacca, 2002).

It is important to understand that whether middle and high school students are in an advanced or a very basic class, they need classroom teachers who will assist them in developing their literacy abilities to the next step. Even high school seniors in advanced placement classes benefit from having teachers who help them to understand difficult vocabulary and develop enhanced study skills. Struggling readers and writers especially need highly competent classroom teachers who can guide them through important content material (Sturtevant, 2004). They also need additional assistance from teachers who have special training in reading if they are to develop higher levels of comprehension, fluency, and vocabulary knowledge. Unfortunately, the majority of middle and secondary schools today do not provide either systematic literacy instruction in content area classrooms or extra support for struggling readers.

Another contributing factor is that adolescents' perceptions of how competent they are as readers and writers, generally speaking, will affect how motivated they are to learn in their subject area classes (e.g., the sciences, social studies, mathematics, and literature). Thus, according to Alvermann (2001), if academic literacy instruction is to be effective, it must address issues of self-efficacy and engagement. The potency of one's beliefs about the self is phenomenal. In adolescence as in earlier and later life, it is the belief in the self (or lack of such

belief) that makes a difference in how capable a person feels. Although the terms self-concept and self-efficacy are sometimes used interchangeably in the research literature, they actually refer to different constructs. For example, an adolescent may have a good self-concept of herself as a reader, but her answer "Not very" to the question "How confident are you that you can comprehend a primary source on the Battle of Gettysburg?" would indicate low self-efficacy for that particular task. A statement of self-concept is domain specific, whereas self-efficacy is task specific.

Moreover, the two constructs need not relate to one another. For instance, an adolescent boy may feel highly efficacious in American Literature class yet experience few if any positive feelings of self-worth, partially due to the fact he may not value excelling in this subject area (Pajares, 1996). Perceptions of self-efficacy are central to most theories of motivation, and the research demonstrates the hypothesized connections. For example, providing adolescents who are experiencing reading difficulties with clear goals for a comprehension task and then giving feedback on the progress they are making can lead to increased self-efficacy and greater use of comprehension strategies (Alvermann, 2001). As well, creating technology environments that heighten students' motivation to become independent readers and writers can increase their sense of competency (Kamil, 2003).

The research is less clear, however, on the shifts that occur in students' motivation to read over time. Although decreases in intrinsic reading motivation have been noted as children move from the elementary grades to middle school, explanations vary as to the cause, with a number of researchers attributing the decline to differences in instructional practices (Kamil, 2003). In a review of how instruction influences students' reading engagement and academic performance, Guthrie and Wigfield (2000) concluded that certain instructional practices, while important, do

not directly impact student outcomes (e.g., time spent reading independently, achievement on standardized tests, performance assessments, and beliefs about reading). Instead, the level of student engagement (including its sustainability over time) is the greatest factor, or avenue, through which classroom instruction influences student outcomes. Guthrie and Wigfield's conception of the engagement model of reading calls for instruction that fosters: student motivation (including self-efficacy and goal setting); strategy use (e.g., using prior knowledge, self-monitoring for breaks in comprehension, and analyzing new vocabulary); growth in conceptual knowledge (e.g., reading trade books to supplement textbook information, viewing videos, and hands-on experiences); and social interaction (e.g., collaborating with peers on a science project, and discussing an Internet search with the teacher).

Other research on effective literacy instruction has shown that teachers contribute positively to an adolescents' sense of competence and self-worth when they are able to convince them that they care about them as individuals and want them to learn (Alvermann, 2001). It is also the case that teachers' perceptions of students' motivations to learn influence how hard they are willing to work to instill in them a sense of competence and self-worth. For example, Patrick Finn (1999), an educator born into a working-class Irish Catholic family on the south side of Chicago, has spent a lifetime exploring teachers' perceptions of working-class adolescents and what those perceptions mean in terms of the education students receive. According to Finn, there are two kinds of education in the United States:

> First, there is empowering education, which leads to powerful literacy, the kind of literacy that leads to positions of power and authority. Second, there is domesticating education, which leads to functional literacy, or literacy that makes a person productive and dependable, but not troublesome. (p. xv-xvi)

Students also seem aware of distinctions in the quality of education offered them, and some are speaking out, as in the case of one young woman who was overheard telling a roomful of high school teachers:

> We know we aren't very well educated. We know there are things we should know by now that we don't. But we're not stupid; most of us are really smart. You just need to show us, break it down for us, work with us and expect us to do it. (Schoenbach et al., 1999)

The strength of one's belief in the ability of self to tackle a particular task affects whether or not the task will be performed. The young woman speaking to the roomful of high school teachers perceived that she and others in her same situation were capable of learning if teachers were willing to work with them and hold them accountable. While attending to issues of self-efficacy is a start in the right direction, it takes a sustained level of student engagement and teacher support over a long period of time to meet the demands of subject matter learning (Alvermann, 2001).

All students should graduate from high school able to read and write so they will be able to earn a good living and lead richer educational lives. Fortunately, the United States has an arsenal of weapons at its disposal for meeting this goal. Significant research supports the idea that a majority of struggling adolescent readers can read words but find it difficult to comprehend increasingly complex academic texts as they progress through school. While adolescents can and do read on a regular basis, many of them simply are not reading academic texts at the level of proficiency required for achievement. Thus, making decisions on how to best modify instruction to engage students in academic reading becomes essential to improving student achievement (Snow & Biancarosa, 2004).

## Improving Adolescent Literacy

According to the National Institute of Child Health and Human Development, the most widely cited recommendation for improving reading comprehension is to increase explicit instruction and support for the use of comprehension strategies. The Report of the National Reading Panel (NRP, 2000) identified common features of this type of instruction. The features are initial discussions (which help students become aware of their own thinking processes), explicit instruction from the teacher, and sufficient opportunities for students to practice using strategies.

In addition, related to the perception of academic literacy is the research finding that comprehension is indeed a complex process—one that should not be left to chance for its development. Members of the (NRP (2000) concluded that seven types of comprehension strategies met their criteria for effectiveness in an evidence-based assessment of the experimental and quasi-experimental research on reading. The NRP's findings, which were based on research conducted in grades 3-8, suggest that the following strategies are effective ways of teaching comprehension in the middle grades, and possibly beyond:

- Comprehension monitoring – knowing when understanding falters or breaks down and which "fix-up" strategies to apply (e.g., rereading, reasoning the matter through and using cues from the sentence/paragraph's organizational structure).
- Cooperative learning – engaging with peers in problem-solving activities or to share ideas through peer-led discussions.
- Using graphic and semantic organizers (including story maps) – representing ideas by combining words, symbols, and lines to organize information.

- Answering questions – providing responses to teachers' questions and receiving feedback on responses.
- Generating questions – asking questions of one's self to understand various aspects of a text.
- Using text structure – developing an awareness of how a writer organizes information to assist readers in recalling the content of a selection.
- Summarizing – integrating ideas and generalizing information across one or more texts.

The National Reading Panel (2000) suggests that vocabulary instruction does facilitate comprehension, but made no recommendation as to the most effective method to approach the integration. The use of computer-assisted vocabulary instruction was more effective than traditional approaches as was listening to others read and preteaching vocabulary in assigned material. Applebee (1994) and Nystrand and Gamoran's (1993) suggestion is to increase the amount and quality of reading related discussions. Student participation in high quality, continuous discussions of the meaning of text is a direct way for them to increase their ability to think about and learn from text. While there is a shortage of research examining the impact of discussion-oriented approaches that measured outcomes with standardized general measures, there is substantial evidence that typical American classrooms, especially those serving high populations of poor and minority students, provide little opportunity for extended and open discussion.

Preparing teachers to teach their students to be strategic readers and writers is one of the greatest challenges facing teacher educators (Duffy, 1993). High district and state literacy standards would have little effect if teachers do not adopt and implement them into their

instructional practice. Duffy (1993) goes on to state, "If students are to be strategic…their teachers must themselves be strategic…and teachers of teachers must also be strategic" (p. 234).

Guthrie and Humenick (2006) identified four practices which positively impact engagement in and motivation for reading: (a) content goals for instruction, (b) choice and autonomy support, (c) interesting texts, and (d) opportunities to collaborate. The authors state the actual text adolescents read can be motivating or demotivating; moreover, a knowledgeable teacher who can make adaptive decisions in response to student needs and engage students in higher order thinking can increase overall active engagement. This level of engagement comes through teacher modeling, direct explanation of strategies, and scaffolded instruction (Marks, 2000). Neuman and Rao suggest that good readers rely on metacognitive skills to help them construct meaning. Some the metacognitive strategies might include rereading the paragraph, using context clues, predicting, summarizing, connecting to prior knowledge, discussing and interpreting texts in collaborative groups, and asking questions about the text, and linking writing to what is being read (2004).

## Best Instructional Practices

Research supports a positive correlation of direct instruction and improved comprehension in adolescent literacy (National Reading Panel, 2000). Direct instruction in this instance refers to teachers explaining and modeling a comprehension strategy that is followed by guided and independent practice. Direct instruction allows for continued feedback and discussion. According to Wood, Winne and Carney's (1995) studies of single strategies, direct instruction has a positive effect on the reading and writing an achievement of students of diverse abilities and backgrounds. Positive results are also evident when direct comprehension strategies are included in comprehensive reading instruction as shown in a year-long study that involved

about 4,000 urban middle school students. The students performed better when taught with a curriculum that integrated high-quality literature, writing, cooperative learning and strategy instruction as opposed to a traditional based reading and language arts instruction approach (Stevens, 2003).

Research also supports reciprocal teaching, a variation of direct instruction in comprehension focused on predicting, questioning, clarifying and summarizing (Palinesar & Brown, 1984). Rosenshine and Meister (1994) reviewed 16 research studies on reciprocal teaching and found the approach to be highly effective in improving student comprehension, especially when the teacher-student dialogue was of high quality. In a later study, Rosenshine, Meister and Chapman (1996) found that students could make more gains in comprehension when they are taught to ask questions about the texts they have read. They also found that strategy instruction is more effective when teachers present strategies in small steps, guide practice, provide ongoing correction and feedback, and engage students in extensive independent practice.

Applebee, Langer, Nystrand and Gamoran (2003) conducted a comprehensive study of middle and high school classrooms. The researchers focused the study on 64 classrooms in 19 urban and suburban school districts in five states. They concluded that advanced students were engaged in more open discussion and were more often encouraged to express their understanding and were exposed to higher academic demands than lower track students. The study suggests that strategic instruction is more appropriate and effective for students of all ability levels unlike traditional skill-based approaches.

Langer (2001) conducted a study that investigated some of the characteristics of instruction of middle and high school students in schools trying to improve performance. The study took place in four states—Florida, New York, California and Texas—and included 25

schools, 44 teachers and 88 classes for whom data was collected over a 2-year period. Results focused around six features that were present and provided distinctions between higher performing and typically performing schools. These key features were all present all the time in the higher performing schools, lending to an environment consistently supportive of increased student reading and uniting abilities.

The researchers extracted the following distinguishing features of instructions in higher performing schools: (a) skills and knowledge are taught in multiple types of lessons; (b) tests are deconstructed to inform curriculum and instruction, (c) connections are made across content and structure to ensure coherence; (d) strategies for thinking and doing are emphasized; (e) generative learning is encourage; and (f) classrooms are organized to foster collaboration and shared cognition. The researcher points out that the six features worked in conjunction with each other and the assumption should not be made that adopting one feature without the others could make the impact need to effect major change in student learning (Langer, 2001).

In her research, Carol Lee (2001) also asserts that instruction must be generative, meaning it should facilitate a wide range of problem solving. It is an idea essential to what Lee has termed “cultural modeling”. This approach to literacy instruction is suggested as one way to meet the diverse needs and reading struggles of low-income African American and Latino students as well as low-income immigrant students. Lee’s cultural modeling framework provides an explicit structure to scaffold instruction as a means to “conceptualize connections between cultural funds of knowledge and disciplinary literacy.” As stated, teachers must first be generative and understand how a student’s experience and language usage provides opportunities to make connections (disciplinary knowledge). The second task of cultural modeling is to investigate the range and routine ways students use language outside of school (cultural funds of

knowledge). Cultural modeling seeks to attain two goals. The first is to make public student strategies and habits already in use in other contexts. The second is to provide support for students to make connections between how they reason in school and out of school. Lee's research illustrates how cultural modeling can simultaneously address the needs of middle and high school struggling readers and engage them in rigorous problems in the disciplines. Because disciplinary literacy can provide access to learning in all subject areas, Lee calls it the civil right of the twenty-first century (Lee, 2001).

Culturally responsive instruction also extends English language learners' opportunities to learn by connecting home, community, and school literacy practices. The importance of building on students' home language and culture has been documented repeatedly in the literature. For example, a cultural modeling approach to teaching has been shown to be effective in motivating underachieving African American high school students to read book-length novels and engage in fairly sophisticated levels of literary analysis. This approach, which built on students' cultural knowledge and personal experiences, fostered an intellectual community in the classroom that sustained interest in reading and discussing texts over an entire school year (Lee, 2001).

## Instructional Models

Research on another approach related to literacy instruction seeks to involve struggling adolescents academically in ways that actively engage them in learning. This attempt is called the participatory model of instruction and emphasizes student involvement and texts as tools for learning rather than deposited information to be memorized and forgotten (Alvermann, 2004). The participatory model helps teachers support student academic development by scaffolding instruction and using peer interaction (small group and discussions) as opposed to skill-and-drill strategies.

Alvermann (2004) describes scaffolding literacy instruction as teaching students strategies to support their learning of new or difficult concepts then gradually withdrawing support, as students are able to apply strategies independently. Scaffolding helps reluctant and illiterate readers find reasons for wanting to read and gives them strategies for synthesizing varied reading, information, and knowledge. In a participatory model, students are encouraged to read from a mix of trade books, textbooks, magazines, newspapers, student-generated texts, digital texts, hypermedia productions, visuals, and artistic performances and they are able to interact with their peers rather than simply answering teacher questions about what they read.

The teacher-centered transmission model of instruction is common to most subject area classrooms in the United States (Alvermann, 2001). Although it is often impugned for its lock-step approach to literacy learning and for emphasizing subject matter coverage (with little depth) over more authentic activities for engaging adolescents in learning academic content, the widespread use of this model at the high school level (and to a lesser extent at the middle school level) suggests reasons for its existence. One frequently cited justification for its use is the need to address pressures coming from outside the classroom, such as accountability in meeting curriculum standards and preparing students for statewide assessments. However, pressures within the classroom to maintain order, regulate socialization patterns, and meet the constraints of time and resource availability also contribute to the transmission model's longstanding use among subject area teachers (Alvermann, 2001).

Participatory approaches to literacy instruction are no less concerned with content mastery than is the transmission model. However, rather than emphasize the teacher's role in transmitting facts and concepts (often through lecturing), participatory approaches support adolescents' academic literacy development by incorporating classroom structures that promote

peer interaction (e.g., peer-led literature discussions and reading/writing workshops) and interaction with a more knowledgeable other (e.g., scaffolded instruction whereby a teacher supports student learning and then gradually withdraws that support as students show they are capable of assuming more responsibility for their own learning). Reading apprenticeship is an example of scaffolded instruction. Its primary goal is to show adolescents "what goes on behind the curtain of expert reading" (Schoenbach et al., 1999, p. 21) by demystifying the comprehension process. Central to this approach is what is known as the "metacognitive" conversation, which is an ongoing interactive discussion between teachers and students about personal reading goals, problem-solving strategies for making sense of text, and the resources available for building knowledge beyond the text.

A distinguishing feature between participatory approaches to classroom instruction and the transmission model of teaching is the role of the text in students' learning. In transmission classrooms, texts (like teachers) are viewed as dispensers of knowledge, whereas in participatory classrooms, students use texts as tools for learning and constructing new knowledge. The range of texts used in these different classrooms also varies. In transmission classrooms, subject matter textbooks are often the de facto curriculum; in participatory classrooms, a mix of textbooks, magazines, student-generated texts, hypermedia productions, visuals, and so on are used to support and extend the curriculum (Alvermann, 2001).

Differences also exist that are no so readily recognized between these two approaches to instruction. Researchers who have conducted studies of actual classroom practice maintain that it is rarely the case that one can draw definitive lines separating participatory from transmission model classrooms. For example, as Schoenbach (1999) has noted, teaching approaches that seem theoretically opposed, or contradictory on the surface, often support one another in actual

classroom practice. A case in point – repeated several times over in the studies, Moore (1996) reviewed contexts for literacy instruction at the middle and high school level – is the finding that teachers' knowledge and beliefs about the goals that should drive literacy instruction, plus the availability of resources, influence how a particular approach is used. Thus, a participatory approach such as peer-led discussion did not necessarily look the same in different teachers' classrooms. Neither did a more teacher transmission-like discussion look the same across classrooms. In fact, often the two types of discussion were used to support one another in the same classroom over a period of time. What mattered in each instance was a teacher's knowledge and beliefs about the goals of a particular approach and the resources available to support those goals (Schoenbach, 1999).

Adolescents' beliefs and knowledge about different approaches to literacy instruction also vary with the context. In a multi-case study of adolescents' perceptions of classroom discussion at five sites across the United States (Alvermann et al., 1996), students in classrooms favoring mostly the transmission model of literacy instruction held strong views about their role as learners. In those rooms, discussions often reflected the teacher's emphasis on learning facts and covering the content rather than on students interacting with each other to construct new knowledge based on those facts. When students believed a topic was meaningless or a task unchallenging, they did not comply with the teacher's instructions to discuss the text in small groups. In their view, the topic and/or task did not merit a collaborative effort. Rather than discuss the topic as a group, students often divided it into smaller parts, with each one working independently on his or her part to produce a written response—very much like they would do had the task required them to answer questions at the end of a chapter. On the other hand, when a group of seventh graders engaged in a classroom project that required them to use several

software authoring tools to construct their own hypermedia documents for a poetry unit, discussions flowed (Myers, Hammett, & McKillop, 2000). Seated around computers, they debated how, when, and why to bring together various kinds of texts (e.g., graphics, sounds, video excerpts, and electronic text); they made suggestions that would improve each other's work; and they (rather than the teacher) decided the criteria for effectively communicating their ideas.

The differences reflected here are about much more than the two approaches to literacy instruction just discussed might suggest. They echo a larger debate in the field of education, and increasingly the public sector as well. Briefly, this debate centers on the degree to which teacher-centered instruction is superior (or inferior) to more student-centered instruction. The question most often raised is whether or not participatory approaches that engages youth in project-based learning work. In part, the answer to that question rests with how much one believes that meaningful content learning displaces literacy teaching. It would be false to claim that there are no tradeoffs. For example, project-based learning that motivates students to use their literacy skills to solve real-world problems is of little value if such skills are unavailable or at a level of development insufficient for completing a project. On the other hand, adolescents who possess the requisite literacy skills for learning content area material may not apply those skills if they are bored or unmotivated by teacher-centered instruction. Of course, nowhere is it written that one approach must prevail at the expense of the other (Alvermann, 2001).

## Special Needs

Reading and/or writing difficulty is of the most prevalent symptoms of adolescents classified with learning disabilities. Fortunately, quite a bit of research has focused on improving literacy of students with disabilities. A few of the fairly recent studies are notable.

Researchers at the University of Kansas Center for Research on Learning have extensively studied teaching content to secondary students with disabilities. They have developed lesson structures that present content using teaching strategies such as using graphic organizers and mnemonic devices to relate new concepts to students' prior knowledge. The researchers consistently found teachers able to implement the routines and students to have higher achievement (including reading) as a result (Bulgren, et al., 1997).

In their studies, Deshler et al. (2001) concluded that students with disabilities need increasing levels of intervention, depending on the severity of the disability. Level 1 interventions include modification of content. Level 2 interventions incorporate explicit strategy instruction and include varied direct and scaffolded approaches. Students with more challenging disabilities will need more progressive levels of intense instruction. The researchers' studies indicate many teachers feel they do not have time to go beyond Level 1 interventions although those strategies many not be sufficient for some students with literacy difficulty.

With the reauthorization of the Individuals with Disabilities Education Improvement Act (IDEA) came regulations for a Response to Intervention (RTI) approach for identifying students who may be eligible for specific learning disability services (U.S. Department of Education, 2004). Immediately, countless middle and secondary schools across the country that previously had no structured literacy programs began adopting the RTI model. Alabama has termed its model Response to Instruction. As interest in RTI at the secondary level grows, it offers the potential to bring about a review of school' models of adolescent literacy instruction, including its services, interventions, and terminology (Shanklin, 2008).

The International Reading Association's Commission on RTI (2009), however, cautions against the tendency of some districts and schools to race to institute RTI at the secondary level

based on primary/elementary approaches. There are several reasons why the commission's warning is assumed to be valid. First, although implementation of RTI-like tiered interventions for the early grades has been proven to be successful, there is little research currently available on the use of RTI in the upper grades (Cobb, Sample, Alwell, & Johns, 2005). This lack of research evidence alone should be enough to give pause to those middle grade teachers and administrators who demand a scientific basis for all elements of a reading program. Second, the structure and culture of middle and secondary schools may limit the feasibility of RTI as a comprehensive model of reading intervention. Additionally, weaving the language arts into all aspects of the curriculum is achieved in typical elementary grade classrooms. This does not work as easily for the history teacher working in a block schedule that may see a group of students every other day, is under strong pressure to cover the content standards and grade level expectancies of U.S. history, and is more than likely superficially knowledgeable of and less experienced in content literacy strategies. A third test to RTI programs in U.S. middle and high schools is scheduling.

If space cannot be found or created within the school day for struggling students to receive appropriate instructional supports, then RTI implementation will not be a success (Brozo, 2010). Moreover, looking at secondary reading only through a disabilities lens may reinforce stereotypes about the nature of reading for students in middle and high school.

Essential to the RTI and student achievement structure is student assessment to monitor progress and inform instruction. Some assessments are more useful than others in performing these tasks. What do criterion-based test reports tell middle level educators about struggling readers? Essentially, score reports reflect students' abilities to master grade-level content standards as measured by state mandated assessments, such as TCAP and the Alabama Reading

and Mathematics Test (ARMT). Students either score above, at, or below grade level on the standards measured by a particular test. Although this information is helpful for schools in determining whether students have successfully mastered the reading standards, these scores do not reveal why struggling readers are testing below grade level. The data we have from standardized reading assessments force us to ask the question, "What abilities do struggling middle school readers possess?" If instructional decisions for young adolescent readers are made based on criterion referenced, state mandated results, these decisions are then made on the assumption that all students who score below proficient are missing the same basic skills (Dennis, 2010).

## Struggling Readers

Research on the instruction offered to struggling elementary school readers demonstrates ensuing instruction promotes skills required for emergent readers (Allington, 2007). Linn (2000) asserted that using scores from standardized assessments in this way has "undesirable effects on teaching and learning because they [lead] to a narrowing of the curriculum and an overemphasis on basic skills". Although no "scientific evidence" exists revealing a connection between testing and increased achievement (Allington, 2007), many school districts use data from these assessments to make indiscriminate decisions about individual students (Allington, 2007). According to Dennis (2010), using results from standardized reading assessments as estimates of individual growth are "at best an approximation of the students' actual achievement level". Students scoring below proficient on state assessments are identified and often placed in supplemental or remedial reading classes, which often focus on phonemic awareness and decoding skills regardless of the grade or reading level of the students in the class (Allington, 2007). A student who scores below-proficient on the state reading assessment could very likely

spends part of the day practicing phonemic awareness and decoding strategies while spending the majority of the day with difficult subject-area texts he or she is expected to comprehend independently. At no point during the day is the student exposed to "just right" text (Allington, 2007). Allington (2007) considered placement of adolescents in supplemental reading courses that focus on early reading skills an "unintended effect" of federal education policy and explained that "most struggling readers find themselves spending much of the school day in learning environments where no theory or empirical evidence. Researchers have noted the discrepancy between the literacy expectations of struggling readers and the behaviors they demonstrate and suggested that struggling adolescents attempt to comprehend content area texts that are much too difficult. To appear successful with the reading task, struggling readers are forced to focus on specific facts within the text, but this surface-level approach to reading does not teach students how to engage or interact with text (Dennis, 2010).

Morocco et al. (2001) studied a low-income middle school whose population was 48 percent minority, mainly Hispanic. About 20 percent were classified as having learning disabilities. The students had the lowest reading scores in the district. The researchers implemented what they called a "supported literacy" curriculum that offered students authentic, student-centered literacy tasks, explicitly taught cognitive reading and writing strategies, and small and whole group activities to socially mediate learning. The researchers observed that students with disabilities in the supported literacy environments performed similarly to normally achieving and honors students and thus concluded a curriculum of authentic reading and writing was superior to a curriculum focus on isolated skills and mechanics.

## Alabama's Approach

Several initiatives have been announced in recent years designed to improve and promote student achievement. One of those, the Alabama Reading Initiative Project for Adolescent Literacy (ARI-PAL), now known as the Literacy and Justice Project, has embraced the aforementioned elements of adolescent literacy reform as well as several other best practices and has molded these practices into modules used to train middle and high school teachers to teach adolescent students reading in a strategic fashion. According to ARI, ARI-PAL strategic teaching is guided by data. The data gathered daily in the classroom provides crucial information that can guide instruction. Strategic teachers are keen observers of their students and keen reflectors of their teaching. They constantly tweak and adjust their instruction to ensure that every student is learning. Active engagement by all students is the most critical element of strategic teaching. Students must talk, write, investigate, read, and listen to others every day in every class. The ARI-PAL schools refer to this process as TWIRL (ARI-PAL Report, 2007). Strategic teaching also promotes literacy across the curriculum. The state launched the ARI-PAL program in 2006 to focus on improving literacy in grades four through nine. The purposes of the program are to (1) establish demonstration sites where the research-based elements proven to increase student learning are fully implemented, (2) build advocacy and secure funding for adolescent literacy by determining the cost of implementation for participating school systems and those that want to replicate the process, and (3) to increase the effectiveness of the ARI secondary model by making it compatible with the latest research and with the experience gained by implementing the updated model in 14 sites. Alabama's use of the Stanford Achievement Test, Tenth Edition allowed the ARI to determine that ARI-PAL schools

made greater gains in reading comprehension in all grades except in Grade 7 than did schools that were not part of the ARI-PAL pilot (ARI, 2007).

In addition, Sturtevant (2004) found the Alabama Reading Initiative is a comprehensive program which includes the goal of placing a literacy coach in every participating school. School faculties must vote (85 percent support is required) in order to join ARI. The Alabama Department of Education, in cooperation with colleges and universities in Alabama, provides ongoing training for all participants, including literacy coaches, teachers, and school administrators. Within the ARI project, literacy coaches are recruited from both within and outside of the participating schools. While some coaches are already certified literacy specialists, others are working toward their certification and can apply some of the training hours toward course credit in university courses.

All coaches must have an in-depth knowledge of literacy and writing processes as well as experience as teachers. The role of the literacy specialist in ARI includes helping teachers learn new strategies, often by modeling. A dedicated specialist will take the lead in assuring that individual student assessment is done regularly and thoroughly. She or he will also bring a continuous stream of new ideas to the school faculty. Coaches are also seen as an integral part of the school leadership team.

The Alabama Reading Initiative has been evaluated on a continuing basis since its inception. According to a report completed in 2001, "on average, ARI schools outperform schools not in the ARI (Moscovitch, 2001). However, the same report notes that some ARI schools performed much better than others. Ten key factors are cited as present in the higher-achieving schools. Among these factors are (a) that "the school has a full-time reading specialist with in-depth, hands-on reading instruction experience," (b) that "teachers re-enforce

comprehension skills for all students, not only in the language block or in language classes, but throughout the school day and across the entire curriculum," and (c) that the "principal is strongly committed to the reading initiative and knows how to provide educational leadership in the school." These findings are consistent with those of other programs, relating the importance of providing schools with a knowledgeable reading teacher who works in a coaching role with content area teachers. They also emphasize the important role of building leadership to support the literacy program.

## Effective Intervention and Teacher Influences

Intervening with middle and high school students who struggle to read is difficult for many reasons. As outlined in the Reading Next report, these students experience a wide range of challenges that require a wide range of interventions. A minority of these individuals still face difficulty simply reading words accurately. A majority of these students can read words accurately, but cannot comprehend, for many reasons, what they read. For others, they are unable to read fluently enough to facilitate comprehension. These students can read accurately and quickly enough for comprehension to take place, but lack strategies to ensure they can comprehend what they read. Example of strategies these students lack include an inability to grasp the gist of the text, notice and repair misinterpretations, and to change approaches based on the purpose of reading. Moreover, these students may not have learned how to generalize the strategies they do have to content-area literacy tasks and are unsure how to use specific strategies in particular subject areas. In addition, these problems are exacerbated when struggling students are English language learners, recent immigrants, or have learning disabilities thereby making intervention a difficult although not impossible task.

As related to teacher influences, Moje's (2008) research on literacy teaching suggests that preservice teachers are skeptical at best about their efficacy of teaching and learning strategies offered by content literacy research. She indicates that part of the self-doubt may be related to the middle grade preservice teacher's lack of experience. Novice teachers may find the strategies difficult to implement because they can be time consuming especially as it relates to covering content instructional objectives. Christianna Alger's (2009) research findings are similar to Moje's findings. Alger found evidence that novice teachers often times do not transfer reading strategy instruction to the classroom although they learned the strategies as a preservice teacher. Her research suggested another cause for lack of implementation of the strategies. Alger found evidence suggesting that novice teachers adapt to traditional school practices and leave behind much of the knowledge gained in their teacher education programs.

Moje's (2008) research also concluded that inservice or experienced middle grade teachers do not enact the teaching and learning strategies frequently enough in their classrooms. A study by Ross and McDaniel (2004) of experienced middle grade teachers enrolled in a reading master's program revealed that teachers implemented only a few key reading strategies in their classrooms. In addition, they found that experienced teachers were more likely to use the reading strategies required the least engagement and preparation.

Moje (2008) found that another potential barrier to implementing the reading strategies may be related to school environmental factors. She found that standard conventions of middle school such as divisions in subject areas, assigned grade levels, and structured class periods may have a negative influence on some middle grade teachers implementing the strategies. Each of these factors can produce their own subcultures within a school complete with cultural practices.

Moje suggested that these cultural practices can teachers to fall into patterns and routines which exclude the literacy strategies.

To teach adolescents well, literacy development must be every teacher's responsibility. Neuman and Rao (2004) suggest that teachers choose one of two mindsets as related to literacy instruction. Either they do not see teaching literacy as their responsibility or they do not know how to teach reading comprehension because they have not been taught. However, many teachers are learning to use a variety of literacy approaches within their content areas. "The expectation that each adult on the campus is responsible for the literacy skills of all students needs to become part of every school's culture and norms" (Neuman & Rao, 2004, p. 12). Neuman and Rao state educators who lead literacy reform efforts must continuously improve their own capacity to teach every student in order to be successful in building capacity in others.

## Models of Leadership Behaviors Supporting Literacy

According to Charlene Cobb (2005), the actions of a building principal who is also a literacy leader will always speak louder than the leader's words. A literacy leader observes the reading process, offers timely feedback, and creates an environment conducive to practicing the strategies. SREB's (2012) research on improving middle schools supports Cobb's position. Leadership at the most-improved middle schools gained teacher support for working with teachers as partners to take ownership of school problems and to identify proven strategies and implement them effectively. In addition, in the most-improved schools, the teacher and student moral was high and teachers were able to motivate students to place a high priority on learning. Furthermore, all principals at the most-improved middle schools reported that they strongly agreed that goals and priorities for their school were clear and that the surrounding community actively supported their school's instructional goals. The role of school administrators has

shifted to that of becoming an instructional leader (Marzano, Waters, & McNulty, 2005). Research on three leadership models will be discussed: McREL's Balanced Leadership Framework, Literacy Leadership Teams, and Reading/Literacy Coaching.

**McREL's Balanced Leadership Framework**

Marzano, Waters, and McNulty (2005) conducted a research meta-analysis focused in identifying leadership behaviors linked to student achievement. They examined 69 research studies completed or published between 1978 and 2001. The studies involved 2,802 K–12 schools and measured the effect size of leadership characteristics on student achievement and identified 21 leadership behaviors that positively impact student achievement. The researchers do not suggest that principals possess each of these characteristics, but rather they be addressed though distributive leadership that allows others to take leadership roles for the purpose of participating in the designing, implementing, and sustaining of effective changes (Marzano, Waters, & McNulty, 2005). This research has come to be known as McREL's Balanced Leadership Framework. A listing and description of each of the 21 leadership behaviors follows.

- Affirmation: Effective leaders recognize and celebrate accomplishments while acknowledging failures through a fair, systematic process.
- Change Agent: Effective leaders are willing to challenge the status quo even if it entails temporarily creating disequilibrium within the school culture.
- Contingent Rewards: Effective leaders recognize and reward individual accomplishments based on individual performance versus longevity.
- Communication: Effective leaders develop strong lines of communication between teachers, students, and staff.

- Culture: Effective leaders create a school culture founded on a shared vision of the possibilities for what the school can become.
- Discipline: Effective leaders protect teachers from issues and influences that detract from teaching time or focus.
- Flexibility: Effective leaders adapt their behaviors and encourage individual expression of diverse opinions when the situation warrants.
- Focus: Effective leaders establish and maintain clear goals and provide clear direction towards achieving those goals.
- Ideals and Beliefs: Effective leaders possess well-defined beliefs about schools, teaching, and learning; share those beliefs with the staff; and demonstrate behaviors that are consistent with beliefs.
- Input: Effective leaders involve teachers in the design and implementation of important decisions and policies.
- Intellectual Stimulation: Effective leaders expose faculty and staff to current research, theories, and practices impacting effective schooling and provide time for systematic discussion.
- Involvement in Curriculum, Instruction, and Assessment: Effective leaders are involved in helping teachers design curriculum, assessments, and instruction.
- Knowledge of Curriculum, Instruction, and Assessment: Effective leaders possess extensive knowledge of effective instructional, curricular, and assessment practices and are able to provide conceptual guidance for teachers.
- Monitoring/Evaluating: Effective leaders monitor the effectiveness of school practices and their impact on student achievement.

- Optimizer: Effective leaders inspire teachers, serve as the driving force behind major initiatives, and maintain a positive attitude by expressing a belief in the staff to achieve its goals.
- Order: Effective leaders establish and reinforce clear routines, structures, and procedures to ensure order within the school community.
- Outreach: Effective leaders advocate and speak for the school to all stakeholders
- Relationships: Effective leaders demonstrate an awareness of the personal aspects of teachers and staff.
- Resources: Effective leaders allocate resources to ensure teachers have the necessary materials and equipment and to provide teachers with appropriate staff development needed to improve instruction.
- Situational Awareness: Effective leaders are aware of the details and undercurrents that may impact the school and are able to intercede when necessary.
- Visibility: Effective leaders are highly visible to students, teachers, and parents, making frequent classroom visits and contacts with students.

**Literacy Leadership Teams**

Just as the Reading Next report recommends teacher teams be involved in literacy efforts, Craig (2009) suggests the need for literacy leadership teams (LLT) to assist the building administrator in putting into practice the 21 leadership behaviors. The LLT would serve as the guiding force behind the development of the Literacy Plan, an outline of specific initiatives designed to improve student achievement. The LLT should be comprised of a cross section of school leaders, administrators, and other school community members committed to working together to identify areas of concern and to set goals for improving student achievement. It

would use current research, theories, and practices linked to student achievement to engage in professional dialogue, use best practices, and make decisions to improve literacy.

**Reading/Literacy Coaching**

Another approach proving to be successful in improving student achievement is the investment in reading or literacy coaches. Walpole and Blamey (2008) assert that literacy coaching is an evolving science. Their goal is to improve teacher knowledge and skills to increase the literacy of all children. As coaching evolves, it remains a critical task for reading coaches to work systematically with both principals and teachers. Reading coaches are neither administrator nor teachers and often find themselves in a no-man's land of sorts, a situation Walpole and Blamey (2008) refer to as conflicting and ambiguous. Reading coaches classify themselves as learners, grant writers, school planners, curriculum experts and researchers. However, their primary function should be helping teachers find and implement new instructional strategies.

Reading coaches help teachers master the art of matching targeted, appropriate instructional strategies to individual student needs. This is part of the reason reading coaches are vital to the success of literacy reform efforts. According to the research of Bean, Swan and Knaub (2003), reading coaches provide resources to teachers, assess students with reading difficulties, develop and implement professional development for teachers, and assume leadership of the school's reading program. The researchers conducted a study of reading coaches in 111 exemplary Title I schools with exemplary reading programs by surveying principals of each of school (Bean, et al., 2003). The results confirmed the vital importance of reading coaches. Principals viewed the reading coach as important to the success of the reading program. The researchers found that while reading coaches perform many instructional tasks,

leadership, carried out in many different ways, emerged as an essential role/function of the reading coach. Demographically, all participants were female and had an average of twenty years of teaching experience. They each had advanced training in reading and came from a variety of school settings (Bean, et al., 2003).

Continual professional development is an important factor as reading coaches provide academic rigor and strategic teaching. Careful planning based on student needs should be done to provide effective professional development training that offers knowledge of research based instructional practices for teachers. Training sessions should be followed with classroom modeling and observations of teacher implementation by the reading coach and principal. The best way to help teachers reflect on their teaching strategies is to have them constantly evaluating the impact of instruction on student success. Providing ineffective, too brief training is actually far worse than conducting no training at all. It sends the message that the needed improvements or the focus is not all that important (Walpole & Blamey, 2008).

Elizabeth Sturtevant (2004) found five major commonalities of programs which included coaches as a part a part of an overall adolescent literacy program. The common approaches seemed to mean the difference in successful and unsuccessful programs. They are:

- Coaching is seen as part of a larger system of professional development and support for teachers and the school community as a whole. The literacy coach is integrated into this system, with intensive training for the coaches as well as for teachers and school administrators.
- Selection of coaches takes into account the knowledge and skills needed, and the ease with which the coach will be able to establish respect and trust in the school. Often, ideal candidates are respected teachers within the school who have agreed to take

substantial time to obtain certification from their state as a reading specialist, as well as training on coaching with middle and high school teachers. In some cases, training programs provided by state or regional agencies are linked to university programs so that teachers can get partial credit toward certification.

- Support for the coaches is ongoing. Within the single-district examples, the district holds regular meetings for the coaches to provide training and support. In the larger projects (Alabama Reading Initiative and the Reading Success Network), a system is established that allows meetings to be held among groups of coaches and principals from schools in the same region.
- Coaches are seen as supporting, but not replacing, teacher knowledge. Content teachers are expected to attend professional development sessions to learn important theoretical and practical information about literacy processes and improvement. In many cases, this professional development is offered by the coaches through ongoing inquiry discussion groups for teachers in their own schools. A key component in the process is that teachers are included as experts in their own content areas; they team with the coach for more effective instruction. One-shot staff development programs without follow-up (which have been commonplace in many school districts) are avoided.
- Funding sources are available. For all projects, funding is necessary to hire coaches and provide ongoing professional development and support for coaches, teachers, and administrators. The models require a long-term commitment, and concern about continuance of funding is common. For example, the Alabama initiative began with funding from both a business partner and the state. Currently, funding has shifted to

the school districts with some state support. Budgetary concerns within the state have affected program expansion.

Literacy coaches have the ability to make a positive difference in the lives of teachers and students. Teachers are both the head and the heart of the classroom. They are the decision makers who are ultimately responsible for helping each and every child succeed. No scientific research recommends supplanting the classroom teacher with a commercial programs and practices. However, reading coaches are charged with the responsibility of evoking passion and perpetual growth so that every teacher can effectively achieve student success.

## Summary

This literature review first presented research on effective adolescent reading instruction, then identified general and specific needs for improving adolescent literacy. The importance of literacy was discussed as were various considerations for improving adolescent literacy. Best practices were identified and instructional models are explored. The review of literature presented research on how literacy practices and models influence struggling readers. It also summarized Alabama's initiative to improve adolescent literacy then reviewed the influence teacher grade/subject level and experience may have on implementing the strategies. Last, models for effective leadership and the role of administrators in improving adolescent literacy were discussed.

Schools that develop a framework for shared literacy leadership and reform efforts become communities of best practices where improving adolescent literacy is the responsibility of all stakeholders. These kinds of schools are able to implement effective strategies and intervention which promote teaching and learning in an engaging, motivating, and invigorating way; the kind of school every teacher and student deserves.

# CHAPTER III. METHODS

## Introduction

Alabama, like most other states, collects data about what takes place in classrooms, schools, districts, and communities to explain the academic performance of students. States keep much more detailed information on statistics such as per pupil expenditures, teacher certification levels, attendance, assessment results, finances, and free and reduced lunch percentages. While this information does yield some useful information about schools and districts, this information does not capture the essence of what schools may be doing in terms of curriculum, instruction, teacher professional development, leadership, or establishing the elements of a learning environment. All of these features might make a significant difference in building capacity to improve adolescent literacy overall. However, research results that are accessible, organized, and easily transferred to practitioners can increase the likelihood effective education practices (Walters, Marzano & McNulty, 2003).

The Alabama State Department of Education (ALSDE) developed a process for improving adolescent literacy and intervening in schools with consistently low academic performance. According to the ALSDE's website, this initiative was formally known as the Alabama Reading Initiative Project for Adolescent Literacy (ARI PAL), but is now called Literacy and Justice for All Project (http://www.alsde.edu/html/sections). While several middle grades schools became a part of the ARI PAL, many schools which serve middle grades did not.

Some of the remaining schools have been quite successful at improving reading achievement for adolescents, yet relative achievement gaps still remain in other schools.

Moreover, in 2011 the Alabama Department of Education developed Alabama's Action Plan for Literacy. According to its introduction, the purpose of this plan is to "provide a framework for action by defining the expectations that support literacy development for learners from birth through grade 12. Literacy development is the shared responsibility of all literacy stakeholders. Literacy stakeholders include parents, family members, caregivers, representatives from community organizations and agencies, and educators. All literacy stakeholders are encouraged to use this Action Plan for Literacy to ensure that every student has the literacy skills necessary to graduate college and/or be career-ready" (Alabama Department of Education, 2011).

## Purpose of the Study

The purpose of this study was to learn what reading comprehension strategies reading researchers view as the most effective for improving literacy among middle grade students. Also, this study sought to learn more about two factors (teacher grade level and experience) which may influence teacher use of reading strategies. In addition, administrative support for use of the reading strategies was investigated.

This research sought to identify which strategies teachers use and how frequently they use them. Moreover, the study examined if use of the strategies is influenced by the grade level a teacher taught or by the number of years of experience a teacher had. In addition, the study identified the level of administrative support teachers believe they receive and if the level of support influences the use of the strategies. Teacher use of strategies is significant because middle grade reading achievement is stagnant in southern states and because educator's

awareness and discourse related to the adolescent literacy problem needs to be brought to the forefront of middle grade discussions. Also, as Alabama leads in addressing adolescent literacy, lessons learned from K–3 reading initiatives can help grades 4–8, and, most importantly, literacy is critical for the success for all students. This chapter identifies the research design and methodology and of the study. The instrument used to gather the data, procedures followed, and how the sample size was selected for the study are described.

## Significance of the Study

Research related to adolescent literacy is relatively new. Moje (2008) states that it has only been since 2003 that unprecedented attention and research has been given to the literacy achievement of adolescent students. While much has been written about best instructional practices for adolescent literacy and some has been written related to leadership qualities necessary to facilitate literacy reform in the middle grades, not much has been examined to identify strategies practicing teachers believe are important and successful. This information is important because it can help educators understand which best practice strategies are widely used among teachers. Secondly, this study investigated if grade level taught or teacher experience influenced teacher use of the strategies. There is very limited research on those two specific factors and this study can contribute the growing body of research on implementation of reading strategies. Third, this study identified the degree to which teachers feel supported by building leadership and administration in the use of said strategies. This information will hopefully guide thought about ways in which administrators and building leaders could support literacy reform efforts at the middle school level.

## Research Questions

The following research questions were derived from research presented in the review of literature to add to the growing the body of knowledge on effective reading strategies for adolescent students.

1. What strategies have reading researchers identified as most effective for improving reading literacy among middle grade students?

2. To what extent, if any, does the grade level that a teacher teaches influence his/her use of the strategies?

3. To what extent, if any, does a teacher's years of experience in teaching influence his/her use of the reading literacy strategies?

4. To what extent, if any, does administrative support influence whether or not teachers use research-based reading literacy strategies?

## Research Design

Research question one is designed to be answered by the researcher's careful analysis and synthesis of research strategies presented in the review of literature. The researcher used four definitive pieces of research on strategies proven to improve adolescent literacy. They were the Reading Next Report (2004), two studies conducted by Donna Alvermann (one done for the National Reading Conference (2001) and the other a multicase study [1996]), and research from the Alabama Reading Initiative (2007). Ten critical strategies emerged as common to each of the four pieces of research. These ten strategies were then used as a basis for the survey instrument.

The remaining research questions were answered based on survey results. From the survey of middle grade teachers, descriptive research methodology was used to identify the reading strategies teachers used and believed to be most important and to assess the degree to

which teachers felt supported in using the research-based strategies. Chi-square analysis was the methodology chosen to interpret the survey results for research questions two, three, and four. Chi-square testing is a statistical test commonly used to compare observed data with data expected to be obtained according to a specific hypothesis. Chi-square tests are used to determine if statistical deviations (differences between observed and expected outcomes) are the result of chance, or if they were due to other factors. This is done through an analysis of contingency tables designed to test each research question (Ross & Shannon, 2008). Chi-square testing allows the investigator to conclude that some other factor, not chance, is at work, causing the observed to differ from the expected. The chi-square test tests what researchers call the null hypothesis**,** which states that there is no significant difference between the expected and observed result. This method was selected as a means to test the collected data in an accurate and systematic fashion (Isaac & Michael, 1981).

## Participants

This study identified teachers of schools which had not been trained in the Alabama Reading Initiative Project (ARI PAL) for adolescent Literacy. Each eligible school contained middle grades ($6^{th}$ – $8^{th}$). The teachers were identified from schools within one of Alabama's inservice regions. The researcher first identified all school systems with the targeted inservice region then selected schools within the system that met the study eligibility requirements (non ARI PAL and $6^{th}$, $7^{th}$, and/or $8^{th}$ grades in the school building). Schools that had already received formal training in the state's literacy modules were eliminated from the study. The researcher obtained a list of previously trained schools from the Alabama Department of Education Reading Initiative office and confirmed with participating school systems the level of state training, if any, received. A detailed description of the population is provided in Chapter 4.

## Instrumentation

### Instrument Development

A survey was developed to gain information about reading instruction for adolescent students. The target population was teachers who deliver reading instruction, either directly or indirectly, to these $6^{th}$–$8^{th}$ grade students on a regular basis. For study purposes, "regular basis" was defined as being three to five days per week. The three-part survey was called The Teacher Inventory for Reading in the Middle Grades (see Appendix 1) and was designed in consideration of information presented in the literature review.

Section I of the instrument collected the following demographic information on each participant: Grade or Grades Taught, Total Number of Years Teaching, Number of Years Teaching Reading, Reading as a Subject or embedded in a Core Subject, and Percent of Students in the School receiving Free and/or reduced meals. Section II of the instrument listed the ten key strategies identified from the review of literature as most important for improving adolescent literacy. Teachers were asked to identify the frequency of use for each strategy with options being Never, Once a Month, 2–3 Times per Month, Once a Week, 2–3 Times per Week, or Daily.

The last section, Section III, of the instrument was a list of the strategies teachers used and to improve adolescent literacy. This section contained an ordinal scale for teachers to rate the degree to which they felt supported by building administration in using the strategies they identified. The scale consisted of the following options: (1) Never, (2) Rarely, (3) Sometimes, (4) Frequently, (5) Always. The McREL's Balanced Leadership Framework which was derived from a study Marzano, Waters, and McNulty (2005) completed and is a reminder of the importance of identifying leadership behaviors which are likely to lead to student achievement.

The survey was sent to teachers at schools included in the sample population. They were asked to rate each of the researched best practices across two areas: (1) How frequently they employed the strategy, and (2) if they felt supported by principals in using the identified research based strategies.

The instrument was distributed using an Auburn University required electronic survey service called Qualtrics. Electronic distribution was chosen over traditional mail delivery for three reasons. First, studies have found that mail distribution does not produce significantly higher response rates than electronic distribution (Ammentorp, Rasmussen, Norgaard, Kirketerp, & Kofoed, 2007; Dixon & Turner, 2007). Second, the number and location of participants made electronic distribution timelier and less expensive. Lastly, the researcher had readily available access to email addresses of superintendents and principals in all schools in the identified inservice region.

**Content Validity**

Carol Roberts (2004), in her book *The Dissertation Journey*, states that when a researcher develops his or her own instrument or modifies an existing one, it must undergo field testing. Appropriateness of item content was established in two ways. First, a panel of seven expert educational instructors with advanced training in best instructional practices for reading provided feedback on the following aspects of the survey: instructions, clear/concise wording, appropriate answer choices, sufficient detail, quality of survey items, length, and convenience. The instrument was revised to reflect the recommendation from the panel of experts which included adjustments to wording and modifications to answer choices.

The second way item appropriateness was documented following the review of the expert panel was to administer the survey to sixth–eighth grade teachers in a local school system not

included in the sampling population. The process was a mock administration of the survey where the survey was sent via email to building principals who forwarded the survey to all sixth, seventh, and eight grade reading teachers for completion. In addition to being sent the link for the survey, teachers were asked email feedback on the survey to the researcher. These teachers, too, were asked to review the survey for instructions, clear/concise wording, appropriate answer choices, sufficient detail, quality of survey items, length, and convenience. Increasing font size of the survey was the only suggestion and revision made.

**Reliability**

Reliability of the survey was established using the entire sample and calculating Cronbach's alpha, a coefficient of reliability, or internal consistency. According to Ross and Shannon (2008), the more consistent the results from an evaluation are, the more reliable they are. The most commonly used internal consistency reliability estimate used by researchers is Cronbach's alpha. Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group (Ross & Shannon, 2008). The coefficient alpha if item deleted was reduced for all ten items, indicating that each of the items increased the reliability of the Teacher Inventory for Reading in the Middle Grades (see Table 1). The reliability coefficient for the Teacher Inventory for Reading in the Middle Grades was .99 (see Table 2).

Table 1

*Item Total Statistics for Cronbach's Alpha*

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|---|
| Strategy 1 | 279.0000 | 89296.000 | .976 | – | .990 |
| Strategy 2 | 279.0000 | 87199.000 | .995 | – | .989 |
| Strategy 3 | 279.0000 | 87327.000 | .992 | – | .990 |
| Strategy 4 | 279.0000 | 88516.000 | .999 | – | .989 |
| Strategy 5 | 279.0000 | 96064.000 | .968 | – | .990 |
| Strategy 6 | 279.0000 | 103948.000 | .925 | – | .994 |
| Strategy 7 | 279.0000 | 90796.000 | .996 | – | .989 |
| Strategy 8 | 279.0000 | 93175.000 | 1.000 | – | .989 |
| Strategy 9 | 279.0000 | 96879.000 | .984 | – | .990 |
| Strategy 10 | 279.0000 | 96879.000 | .984 | – | .990 |

Table 2

*Reliability Statistics for Cronbach's Alpha*

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .991 | .997 | 10 |

**Response Rate**

To improve the rate of return, three strategies were employed. First, an introductory letter that assured the superintendent of the legitimacy, value of the study, and its benefit to the

participant was prepared and shared with participants (see Appendix 2). Second, the anonymity and confidentiality of the participants of study was confirmed and each participant was offered a copy of the summary of the results in the information letter (see Appendix 3). Third, two follow-up email messages were sent to non-responders. The first reminder was sent one week after the initial message and the second was sent approximately two weeks after the initial message. The researcher had not planned a third follow-up communication; however, it became necessary when the response rate was only 37% after the second reminder was sent (see Appendix 4). The third reminder improved the response rate to 52% or 92 out of 177 teachers eligible to be surveyed.

## Data Collection Procedures

Auburn University's IRB department approved this study, Protocol #11-223, in early February 2012 (see Appendix 5). The data collection process began immediately. After selected superintendents provided written permission for teachers in their districts to be surveyed, an introductory letter along with the letter of endorsement was sent to principals of schools included in the sample population a week prior to the survey being sent. A cover letter and survey link was then sent to principals with a request for the principal to forward the survey to applicable teachers (see Appendix 6). In some instances, it was necessary to contact both superintendents and principals by telephone if they did not respond to email messages. Two follow-up email messages were sent at one and three week intervals before a third and final request was sent.

## Data Analysis

Survey instrument data was collected using Qualtrics. At the end of the survey period, responses were exported to SPSS. After the data were processed, a series of descriptive statistics

tests were run in addition to contingency test analysis using Chi-square testing. Results of Chi-square tests were interpreted and reported in Chapter 4.

## Summary

The purpose of this study was to (1) identify which strategies researchers identify as the most effective for middle grade students, (2) determine which strategies teachers identify as important, (3) examine grade level taught and teacher experience as influential factors, and (4) assess the degree to which teachers feel supported in using the identified strategies. A survey, The Teacher Inventory for Reading in the Middle Grades, was designed by the researcher to collect data about best practices related to improving adolescent literacy. The strategies in the survey were the ten essential elements synthesized from the review of literature. Content validity of the instrument was established through an expert review and a field test of reading teachers. The reliability coefficient as measured by Cronbach's Alpha for the Teacher Inventory for Reading in the Middle Grades was .99. Surveys were sent electronically using Qualtrics and data was analyzed using SPSS, Version 19. Response rate improved to 52% from 37% after the researcher communicated a third time with non-responders.

# CHAPTER IV. RESULTS AND ANALYSIS

## Introduction

Chapter 4 presents the research findings of this study. As stated in Chapter 1, research suggests adolescents lack the reading literacy skills necessary to participate in an increasingly complex world. However, as educators, we cannot ignore the glaring statistics reminding us that students who are not able to read proficiently are at risk for failure, not only within the school culture but also within society.

The purpose of this study was to (1) identify which strategies researchers identify as most effective for improving literacy among middle grade students, (2) determine which strategies teachers identify as important, and (3) the degree to which teachers feel supported by administrators and leadership teams in using the identified strategies. Identification of effective reading strategies sought to further contribute to the modification of reading instruction. Thus, determining how to effectively modify instruction as a means of engaging students in academic reading becomes paramount to improving student achievement (Moje, Overby, Tysvaer, & Morris, 2008).

## Research Questions

The following research questions were generated from the knowledge and information gathered from the review of literature outlined in Chapter 2.

1. What strategies have reading researchers identified as most effective for improving reading literacy among middle grade students?

2. To what extent, if any, does the grade level that a teacher teaches influence his/her use of the strategies?

3. To what extent, if any, does a teacher's years of experience in teaching influence his/her use of the reading literacy strategies?

4. To what extent, if any, does administrative support influence whether or not teachers use research-based reading literacy strategies?

## Description of the Population

The population sample included teachers of grades six, seven, and eight who were assigned to schools within one Alabama Inservice Center Region. These teachers had not been previously trained in any of Alabama's literacy modules as offered through ARI PALS or the Literacy and Justice Project. Of the 21 school systems within this Inservice Center Region, teachers in 17 systems were eligible to participate in the study. From the 17 eligible school systems, the researcher was able to obtain permission to survey teachers in 11 of the school systems. The 11 school systems represented 23 eligible schools containing grades six through eight. The total number of available participants to be surveyed was 177. The total number of teachers completing the survey was 92 for a response rate of 52%.

Of the respondents, 41% reported teaching sixth grade, 48% identified seventh as the grade level taught, and 46% answered eighth grade as the level taught. These numbers indicate that at least 35% of respondents taught more than one grade level. When asked how many years of teaching experience respondents had, the response was as follows: 10% had taught for one to three years, 33% had taught four to ten years, 35% had taught 11 to 20 years, and 22% had taught 20 years or more. The respondents also reported on the number of years they had spent teaching reading: 14% had taught reading for one to three years, 45% had taught reading four to

ten years, 20% had taught reading 11 to 20 years, 9% had taught reading 20 years or more while 12% had no experience teaching reading. When asked how reading instruction was delivered to students, 51% of respondents reported teaching reading as a separate core subject, 37% indicated reading was taught as a part of another subject, while 12% selected the option indicating they did not teach reading.

In responding to the question about the socio economic status of the school, teachers reported the following: 58% taught in schools where 80% or more of students received free and/or reduced meals, 32% taught in schools where 50% to 79% of students received free and/or reduced meals, and 10% taught in schools where less than 50% of students received free and/or reduced meals.

**Research Question 1: What strategies have reading researchers identified as most effective for improving reading literacy among middle grade students?**

After analyzing the survey responses, statistical data indicated the first five strategies (explicitness during reading instruction; activation of/connection to prior knowledge; consistent student engagement; explaining/modeling/practicing comprehension strategies; and use of predicting, questioning, clarifying, and summarizing techniques) as the strategies the participants most often selected when asked to identify how frequently the strategy is used within their classrooms as shown in Table 3.

Table 3

*Descriptive Statistics for the First Five Strategies for Use*

| | | Explicitness | Connection To Prior Knowledge | Consistent Student Engagement | Explaining Modeling Practicing Strategy | Predicting Questioning Clarifying |
|---|---|---|---|---|---|---|
| N | Valid | 92 | 92 | 92 | 92 | 92 |
| | Missing | 0 | 0 | 0 | 0 | 0 |
| Mean | | 2.7634 | 2.8602 | 2.8710 | 2.8495 | 2.8280 |
| Std. Deviation | | .57856 | .37854 | .36789 | .41563 | .40710 |
| Sum | | 257.00 | 266.00 | 267.00 | 265.00 | 263.00 |

Participants responded to the remaining five strategies (use of graphic/semantic organizers, use of diverse and high interest texts, comprehension monitoring during reading, incorporation of high quality discussions related to reading/text, and opportunities for student collaboration during reading activities) slightly less as shown in Table 4.

Table 4

*Descriptive Statistics for the Last Five Strategies for Use*

| | | Graphics Semantic Organizers | Diverse High Interest Texts | Comprehension Monitoring During Reading | High Quality Discussions | Student Collaborations |
|---|---|---|---|---|---|---|
| N | 92 | 92 | 92 | 92 | 92 | 92 |
| | 0 | 0 | 0 | 0 | 0 | 0 |
| Mean | | 2.6344 | 2.3763 | 2.7419 | 2.6774 | 2.5914 |
| Std. Deviation | | .54742 | .72102 | .54977 | .59273 | .61213 |
| Sum | | 245.00 | 221.00 | 255.00 | 249.00 | 241.00 |

Likewise, the first five strategies (explicitness during reading instruction; activation of/connection to prior knowledge; consistent student engagement; explaining/modeling/ practicing comprehension strategies; and use of predicting, questioning, clarifying, and summarizing techniques) were the strategies participants most often selected when asked about the amount of administrative support received when using the strategies within their classrooms as shown in Table 5.

Table 5

*Descriptive Statistics for the First Five Strategies for Administrative Support*

| | | Admin. Support Explicitness | Administrative Support Activation of Prior Knowledge | Administrative Support Consistent Engagement | Administrative Support Explaining Modeling Practicing Strategy | Administrative Support of Predicting Questioning Clarifying |
|---|---|---|---|---|---|---|
| N | Valid | 92 | 92 | 92 | 92 | 92 |
| | Missing | 1 | 1 | 1 | 1 | 1 |
| Mean | | 2.7935 | 2.7826 | 2.8370 | 2.8478 | 2.7935 |
| Sum | | 257.00 | 256.00 | 261.00 | 262.00 | 257.00 |

The remaining five strategies (use of graphic/semantic organizers, use of diverse and high interest texts, comprehension monitoring during reading, incorporation of high quality discussions related to reading/text, and opportunities for student collaboration during reading activities) were the strategies participants least often selected when asked about the amount of administrative support received when using the strategies within their classrooms as shown in Table 6.

Table 6

*Descriptive Statistics for the Last Five Strategies for Administrative Support*

| | | Adm. Support Graphic Semantic Organizers | Adm. Support Diverse High Interest Texts | Adm. Support Comprehension Monitoring During Reading | Adm. Support High Quality Discussions | Adm. Support Student Collaborations |
|---|---|---|---|---|---|---|
| N | Valid | 92 | 92 | 92 | 92 | 92 |
| | Missing | 1 | 1 | 1 | 1 | 1 |
| Mean | | 2.7717 | 2.6630 | 2.7065 | 2.7065 | 2.7174 |
| Sum | | 255.00 | 245.00 | 249.00 | 249.00 | 250.00 |

For the purposes of this study, analysis was provided for the first five strategies and their relevance as related to the remaining research questions. This was done for three reasons. First, the first five strategies were most often selected by teachers for each section of the survey where they rated use of and support for the strategies. Second, presenting and analyzing chi-square tables for each strategy would have proved to be too massive for the scope of this study. Third, not presenting the data on the last five strategies gave the researcher an option for future study.

**Research Question 2: To what extent, if any, does the grade level that a teacher teaches influence his/her use of the strategies?**

For this research question, each of the top five strategies were analyzed using contingency tables and chi-square tests to determine if there is a relationship between the grade level a teacher teaches and a teacher's actual use of the strategy. The chi-square analysis was chosen to test the research hypothesis that there is a relationship between the grade level a

teacher teachers and a teacher's actual use of the strategy ($H_1$: $\mu > .05$). The competing hypothesis, the null, state there is no relationship between the grade level a teacher teachers and a teacher's actual use of the strategy ($H_0$: $\mu \neq .05$). While the null hypothesis can never be proven because testing the hypothesis is a prediction, interpretation of data can cause the researcher to reject a null hypothesis or fail to reject a null hypothesis (Ross & Shannon, 2008). In addition, Phi and Cramer's V will be analyzed. Phi and Cramer's V are measures of the strength of association between two variables when one or both are at the nominal level of measurement (http://www.csub.edu, 2000).

### *Strategy 1 – Grade Level Taught and Explicitness*

Each of the five strategies were analyzed and compared to the grade level a teacher taught. Respondents identified themselves as a sixth, seventh or eighth grade teacher or selected any combination of these three grade levels. In reviewing the cross tabulation table for this strategy it should be noted that 66.7% of cells had an expected count less than 5. Therefore, the Fisher's Exact test results were used since the Chi-square test assumes that fewer than 20% of cells have an expected cell count less than 5 (Ross and Shannon, 2008). There is no such assumption for the Fisher test; therefore, the analysis provided for each strategy is based on the Fisher's Exact Test beginning with Table 7.

Table 7

*Chi-square Tests for Grade Level Taught and Explicitness*

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) | Point Probability |
|---|---|---|---|---|---|---|
| Pearson Chi-square | 10.026[a] | 6 | .124 | .113 | | |
| Likelihood Ratio | 9.147 | 6 | .165 | .269 | | |
| Fisher's Exact Test | 9.221 | | | .088 | | |
| Linear-by-Linear Association | .126[b] | 1 | .723 | .762 | .391 | .057 |
| N of Valid Cases | 92 | | | | | |

[a] 8 cells (66.7%) have expected count less than 5. The minimum expected count is 1.11.

[b] The standardized statistic is -.355.

The Fisher's Exact test yielded a p-value of .088 (= 9.221). This value suggests that the grade level of the teacher does not significantly affect the use of explicitness as a strategy by the teachers, failing to reject the null hypothesis at $\alpha = .05$. A Phi of .33 and Cramer's V of .23 indicate a small strength of association between the variables.

***Strategy 2 – Grade Level Taught and Use of Activation of and Connection to Prior Knowledge***

In reviewing the cross tabulation table for this strategy it should be noted that 66.7% of cells had an expected count less than 5 (Table 8).

Table 8

*Chi-square Tests for Grade Level Taught and Connection to Prior Knowledge*

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) | Point Probability |
|---|---|---|---|---|---|---|
| Pearson Chi-square | 3.114[a] | 6 | .794 | .919 | | |
| Likelihood Ratio | 3.109 | 6 | .795 | .947 | | |
| Fisher's Exact Test | 3.591 | | | .904 | | |
| Linear-by-Linear Association | .559[b] | 1 | .455 | .511 | .266 | .067 |
| N of Valid Cases | 92 | | | | | |

[a] 8 cells (66.7%) have expected count less than 5. The minimum expected count is .18.

[b] The standardized statistic is -.748.

The Fisher's Exact test yielded a p-value of .904 (= 3.591). This value suggests that the grade level of the teacher does not significantly affect the use of prior knowledge as a strategy by the teachers, failing to reject the null hypothesis at $\alpha = .05$. A Phi of .18 and Cramer's V of .13 indicate a small strength of association between the variables.

### *Strategy 3 – Grade Level Taught and Consistent Student Engagement*

In reviewing the cross tabulation table for this strategy it should be noted that 50% of cells had an expected count less than 5 (Table 9).

Table 9

*Chi- square Tests for Grade Level Taught and Consistent Student Engagement*

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) | Point Probability |
|---|---|---|---|---|---|---|
| Pearson Chi-square | 1.446[a] | 3 | .695 | .703 | | |
| Likelihood Ratio | 1.428 | 3 | .699 | .725 | | |
| Fisher's Exact Test | 1.712 | | | .609 | | |
| Linear-by-Linear Association | .201[b] | 1 | .654 | .689 | .378 | .096 |
| N of Valid Cases | 92 | | | | | |

[a] 4 cells (50.0%) have expected count less than 5. The minimum expected count is 1.85.

[b] The standardized statistic is -.448.

The Fisher's Exact test yielded a p-value of .61 (= 1.712). This value suggests that the grade level of the teacher does not significantly affect the use of consistent student engagement as a strategy by the teachers, failing to reject the null hypothesis at $\alpha = .05$. A Phi of .13 and Cramer's V of .13 indicate a very small strength of association between the variables.

### *Strategy 4 – Grade Level Taught and Explaining/Modeling/Practicing*

In reviewing the cross tabulation table for this strategy it should be noted that 66.7% of cells had an expected count less than 5 (Table 10).

Table 10

*Chi-square Tests for Grade Level Taught and Explaining/Modeling/Practicing Techniques*

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) | Point Probability |
|---|---|---|---|---|---|---|
| Pearson Chi-square | 8.678[a] | 6 | .193 | .143 | | |
| Likelihood Ratio | 7.771 | 6 | .255 | .262 | | |
| Fisher's Exact Test | 7.337 | | | .187 | | |
| Linear-by-Linear Association | 3.565[b] | 1 | .059 | .064 | .036 | .016 |
| N of Valid Cases | 92 | | | | | |

[a] 8 cells (66.7%) have expected count less than 5. The minimum expected count is .18.

[b] The standardized statistic is 1.888.

The Fisher's Exact test yielded a p-value of .19 (= 7.337). This value suggests that the grade level of the teacher does not significantly affect the use of explaining/modeling/practicing techniques as a strategy by the teachers, failing to reject the null hypothesis at $\alpha = .05$. A Phi of .31 and Cramer's V of .22 indicate a medium strength of association between the variables.

### *Strategy 5 – Grade Level Taught and Use of Predicting, Questioning, Clarifying, and Summarizing Techniques*

In reviewing the cross tabulation table for this strategy it should be noted that 50% of cells had an expected count less than 5 (Table 11).

Table 11

*Chi-square Tests for Grade Level Taught and Use of Predicting, Questioning, Clarifying, and Summarizing Techniques*

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) | Point Probability |
|---|---|---|---|---|---|---|
| Pearson Chi-square | 4.108[a] | 3 | .250 | .279 | | |
| Likelihood Ratio | 3.906 | 3 | .272 | .311 | | |
| Fisher's Exact Test | 3.806 | | | .275 | | |
| Linear-by-Linear Association | 1.431[b] | 1 | .232 | .244 | .142 | .047 |
| N of Valid Cases | 92 | | | | | |

[a] 4 cells (50.0%) have expected count less than 5. The minimum expected count is 2.59.

[b] The standardized statistic is 1.196.

The Fisher's Exact test yielded a p-value of .28 (= 3.806). This value suggests that the grade level of the teacher does not significantly affect the use of predicting, questioning, clarifying, and summarizing techniques as a strategy by the teachers, failing to reject the null hypothesis at $\alpha = .05$. A Phi of .31 and Cramer's V of .22 indicate a medium strength of association between the variables.

**Research Question 3: To what extent, if any, does a teacher's years of experience in teaching influence his/her use of the reading literacy strategies?**

For this research question, each of the top five strategies were analyzed using cross tabulation results and chi-square tests to determine if there exists a relationship between the

number of years of teaching experience a teacher has and a teacher's actual use of the strategy. The chi-square testing methodology was chosen to test the research hypothesis that there is a relationship number of years of teaching experience a teacher has and a teacher's actual use of the strategy ($H_1$: $\mu > .05$). The competing hypothesis, the null, states there is no relationship between number of years of teaching experience a teacher has and a teacher's actual use of the strategy ($H_0$: $\mu \neq .05$). In addition, Phi and Cramer's V will be analyzed. Phi and Cramer's V are measures of the strength of association between two variables when one or both are at the nominal level of measurement (http://www.csub.edu, 2000).

### *Strategy 1 – Years of Teaching Experience and Explicitness*

Each of the five strategies were analyzed and compared to the number of years of experience a teacher had. Respondents could identify themselves as having one to three years, four to ten years, 11–20 years, or 20 years or more of teaching experience. In reviewing the cross tabulation table for this strategy it should be noted that 66.7% of cells had an expected count less than 5. Therefore, the Fisher's Exact test results were used since the Chi-square test assumes that fewer than 20% of cells have an expected cell count less than 5 (Ross & Shannon, 2008). There is no such assumption for the Fisher test; therefore, the analysis provided for each strategy is based on the Fisher's Exact Test beginning with (Table 12).

Table 12

*Chi-square Table for Years of Teaching Experience and Explicitness*

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) | Point Probability |
|---|---|---|---|---|---|---|
| Pearson Chi-square | 7.646[a] | 6 | .265 | .257 | | |
| Likelihood Ratio | 7.529 | 6 | .275 | .385 | | |
| Fisher's Exact Test | 6.580 | | | .287 | | |
| Linear-by-Linear Association | 2.069[b] | 1 | .150 | .175 | .091 | .031 |
| N of Valid Cases | 92 | | | | | |

[a] 8 cells (66.7%) have expected count less than 5. The minimum expected count is .52.

[b] The standardized statistic is -1.438.

The Fisher's Exact test yielded a p-value of .29 (= 6.580). This value suggests that the number of years of teaching experience a teacher has does not significantly affect the use of explicitness as a strategy by the teachers, failing to reject the null hypothesis at $\alpha = .05$. A Phi of .29 and Cramer's V of .20 indicate a small strength of association between the variables.

### *Strategy 2 – Years of Teaching Experience and Use of Activation of and Connection to Prior Knowledge*

In reviewing the cross tabulation table for this strategy it should be noted that 66.7% of cells had an expected count less than 5 (Table 13).

Table 13

*Chi-square Tests for Years of Teaching Experience and Use of Activation of and Connection to Prior Knowledge*

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) | Point Probability |
|---|---|---|---|---|---|---|
| Pearson Chi-square | 3.822[a] | 6 | .701 | .718 | | |
| Likelihood Ratio | 3.779 | 6 | .707 | .787 | | |
| Fisher's Exact Test | 4.944 | | | .609 | | |
| Linear-by-Linear Association | .440[b] | 1 | .507 | .550 | .305 | .096 |
| N of Valid Cases | 92 | | | | | |

[a] 8 cells (66.7%) have expected count less than 5. The minimum expected count is .09.

[b] The standardized statistic is .663.

The Fisher's Exact test yielded a p-value of .61(= 4.944). This value suggests that the number of years of teaching experience a teacher has does not significantly affect the use of activation of and connection to prior knowledge as a strategy by the teachers, failing to reject the null hypothesis at $\alpha = .05$. A Phi of .20 and Cramer's V of .14 indicate a small strength of association between the variables.

***Strategy 3 – Years of Teaching Experience and Consistent Student Engagement***

In reviewing the cross tabulation table for this strategy it should be noted that 50% of cells had an expected count less than 5 (Table 14).

Table 14

*Chi-squares for Years of Teaching Experience and Consistent Student Engagement*

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) | Point Probability |
|---|---|---|---|---|---|---|
| Pearson Chi-square | 2.475[a] | 3 | .480 | .524 | | |
| Likelihood Ratio | 2.274 | 3 | .518 | .625 | | |
| Fisher's Exact Test | 2.595 | | | .443 | | |
| Linear-by-Linear Association | 1.171[b] | 1 | .279 | .359 | .186 | .084 |
| N of Valid Cases | 92 | | | | | |

a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is .87.

b. The standardized statistic is -1.082.

The Fisher's Exact test yielded a p-value of .44 (= 2.595). This value suggests that the number of years of teaching experience a teacher has does not significantly affect the use of consistent student engagement as a strategy by the teachers, failing to reject the null hypothesis at $\alpha = .05$. A Phi of .16 and Cramer's V of .16 indicate a small strength of association between the variables.

### *Strategy 4 – Grade Level Taught and Explaining/Modeling/Practicing*

In reviewing the cross tabulation table for this strategy it should be noted that 66.7% of cells had an expected count less than 5 (Table 15).

Table 15

*Chi-square Tests for Years of Experience and Explaining/Modeling/Practicing*

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) | Point Probability |
|---|---|---|---|---|---|---|
| Pearson Chi-square | 16.266[a] | 6 | .012 | .015 | | |
| Likelihood Ratio | 17.053 | 6 | .009 | .003 | | |
| Fisher's Exact Test | 15.882 | | | .002 | | |
| Linear-by-Linear Association | .620[b] | 1 | .431 | .446 | .267 | .092 |
| N of Valid Cases | 92 | | | | | |

[a] 8 cells (66.7%) have expected count less than 5. The minimum expected count is .09.

[b] The standardized statistic is -.787.

The Fisher's Exact test yielded a p-value of .002 (= 15.882). This value suggests that the number of years of teaching experience a teacher has does significantly affect the use of explaining/modeling/practicing as a strategy by the teachers, rejecting the null hypothesis at $\alpha = .05$. This analysis is based on a summary of all categories of years of teaching experience. A Phi of .42 and Cramer's V of .30 indicate mid-range strength of association between the variables.

### *Strategy 5 – Grade Level Taught and Use of Predicting, Questioning, Clarifying, and Summarizing Techniques*

In reviewing the cross tabulation table for this strategy it should be noted that 37.5% of cells had an expected count less than 5 (Table 16).

Table 16

*Chi-square Tests for Years of Experience and Use of Predicting, Questioning, Clarifying, and Summarizing Techniques*

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) | Point Probability |
|---|---|---|---|---|---|---|
| Pearson Chi-square | 6.260[a] | 3 | .100 | .094 | | |
| Likelihood Ratio | 5.572 | 3 | .134 | .162 | | |
| Fisher's Exact Test | 5.912 | | | .101 | | |
| Linear-by-Linear Association | .001[b] | 1 | .972 | 1.000 | .551 | .126 |
| N of Valid Cases | 92 | | | | | |

[a] 3 cells (37.5%) have expected count less than 5. The minimum expected count is 1.22.

[b] The standardized statistic is -.035.

The Fisher's Exact test yielded a p-value of .10 (= 5.912). This value suggests that the number of years of teaching experience a teacher has does not significantly affect the use of predicting, questioning, clarifying, and summarizing techniques as a strategy by the teachers, failing to reject the null hypothesis at $\alpha = .05$. A Phi of .26 and Cramer's V of .26 indicate a medium strength of association between the variables.

**Research Question 4. To what extent, if any, does administrative support influence whether or not teachers use research-based reading literacy strategies?**

For this research question, each of the top five strategies were analyzed using cross tabulation results and Chi-square tests to determine if there is a relationship between

administrative support for the use of a strategy and a teacher's actual use of the strategy. The Chi-square testing methodology was again chosen to test the research hypothesis that there is a relationship between administrative support for the use of a strategy and a teacher's actual use of the strategy ($H_1$: $\mu > .05$). The competing hypothesis, the null, states there is no relationship between administrative support for the use of a strategy and a teacher's actual use of the strategy ($H_0$: $\mu \neq .05$). In addition, Phi and Cramer's V will be analyzed. Phi and Cramer's V are measures of the strength of association between two variables when one or both are at the nominal level of measurement (http://www.csub.edu, 2000).

### *Strategy 1 – Administrative Support for Explicitness*

For each strategy, teachers were asked to rank the degree to which they felt school administration supported them in the use of the strategy. The frequency of use was categorized as never to once per month, 2–3 times per month to once a week, and 2–3 times per week to daily. The level of support was categorized as never, sometimes, and frequently. In reviewing the cross tabulation table for this strategy it should be noted that 55.6% of cells had an expected count less than 5. Therefore, the Fisher's Exact test results were used since the Chi-square test assumes that fewer than 20% of cells have an expected cell count less than 5 (Ross & Shannon, 2008). There is no such assumption for the Fisher test; therefore, the analysis provided for each strategy is based on the Fisher's Exact Test beginning with Table 17.

Table 17

*Chi-square Tests for Administrative Support for Explicitness*

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) | Point Probability |
|---|---|---|---|---|---|---|
| Pearson Chi-square | 16.942[a] | 4 | .002 | .009 | | |
| Likelihood Ratio | 10.257 | 4 | .036 | .017 | | |
| Fisher's Exact Test | 11.498 | | | .012 | | |
| Linear-by-Linear Association | 11.219[b] | 1 | .001 | .004 | .004 | .002 |
| N of Valid Cases | 92 | | | | | |

[a] 5 cells (55.6%) have expected count less than 5. The minimum expected count is .26.

[b] The standardized statistic is 3.349.

The Fisher's Exact test yielded a p-value of .012 (= 11.498). This value suggests that the administrative support for explicitness significantly affects the use of explicitness as a strategy by the teachers, rejecting the null hypothesis at $\alpha = .05$. Additionally, the Phi and Cramer's V show a medium strength of associations between the variables. The sample data shows, the more administrators support using explicitness as reading strategy the more teachers use the explicitness strategy. With low administrative support, 4.3% of the teachers use explicitness as a strategy, with medium administrative support, 12% of the teachers use explicitness as a strategy and with high administrative support 83.7% of the teachers use the explicitness as a strategy. Moreover, with lowest administrative support only 2 respondents chose the option "2 to 3 times a week to daily" whereas with highest administrative support 68 respondents chose the same

option in response to answer how frequently they use the explicitness strategy. This represents the frequency of use of the explicitness strategy also increases according to the increased level of administrative support provided for using the explicitness strategy.

***Strategy 2 – Administrative Support for Activation of and Connection to Prior Knowledge***

In reviewing the cross tabulation table for this strategy it should be noted that 66.7% of cells had an expected count less than 5 (Table 18).

Table 18

*Chi-square Tests for Administrative Support for Activation of and Connection to Prior Knowledge*

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) | Point Probability |
|---|---|---|---|---|---|---|
| Pearson Chi-square | 34.338[a] | 4 | .000 | .002 | | |
| Likelihood Ratio | 11.033 | 4 | .026 | .013 | | |
| Fisher's Exact Test | 12.340 | | | .011 | | |
| Linear-by-Linear Association | 8.547[b] | 1 | .003 | .011 | .011 | .008 |
| N of Valid Cases | 92 | | | | | |

[a] 6 cells (66.7%) have expected count less than 5. The minimum expected count is .03.

[b] The standardized statistic is 2.924.

The Phi (0.611) shows a high strength of association and Cramer's V (0.432) shows a medium strength of associations between the variables. The sample data shows, the more

administrative support for using the prior knowledge strategy the teachers get, the more teachers use the prior knowledge strategy. With low administrative support, 3.3% of the teachers use this strategy, with medium administrative support, 15.2% of the teachers and with high administrative support, 81.5% of the teachers use this strategy. Moreover, with lowest administrative support only 2 respondents chose the option "2 to 3 times a week to daily" whereas with medium administrative support 10 chose and with highest administrative support 68 chose the same option in response to answer how frequently they use the connection to prior work knowledge strategy. This represents the frequency of use of the prior knowledge strategy also increases according to the increased level of administrative support provided for using the connection to prior work knowledge strategy.

### *Strategy 3 – Administrative Support for Consistent Student Engagement*

In reviewing the cross tabulation table for this strategy it should be noted that 50% of cells had an expected count less than 5 (Table 19).

Table 19

*Chi-square Tests for Administrative Support for Consistent Student Engagement*

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) | Point Probability |
|---|---|---|---|---|---|---|
| Pearson Chi-square | 7.090[a] | 2 | .029 | .040 | | |
| Likelihood Ratio | 5.127 | 2 | .077 | .040 | | |
| Fisher's Exact Test | 6.783 | | | .040 | | |
| Linear-by-Linear Association | 7.002[b] | 1 | .008 | .024 | .024 | .019 |
| N of Valid Cases | 92 | | | | | |

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .22.

b. The standardized statistic is 2.646.

The Fisher's Exact test yielded a p-value of .040 (= 6.783). This value suggests that the administrative support for consistent student engagement strategy significantly affects the use of consistent student engagement strategy by the teachers, rejecting the null hypothesis at $\alpha = .05$. Here, the Phi (.278) and Cramer's V (.278) show a small strength of associations between the variables. The sample data shows, the more administrative support for using consistent student engagement strategy the teachers get, the more teachers use the consistent student engagement strategy. With low administrative support, 2.2% of the teachers use consistent student engagement strategy. With medium administrative support, 12% of the teachers use the consistent student engagement strategy and with high administrative support, 85.9% of the teachers use the consistent student engagement strategy. Moreover, with lowest administrative support only 1 respondent chose the option "2 to 3 times a week to daily," with medium

administrative support 8 chose, whereas with highest administrative support 73 respondents chose the same option in response to answer how frequently they use the consistent student engagement strategy. This represents the frequency of use of the consistent student engagement strategy also increases according to the increased level of administrative support provided for using the strategy.

### *Strategy 4 – Administrative Support for Explaining/Modeling/Practicing*

In reviewing the cross tabulation table for this strategy it should be noted that 66.7% of cells had an expected count less than 5 (Table 20).

Table 20

*Chi-square Tests for Administrative Support for Explaining/Modeling/Practicing*

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) | Point Probability |
|---|---|---|---|---|---|---|
| Pearson Chi-square | 3.049[a] | 4 | .550 | .333 | | |
| Likelihood Ratio | 2.731 | 4 | .604 | .501 | | |
| Fisher's Exact Test | 6.831 | | | .333 | | |
| Linear-by-Linear Association | .727[b] | 1 | .394 | .447 | .279 | .161 |
| N of Valid Cases | 92 | | | | | |

[a] 6 cells (66.7%) have expected count less than 5. The minimum expected count is .01.

[b] The standardized statistic is .853.

The Fisher's Exact test yielded a p-value of .333 (= 6.831). This value suggests that the administrative support for Explaining/Modeling/Practicing Strategy does not significantly affect the use of Explaining/Modeling/Practicing Strategy by the teachers, failing to reject the null hypothesis at $\alpha = .05$. The administrative support for Explaining/Modeling/Practicing Strategy has no effect on the use of Explaining/Modeling/Practicing Strategy. For this strategy, the Phi (.182) and Cramer's V (.129) show a small strength of associations between the variables.

### *Strategy 5 – Administrative Support for Use of Predicting, Questioning, Clarifying, and Summarizing Techniques*

In reviewing the cross tabulation table for this strategy it should be noted that 50% of cells had an expected count less than 5 (Table 21).

Table 21

*Chi-square Tests for Administrative Support for Use of Predicting, Questioning, Clarifying, and Summarizing Techniques*

| | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) | Point Probability |
|---|---|---|---|---|---|---|
| Pearson Chi-square | .558[a] | 2 | .757 | 1.000 | | |
| Likelihood Ratio | 1.010 | 2 | .604 | .894 | | |
| Fisher's Exact Test | .247 | | | 1.000 | | |
| Linear-by-Linear Association | .289[b] | 1 | .591 | .774 | .441 | .228 |
| N of Valid Cases | 92 | | | | | |

[a] 3 cells (50.0%) have expected count less than 5. The minimum expected count is .46.

[b] The standardized statistic is -.538.

The Fisher's Exact test yielded a p-value of 1.00 (= .247). This value suggests that the administrative support for use of Predicting, Questioning, Clarifying, and Summarizing Techniques does not significantly affect the use of Predicting, Questioning, Clarifying, and Summarizing Techniques by the teachers, failing to reject the null hypothesis at $\alpha = .05$. The administrative support for use of Predicting, Questioning, Clarifying, and Summarizing Techniques has no effect on the use of Use of Predicting, Questioning, Clarifying, and Summarizing Techniques. Therefore, the Phi (.078) and Cramer's V (.078) show a very small strength of associations between the variables.

## Summary of Overall Findings

Survey results analyzed for this study represented one inservice center region in Alabama. Fifty-two percent of eligible teachers completed the Teacher Inventory for Reading in the Middle Grades. Thirty-five percent of the teachers surveyed taught more than one of the given grade levels. A majority (57%) of the surveyed teachers were veteran teachers with at least 11 years of experience. Five strategies (explicitness during reading instruction; activation of/connection to prior knowledge; consistent student engagement; explaining/modeling/ practicing comprehension strategies; and use of predicting, questioning, clarifying, and summarizing techniques) were identified by the respondents the strategies most often selected when asked to identify how frequently the strategy is used within their classrooms. Tables 1 through 4 provide the statistical data used for the analysis.

Study results of the five common strategies suggested the grade level a teacher teaches does not influence if the teacher will employ the research-based reading strategies. Moreover, with one exception, study results of the five strategies suggested the number of years of teaching experience a teacher has does not influence the teacher's use of the research-based reading

strategies.  A favorable finding was administrative support for the five common strategies does influence whether or not teachers use the research-based strategies. Tables 5 through 19 provide the statistical data used for the analysis.

# CHAPTER V. RESULTS AND ANALYSIS

## Introduction

This chapter presents an overview of the study and a summary of important conclusions drawn from the data. The chapter also provides a discussion of the implications for action and recommendations for practice and further research.

## Summary of the Study and Findings

In 2007, The Nation's Report Card on Reading (Lee, Grigg, & Donahue, 2007) stated that although the lowest performing students are making gains in reading achievement, no significant gains have been made in overall reading proficiency for 8th grade students. The report suggests adolescents lack the literacy skills necessary to participate in an increasingly complex world. Educators cannot afford to ignore the glaring statistics reminding us that students who are not able to read proficiently are at risk for failure, not only within the school culture but within society as well.

The purpose of this study was to (1) identify which strategies researchers identify as the most effective for improving reading comprehension among middle grade students, (2) determine which strategies teachers identify as important, (3) determine if the grade level a teacher teaches and years of experience are related to teacher use of the strategies, and (4) the degree to which teachers feel supported by administrators and leadership teams in using the identified strategies.

Research questions that were investigated were as follows:

1. What strategies have reading researchers identified as most effective for improving reading literacy among middle grade students?

2. To what extent, if any, does the grade level that a teacher teaches influence his/her use of the strategies?

3. To what extent, if any, does a teacher's years of experience in teaching influence his/her use of the reading literacy strategies?

4. To what extent, if any, does administrative support influence whether or not teachers use research-based reading literacy strategies?

Participants were teachers of grades six through eight within a specific Alabama inservice region who had not undergone any training adolescent reading training provided by the Alabama Department of Education. The participants completed an electronic survey called The Teacher Inventory for Reading in the Middle Grades. It was designed to collect data about best practices related to improving adolescent literacy. Content validity of the instrument was established through an expert review and a field test of reading teachers. Reliability was established. The surveys were sent electronically using Qualtrics. Data was analyzed using Qualtrics and SPSS. Primarily, chi-square tests were utilized to draw conclusions as to how the independent variables (teaching strategies) are related to the dependent variables (teacher grade level, teacher experience, and administrative support).

**Effective Strategies**

Through synthesizing best practice research from National Reading Panel, Reading Next Report and the Alabama Reading Initiative primarily with additional research verifying the validity of such, the following ten strategies emerged as the most effective for improving adolescent reading comprehension for student in grades 4 through 8:

- Explicitness during reading instruction – direct explanation, teacher modeling ("thinking aloud"), guided practice, and application.
- Activation of/connection to prior knowledge – helping student make connections between text to self, text to world, and text to text
- Consistent student engagement – active learning/discovery related to text during reading
- Explaining/modeling/practicing comprehension strategies – teacher models how to apply the strategy and guides and assists students in learning how/when to apply the strategy
- Use of predicting, questioning, clarifying, and summarizing – providing responses and answering questions, integrating ideas and generalizing information across one or more texts
- Using graphic and semantic organizers – illustrate concepts and relationships between concepts in a text or using diagrams
- Use of diverse and high interest texts
- Comprehension monitoring – knowing when understanding falters or breaks down and which “fix-up” strategies to apply
- Incorporation of high quality discussions related to reading/text – sharing ideas through peer-led discussions related to the text
- Opportunities for student collaboration during reading activities – engaging with peers in problem-solving activities relate to the text

The first five strategies were the strategies to which participants most frequently and favorably responded on the survey. Because of their high response rate, the first five strategies

(explicitness during reading instruction; activation of/connection to prior knowledge; consistent student engagement; explaining/modeling/practicing comprehension strategies; and use of predicting, questioning, clarifying, and summarizing techniques) were used for analysis to address the three remaining research questions. This was done for three reasons. First, the first five strategies were most often selected by teachers for each section of the survey where they rated use of and support for the strategies. Second, presenting and analyzing chi-square tables for each strategy would have proved to be too massive for the scope of this study. Third, not presenting the data on the last five strategies gave the researcher an option for future study.

**Grade Level Influence**

An analysis of contingency tables and Chi-square tests for the variables in research question two suggested that a teacher's assigned grade level does not significantly affect the use identified reading strategies. Moreover, participant responses show that approximately 35% of teachers teach more than one grade level and, in small schools, could possibly teach all identified grades: sixth, seventh, and eighth.

**Years of Experience**

With the exception of the explaining/modeling/predicting strategy, an analysis of contingency tables and chi-square tests for the variables in research question three suggested that a teacher's years of teaching experience does not significantly affect the use identified reading strategies. The one outlier (explaining/modeling/predicting) could possibly be explained by teacher's use of reading texts to plan instruction. While the survey teachers were not trained in the state's literacy models, the impact of such an initiative has filtered down to textbooks. Most reading texts adopted in Alabama, from a suggested list, contain specific directions on how even an untrained teacher could effectively use this common combination of strategies. Of the survey

respondents, 10% were novice teachers with only one to three years of experience while 57% were veteran teachers with 11 years or more of experience.

**Administrative Support**

An analysis of contingency tables and Chi-square tests for the variables in research question four suggested that administrative support does significantly affect whether or not teachers use the identified reading strategies. On average for all the targeted strategies, 84% of teachers who selected receiving high administrative support also reported using the strategies several times per week to using the strategy daily. A more in-depth analysis of teacher responses showed that frequency of use for strategies increased according to an increased level of administrative support provided for using the strategies. The opposite is also true – teacher use of the strategies decreased as the level of administrative support for using the strategies decreases.

## Discussion and Implications

Previous researchers (Alvermann, 2001; Applebee et al., 2003; Biancarosa & Snow, 2006; Guthrie, 2006; Lee, 2004; Morocco et al., 2001; Nystrand & Gamoran, 1993; Rosenshine et al., 1996; Stevens, 2003; Sturtevant 2004) extensively studied and reported on key instructional practices and their relation to improved reading comprehension in adolescent learners. The researcher identified three main implications after completing this study. First, there is little debate over best instructional practices which are effective for improving reading skills in adolescents. It is clear that to be successful learners, adolescent students must be taught to master complex texts and to understand how effective reading is connected to a larger set of diverse literacy demands across all content areas. How is this done? This thought develops my first implication. Effective teachers are the key. Programs and products do not improve reading;

well trained teachers do. Teachers must become more effective at delivering the identified, meaningful and targeted instructional strategies which are research-based and proven to improve reading. Biancarosa (2012) implies that teachers should move away from outdated teaching resources and approaches to implement the proven strategies in all content areas to address the full range of learners within their classrooms.

Second, the researcher found that use of the identified strategies is not contingent upon what grade level the teacher teaches or how many years of teaching experience a teacher has. This implies the reasons why teachers do not utilize the proven strategies can range widely. Moje (2008) suggested that novice teachers may find the strategies difficult to implement because they can be time consuming especially as it relates to covering content instructional objectives. Alger (2009) found evidence that novice teachers often times do not transfer reading strategy instruction to the classroom although they learned the strategies as a preservice teacher possibly because novice teachers adapt to traditional school practices and leave behind much of the knowledge gained in their teacher education programs.

A study by Ross and McDaniel (2004) of experienced middle grade teachers enrolled in a reading master's program revealed that teachers implemented only a few key reading strategies in their classrooms. In addition, they found that experienced teachers were more likely to use the reading strategies required the least engagement and preparation. Moje (2008) found that another potential barrier to implementing the reading strategies may be related to school environmental factors. She found that standard conventions of middle school such as divisions in subject areas, assigned grade levels, and structured class periods may have a negative influence on some middle grade teachers implementing the strategies.

The researcher, with more than 19 years of education experience including teaching and administration, found through her own observations and discussions that when teachers do not implement best practices, more often than not, it is because they do not fully understand how to go about doing so. They simply are not comfortable with an approach and elect not to use it. Many teachers may lack the necessary training and/or exposure to the approach. Therefore, insuring teachers receive proper training is paramount to helping middle grade teachers reach struggling students. The professional development needed for strategy implementation is not the kind that attempts to get all teachers learning and using the same strategies; rather, it should be specialized and targeted enough for teachers to be able to identify the reading deficit a student may have and know what strategy or combination of strategies will accelerate that student through the deficiency. Schools need to invest in meaningful professional development tailored to the needs of the teachers and students within the school (Guthrie, 2008).

The Reading Next Report (2004) suggests that professional development for a literacy program be viewed as the kind of ongoing, long-term, and specific training which will more likely promote lasting, positive changes in teacher knowledge and practice. Professional development should be systemic and include all professional staff in a school building. The training opportunities should be built into the regular school schedule and provide consistent information about new and best instructional research and practices with time to implement and reflect on the new ideas. This kind of professional development may help create and maintain a team oriented approach to improving instruction and structures that promote improved adolescent literacy.

Third, the results of the study suggest there is a positive correlation between teacher's use of the strategies and administrative support for using the strategy. The Reading Next Report

(2004) also addressed the issue of leadership by stating how crucial it is to any school reform. The school administration's clear commitment and enthusiasm to improving literacy must be visible. The principal has to be seen as the instructional leader who understands and has personal knowledge of how young people learn and struggle with reading and writing. This knowledge is needed to give the principal necessary understanding and credibility to organize and coordinate changes in a school's literacy program. Simply stated, building administrators are important to the implementation of any reform.

This study suggests that teachers use the literacy strategies when administrator support them in doing so. Administrators do not force teachers to use the strategies, but through, verbal and physical support, they can create a climate that fosters the use of research-based strategies and encourage teachers to use them. The support administrators give may manifest itself through scheduling, participation in training on the strategies, monitoring and modeling the strategies, and providing needed materials and resources (Guthrie, 2008). SREB (2012) asserts that a strong school principal and leadership team keeps teachers focused on the school's mission, student engagement in a rigorous curriculum, and on the review of date to inform school reform efforts. Moreover, effective school administrators seek new ideas, encourage meaningful risk-taking, work as a team member, set clear priorities and maintain a demanding yet supportive school climate. SREB goes on to state that leadership is second only to classroom instruction among all school-related factors that contribute to what students learn at school.

## Recommendations for Practice

1. The researcher recommends that middle grade teachers who may not use the research-based reading strategies make it a practice to use those strategies appropriate for the needs of their students.

2. The researcher recommends continuous, job-embedded professional development around the research-based reading strategies. Should a school not offer training in the strategies, the researcher recommends that teachers be proactive and seek the needed training through other means including regional and/or state training and professional organizations such as the National Staff Development Council, the Association for Supervision and Curriculum Development, or professional journals.

3. Since professional development should never occur in a vacuum, the researcher recommends that teachers ask for support in implementing research-based reading strategies from building administrators and other instructional leaders within the school or school system.

4. The important role played by school leaders in supporting instructional methodology should not be underestimated for teachers at all experience levels.

## Recommendations for Further Research

Based on the findings, discussions, and implications of this study, the researcher offers the following recommendations for future investigations:

1. The researcher recommends further research to gather more information on whether grade level taught seems to influence use of strategies in multiple geographic regions to make study results possibly more generalizable.

2. The researcher recommends further research to gather more information on whether years of experience influences the use of strategies in multiple geographic regions to make study results possibly more generalizable.

3. The researcher recommends including more geographic regions to collect data on varied socio-economic levels to make results of the study possibly more generalizable.

4. The researcher recommends examining differences between general education and special education teachers' use of research-based strategies.

## Conclusions

According to Biancarosa (2006), despite almost a decade of attention to adolescent literacy among education stakeholders, most people still believe the major problem for struggling adolescent readers is the student's failure to master basic reading skills. Researchers of adolescent literacy recognize the issue to be larger than remediating student who cannot read at proficient levels. The process of diagnosing, treating and accelerating struggling adolescent readers through reading difficulties requires knowledgeable and skilled middle grade teachers who employ specific research-based reading strategies.

This study identified the research-based strategies for improving adolescent reading comprehension, and then sought to learn more about the teacher's grade level and years of experience and how they may influence teacher use of the identified strategies. Perhaps teacher grade level and/or experience are a hindrance to effective use of the strategies. The results reveal no significant relationship between the three. The study also revealed that administrative support influences the teacher's use of or lack of use of the strategies. Increased support increases use while decreased support decreases use. This finding comes as no real surprise as research does exists which concludes teachers focus on what administrator's deem to be important. Building administrators do have the power to help teachers effectively implement school reform best practices such as reading improvement.

The given recommendations for improving teacher use of the strategies could possibly improve student reading comprehension skills. This study took place in one inservice region of the state of Alabama, and while teacher perceptions cannot be generalized to other areas, the use

of effective research-based strategies can and should be a priority for all middle grade teachers. Given the current climate in education, evidence of effectiveness and data to inform decisions must become priorities in order to make true progress in adolescent literacy. Educators have a duty to ensure that students leave high school with the reading literacy skills they need to thrive in the 21st century career and college landscape.

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Appendix 1

Teacher Inventory for Reading in the Middle Grades

# Teacher Inventory for Reading in the Middle Grades

**Default Question Block**

**What grade/s do you teach? You may select more than one.**

- [ ] 5th
- [ ] 6th
- [ ] 7th
- [ ] 8th

**How many total years of teaching experience do you have?**

- ○ 1 - 3 Years
- ○ 4 - 9 Years
- ○ 10 - 20 Years
- ○ 20 or more Years

**How many years have you taught reading?**

- ○ 1 - 3 Years
- ○ 4 - 9 Years
- ○ 10 - 20 Years
- ○ 20 or more Years
- ○ I think

**How do you currently teach reading?**

- ○ I teach reading as a subject (i.e. reading class)
- ○ I teach reading as a part of another subject (i.e. writing class, social studies, science, etc.)
- ○ I do not teach reading

**Select the most appropriate statement for your school.**

- ○ Eighty percent (80%) or more of students receive their daily instructional level
- ○ Fifty percent (50%) to seventy-five percent (75%) of students receive their daily instructional level
- ○ Less than fifty percent (50%) of students receive their daily instructional level

**Identify how often you use the following strategies with students during instruction. For each strategy, select how frequently you employ the identified strategy.**

| | Never | Once a Month | 2-3 Times a Month | Once a Week | 2-3 Times a Week | Daily |
|---|---|---|---|---|---|---|
| Explicitly teaching vocabulary words | ○ | ○ | ○ | ○ | ○ | ○ |
| Activating or connecting to prior knowledge | ○ | ○ | ○ | ○ | ○ | ○ |

| Never | Once a Month | 2-3 Times a Month | Once a Week | 2-3 Times a Week | Daily |
|---|---|---|---|---|---|
| Constant student engagement | | | | | |
| Explaining/modeling/practicing comprehension strategies | | | | | |
| Use of predicting, questioning, clarifying, and summarizing techniques | | | | | |
| Use of graphic/semantic organizers | | | | | |
| Use of diverse, high interest texts | | | | | |
| Comprehension monitoring during reading | | | | | |
| Incorporation of high quality discussions related to reading/text | | | | | |
| Opportunities for student collaboration during reading activities | | | | | |

**Identify the degree to which you feel supported by building administration (principals, assistant principals) in using each of the following strategies.**

| Never | Rarely | Sometimes | Frequently | Always |
|---|---|---|---|---|
| Explicit instruction during reading instruction | | | | |
| Activation of/connection to prior knowledge | | | | |
| Constant student engagement | | | | |
| Explaining/modeling/practicing comprehension strategies | | | | |
| Use of predicting, questioning, clarifying, and summarizing techniques | | | | |
| Use of graphic/semantic organizers | | | | |
| Use of diverse, high interest texts | | | | |
| Comprehension monitoring during reading | | | | |
| Incorporation of high quality discussions related to reading/text | | | | |
| Opportunities for student collaboration during reading activities | | | | |

Appendix 2

Introductory Letter to Superintendent

AUBURN UNIVERSITY

COLLEGE OF EDUCATION

EDUCATIONAL FOUNDATIONS, LEADERSHIP AND TECHNOLOGY

February 1, 2012

Dear Superintendent

My name is Donnella Carter and I am a doctoral candidate at Auburn University majoring in Administration of Elementary and Secondary Education. As a requirement of the PhD program, I am working on a research study entitled, **"The Effectiveness of Instructional Strategies to Improve Literacy in the Middle Grades: Literacy and Justice for All?"**

The study requires input from middle ($6^{th} - 8^{th}$) grade teachers whose schools have not been trained in modules for adolescent literacy offered by the Alabama Department of Education. Teachers will be asked to complete a brief, anonymous, web-based survey on reading strategies. I would be grateful if you would encourage your middle school teachers to participate in this survey. Again, the survey is completely confidential. No teacher or school will be identified in any way.

There are no risks or discomforts associated with participating in this study. No personal benefits or compensation will be provided to participants. Excluding time, there is no cost for to the participant in this study. While the participants will receive no tangible and direct benefits from participating in this survey, I hope they will find value in completing the survey as means to reflect on personal instructional practices.

The survey will take 8 – 10 minutes to complete and consists of multiple-choice demographic questions and Likert scale responses related to reading strategies. The results of this study may be subject to possible future publication. However, participant identity and the identity of schools and school systems will be protected in the reporting of results.

With your permission, I will send principal of a participating school an invitation email message which contains an information letter and a link to the survey. Your expediency in encouraging teachers to complete the web-based survey will be greatly appreciated. If you have any questions about the survey or if you would like to receive a summary of the results of this survey when complete, please contact Donnella Carter by phone at 334-672-6757 or by email at dec0002@auburn.edu.

Thank you in advance for your support of and cooperation in this study.

Sincerely,

Donnella Carter, Investigator

4036 Haley Center, Auburn, AL 36849-5221; Telephone: 334-844-4460; Fax: 334-844-3072

www.auburn.edu

Appendix 3

Introductory Letter to Participants

AUBURN UNIVERSITY

COLLEGE OF EDUCATION

EDUCATIONAL FOUNDATIONS, LEADERSHIP AND TECHNOLOGY

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)

Information Letter for a Research Study Entitled
"The Effectiveness of Instructional Strategies to Improve Literacy in the Middle Grades: Literacy and Justice for All?"

You are invited to participate in a research study to (1) identify which strategies researchers identify as the most effective for improving literacy among middle grade students, (2) determine which strategies teachers identify as utilized and important, and (3) determine the degree to which teachers feel supported by administrators and leadership teams in using the identified, research-based strategies. The study is being conducted by Donnella Carter, Doctoral Student, under the direction of Dr. Cynthia Reed, Associate Professor in the Auburn University Department of Educational Foundations, Leadership and Technology. You were selected as a possible participant because you are a 6th, 7th, or 8th grade teacher in a selected school.

Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to complete a brief online survey. Your total time commitment will be less than 10 minutes. If you change your mind about participating, you can withdraw at any time by closing your browser window. Once you have submitted anonymous data, it cannot be withdrawn since it is unidentifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your or your school's future relations with Auburn University or the Department of Educational Foundations, Leadership and Technology.

The researcher expects no risks or discomforts associated with this study. The instrument is an anonymous survey. No personal benefits are provided to participants in this evaluation. There will be no compensation provided to participants. Excluding time, there is no cost for you to participate in this study.

Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by using a secure internet connection and not assigning any identifying information to your survey that would identify you. Qualtrics is the online survey facilitator and is set not to collect email or IP addresses for the researcher's files. This way of collecting data insures your identity will be protected. Information collected through your participation will be used to fulfill an educational requirement and may be published in a professional journal, and/or presented at a professional meeting.

If you have questions about this study, please contact either Donnella Carter (by phone at 334-672-6757 or by email at dgc0002@auburn.edu), or her advisor, Dr. Cynthia Reed at 334-844-4488.



4036 Haley Center, Auburn, AL 36849-5221; Telephone: 334-844-4460; Fax: 334-844-3072

www.auburn.edu

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334) 844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

**The Auburn University Institutional Review Board has approved this document for use from July 14, 2011 to July 13, 2012. Protocol #11-223 EX 1107.**

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK ON THE LINK BELOW. YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

https://auburn.qualtrics.com/SE/?SID=SV_cQ7uTvAbwMHqUM4

Thanking you in advance,

Donnella Carter, Investigator February 9, 2012

Appendix 4

Email Message

**From:** Donnella Carter
**To:** Beth
**Subject:** Reminder letter sample

Hi Beth,

My survey response rate is lower than anticipated. I am resending the survey link. I really would appreciate it if you would encourage your teachers to complete the survey. This is my third and final attempt to improve the survey response. Thank you for all you have done to assist with this endeavor.

Donnella Carter

Appendix 5

Auburn University Institutional Review Board (IRB) Approval

**AUBURN UNIVERSITY INSTITUTIONAL REVIEW BOARD for RESEARCH INVOLVING HUMAN SUBJECTS**

# RESEARCH PROTOCOL REVIEW FORM

For information or help contact **THE OFFICE OF RESEARCH COMPLIANCE**, 115 Ramsay Hall, Auburn University
**Phone:** 334-844-5966 **e-mail:** hsubjec@auburn.edu **Web Address:** http://www.auburn.edu/research/vpr/ohs/

Revised 03.26.11 – DO NOT STAPLE, CLIP TOGETHER ONLY. Save a Copy

1. **PROPOSED START DATE of STUDY:** July 18, 2011

**PROPOSED REVIEW CATEGORY (Check one):** FULL BOARD EXPEDITED ✓ EXEMPT

2. **PROJECT TITLE:** The Effectiveness of Instructional Strategies to Improve Literacy in the Middle Grades: Literacy and Justice for All?

| 3. Donnella Carter | Doctoral Student | Auburn University | 334-672-6757 | dgc0002@auburn.edu |
|---|---|---|---|---|
| PRINCIPAL INVESTIGATOR | TITLE | DEPT | PHONE | AU E-MAIL |
| 300 Butter and Egg Road | | 334-566-2580 | | dcarter@pikecountyschools.com |
| MAILING ADDRESS | | FAX | | ALTERNATE E-MAIL |

4. **SOURCE OF FUNDING SUPPORT:** ✓ Not Applicable ___ Internal ___ External Agency _____ Pending Received

5. **LIST ANY CONTRACTORS, SUB-CONTRACTORS, OTHER ENTITIES OR IRBs ASSOCIATED WITH THIS PROJECT:**
N/A

6. **GENERAL RESEARCH PROJECT CHARACTERISTICS**

## 6A. Mandatory CITI Training

**Names of key personnel who have completed CITI:**
Donnella Carter

**CITI group completed for this study:**
Social/Behavioral Biomedical

**PLEASE ATTACH TO HARD COPY *ALL* CITI CERTIFICATES FOR *EACH* KEY PERSONNEL**

## 6B. Research Methodology

**Please check all descriptors that best apply to the research methodology.**

Data Source(s): ✓ New Data Existing Data

Will recorded data directly or indirectly identify participants?
Yes ✓ No

Data collection will involve the use of:
- Educational Tests (cognitive diagnostic, aptitude, etc.)
- Interview / Observation
- Physical / Physiological Measures or Specimens (see Section 6E.)
- ✓ Surveys / Questionnaires
- ✓ Internet / Electronic
- Audio / Video / Photos
- Private records or files

## 6C. Participant Information

**Please check all descriptors that apply to the participant population.**

✓ Males ✓ Females AU students

**Vulnerable Populations**
Pregnant Women/Fetuses Prisoners
Children and/or Adolescents (under age 19 in AL)

**Persons with:**
Economic Disadvantages Physical Disabilities
Educational Disadvantages Intellectual Disabilities

**Do you plan to compensate your participants?** Yes No

## 6D. Risks to Participants

**Please identify all risks that participants might encounter in this research.**

- Breach of Confidentiality* Coercion
- Deception Physical
- Psychological Social
- ✓ None Other: _____

*Note that if the investigator is using or accessing confidential or identifiable data, breach of confidentiality is always a risk.

**Do you need IBC Approval for this study?** ✓ No Yes - BUA # _____ **Expiration date** _____

## FOR OHSR OFFICE USE ONLY

**DATE RECEIVED IN OHSR:** _____ by _____ **PROTOCOL #:** _____
**DATE OF IRB REVIEW:** _____ by _____ **APPROVAL CATEGORY:** _____
**DATE OF IRB APPROVAL:** _____ by _____ **INTERVAL FOR CONTINUING REVIEW:** _____
**COMMENTS:**

**7. PROJECT ASSURANCES**

**PROJECT TITLE:** The Effectiveness of Instructional Strategies to Improve Literacy in the Middle Grades: Literacy and Justice for All?

## A. PRINCIPAL INVESTIGATOR'S ASSSURANCES

1. I certify that all information provided in this application is complete and correct.
2. I understand that, as Principal Investigator, I have ultimate responsibility for the conduct of this study, the ethical performance this project, the protection of the rights and welfare of human subjects, and strict adherence to any stipulations imposed by the Auburn University IRB.
3. I certify that all individuals involved with the conduct of this project are qualified to carry out their specified roles and responsibilities and are in compliance with Auburn University policies regarding the collection and analysis of the research data.
4. I agree to comply with all Auburn policies and procedures, as well as with all applicable federal, state, and local laws regarding the protection of human subjects, including, but not limited to the following:
    a. Conducting the project by qualified personnel according to the approved protocol
    b. Implementing no changes in the approved protocol or consent form without prior approval from the Office of Human Subjects Research
    c. Obtaining the legally effective informed consent from each participant or their legally responsible representative prior to their participation in this project using only the currently approved, stamped consent form
    d. Promptly reporting significant adverse events and/or effects to the Office of Human Subjects Research in writing within 5 working days of the occurrence.
5. If I will be unavailable to direct this research personally, I will arrange for a co-investigator to assume direct responsibility in my absence. This person has been named as co-investigator in this application, or I will advise OHSR, by letter, in advance of such arrangements.
6. I agree to conduct this study only during the period approved by the Auburn University IRB.
7. I will prepare and submit a renewal request and supply all supporting documents to the Office of Human Subjects Research before the approval period has expired if it is necessary to continue the research project beyond the time period approved by the Auburn University IRB.
8. I will prepare and submit a final report upon completion of this research project.

My signature indicates that I have read, understand and agree to conduct this research project in accordance with the assurances listed above.

| Donnella Carter | | |
|---|---|---|
| **Printed name of Principal Investigator** | **Principal Investigator's Signature** (SIGN IN BLUE INK ONLY) | **Date** |

## B. FACULTY ADVISOR/SPONSOR'S ASSURANCES

1. By my signature as faculty advisor/sponsor on this research application, I certify that the student or guest investigator is knowledgeable about the regulations and policies governing research with human subjects and has sufficient training and experience to conduct this particular study in accord with the approved protocol.
2. I certify that the project will be performed by qualified personnel according to the approved protocol using conventional or experimental methodology.
3. I agree to meet with the investigator on a regular basis to monitor study progress.
4. Should problems arise during the course of the study, I agree to be available, personally, to supervise the investigator in solving them.
5. I assure that the investigator will promptly report significant adverse events and/or effects to the OHSR in writing within 5 working days of the occurrence.
6. If I will be unavailable, I will arrange for an alternate faculty sponsor to assume responsibility during my absence, and I will advise the OHSR by letter of such arrangements. If the investigator is unable to fulfill requirements for submission of renewals, modifications or the final report, I will assume that responsibility.
7. I have read the protocol submitted for this project for content, clarity, and methodology

| Cynthia Reed | | Jun 27, 2011 |
|---|---|---|
| **Printed name of Faculty Advisor / Sponsor** | **Signature (SIGN IN BLUE INK ONLY)** | **Date** |

## C. DEPARTMENT HEAD'S ASSSURANCE

By my signature as department head, I certify that I will cooperate with the administration in the application and enforcement of all Auburn University policies and procedures, as well as all applicable federal, state, and local laws regarding the protection and ethical treatment of human participants by researchers in my department.

| Sherida Downer | | Jun 27, 2011 |
|---|---|---|
| **Printed name of Department Head** | **Signature (SIGN IN BLUE INK ONLY)** | **Date** |

8. **PROJECT OVERVIEW: Prepare an abstract that includes:**
(400 word maximum, in language understandable to someone who is not familiar with your area of study):

**I.) A summary of relevant research findings leading to this research proposal:**
*(Cite sources; include a "Reference List" as Appendix A.)*
**II.) A brief description of the methodology,**
**III.) Expected and/or possible outcomes, and,**
**IV.) A statement regarding the potential significance of this research project.**

I. Relevant Research Findings - According to international assessments by OECD, fifteen-year-olds in the United States rank fifteenth in the world and are below the international average for engagement in school and reading (Snow and Biancarosa, 2003). Thompson and Winking state America is experiencing an "adolescent literacy crisis" (2007). Beginning in the early 1980s, A Nation at Risk (National Commission on Excellence in Education, 1983) warned of a crisis in adolescent literacy. Middle grade teachers are often overwhelmed by increasingly larger class sizes, more diverse student demographics, scheduling and time conflicts, lack of updated instructional technology, poorly maintained facilities, pressure of high-stakes assessments, and No Child Left Behind requirements. Daniel Perna and Sarah Mahurt suggest these restraints make it difficult for middle grade teachers to feel they possess the expertise and time to teach literacy skills and core content (2009).

II. Methodology - This study utilizes descriptive research methods to identify the reading strategies teachers use and believe to be most important and assesses the degree to which teachers feel supported in using said strategies. This method was selected as a means to describe collected data in an accurate and systematic fashion. A four-part survey entitled "Reading Strategies Inventory" was designed by the researcher, and will be distributed electronically using QuestionPro. Content validity will be established through the use of an expert panel and sampling.

III. Expected/Possible Outcomes - According to evidence presented in the literature review and this study, anticipated outcomes include teachers better understanding how crucial it is for middle grade students to be literate and why literacy skills must be taught within core content. Moreover, teachers will recognize that middle grade approaches to literacy differ from elementary designs and administrative/ leadership support is critical for literacy reform strategies to be effective.

IV. Significance - Much has been written about best instructional practices for adolescent literacy and some related to leadership qualities necessary to facilitate literacy reform in the middle grades, not as much has been examined to identify strategies practicing teachers believe are important and successful. This study is important because it can help readers understand which best practice strategies are widely used among teachers in high and low performing schools and identify the degree to which teachers feel supported by administration in the use of said strategies. This information can guide thought about ways in which leaders support literacy reform in the middle school.

9. **PURPOSE.**
**a. Clearly state all of the objectives, goals, or aims of this project.**

Throughout the country, school systems are experimenting with innovative reforms and initiatives to improve student achievement and close achievement gaps especially in the area of reading. To that end, the purpose of this study is to
(1) identify which strategies researchers identify as the most effective for improving literacy among middle grade students,
(2) determine which strategies teachers identify as utilized and important, and
(3) determine the degree to which teachers feel supported by administrators and leadership teams in using the identified, research-based strategies.

**b. How will the results of this project be used? (e.g., Presentation? Publication? Thesis? Dissertation?)**

This project will be part of a published dissertation. The results will be circulated in local and state conferences and meetings and could possibly be published in professional/educational journals. This project will also be used as a professional development tool in local schools to inform middle school instructional literacy practices.

10a. KEY PERSONNEL. Describe responsibilities. Include information on research training or certifications related to this project. CITI is required. Be as specific as possible. (Attach extra page if needed.) *All non-AU affiliated key personnel must attach* ***CITI certificates of completion.***

Principle Investigator: Donnella Carter Title: Doctoral Student E-mail address: dgc0002@auburn.edu
Dept / Affiliation: EFLT

***Roles / Responsibilities:***

Role: Carter is author and lead researcher for this project.
Responsibility: Carter is responsible for collecting all data for the literature review; developing the conceptual framework for the project; designing survey instrument; obtaining permission from participants; and collecting, analyzing, interpreting, and reporting the research data.

Individual: Dr. Cynthia Reed Title: Professor E-mail address: reedcyn@auburn.edu
Dept / Affiliation: EFLT

***Roles / Responsibilities:***

Role: Reed is the principal advisor on the project.
Responsibility: Reed is responsible for advising the lead researcher throughout all phases of this research project from the development of the conceptual framework through the publication of the dissertation.

Individual: _____ Title: _____ E-mail address: _____
Dept / Affiliation: _____

***Roles / Responsibilities:***

Individual: _____ Title: _____ E-mail address: _____
Dept / Affiliation: _____

***Roles / Responsibilities:***

Individual: _____ Title: _____ E-mail address: _____
Dept / Affiliation: _____

***Roles / Responsibilities:***

Individual: _____ Title: _____ E-mail address: _____
Dept / Affiliation: _____

***Roles / Responsibilities:***

11. LOCATION OF RESEARCH. List all locations where data collection will take place. (School systems, organizations, businesses, buildings and room numbers, servers for web surveys, etc.) Be as specific as possible. Attach permission letters in Appendix E.
*(See sample letters at http://www.auburn.edu/research/vpr/hrs/sample.html)*
Data will be collected from middle school teachers in Alabama schools. Teachers will be sent an electronic invitation to participate in the study. An information letter and link to the survey will be included in the invitation.

12. PARTICIPANTS.

a. Describe the participant population you have chosen for this project.
Check here if there is existing data; describe the population from whom data was collected & include the # of data files.

The targeted teacher population reflects teachers who currently teach grades six through eight in a non ARI public schools in Alabama. Moreover, these teachers have not participated in formal ARI PALS or ARI Strategic Teaching training. Male and female teachers of diverse backgrounds are anticipated to comprise the participation sample.

b. Describe why is this participant population is appropriate for inclusion in this research project. (Include criteria for selection.)

This study seeks to identify teachers of 6th - 8th grade students at high and low performing high poverty schools in Alabama, inquire into the many approaches and strategies for middle grades literacy at individual schools being used, and to compare results across schools to identify commonalities and differences. The targeted teacher population is better suited to respond to these prompts as they provide instruction to these students. Moreover, middle grade reading achievement is stagnant in southern states and educator's awareness and discourse related to the adolescent literacy problem needs to raised.

c. Describe, step-by-step, all procedures you will use to recruit participants. *Include in Appendix B a copy of all e-mails, flyers, advertisements, recruiting scripts, invitations, etc., that will be used to invite people to participate.*
*(See sample documents at http://www.auburn.edu/research/vpr/ohs/sample.htm.)*

1. The researcher will acquire permission to contact perspective participants from the principal of each school selected to participate in the study.
2. Once permission is obtained, an email message containing the information letter and survey link will be sent directly to participants. See Appendix B.
3. The recruited participants will be limited to teachers who teach grades 6th-8th in the selected schools. Participants will be contacted via email.
4. Responses will be collected via QuestionPro.com in an Excel file format.

What is the minimum number of participants you need to validate the study? 40-50

Is there a limit on the number of participants you will recruit? ☑ No ☐ Yes – the number is _____

Is there a limit on the number of participants you will include in the study? ☑ No ☐ Yes – the number is _____

d. Describe the type, amount and method of compensation and/or incentives for participants.
(If no compensation will be given, check here ✓.)

Select the type of compensation: ___ Monetary ___ Incentives
___ Raffle or Drawing incentive (Include the chances of winning.)
___ Extra Credit (State the value)
___ Other

*Description:*

N/A

13. PROJECT DESIGN & METHODS.

a. Describe, step-by-step, all procedures and methods that will be used to consent participants.
( └ Check here if this is "not applicable"; you are using existing data.)

This study will employ the use of electronic surveys to collect data during the summer and fall of 2011.
1. Once permission from the school principal has been granted, an email message containing the survey link will be sent to faculty members. The link will take the teacher to a letter requesting his/her participation.
2. Teachers who agree to participate will be taken directly to the survey.
3. Each week, for three weeks, follow-up requests for survey completion will be sent to participants in an attempt to maximize response rate.

b. Describe the procedures you will use in order to address your purpose. Provide a step-by-step description of how you will carry out this research project. Include specific information about the participants' time and effort commitment. (*NOTE: Use language that would be understandable to someone who is not familiar with your area of study. Without a complete description of all procedures, the Auburn University IRB will not be able to review this protocol. If additional space is needed for this section, save the information as a .PDF file and insert after page 6 of this form.*)

1. The researcher will contact the principal of each selected school requesting permission to send the electronic survey to faculty members.
2. Once permission is obtained, the researcher will then send an informational letter via email to faculty members inviting participation in the survey.
3. Teachers who participate will be prompted to click a link which will take him/her directly to the survey.
4. Participants can expect to spend 8 to 12 minutes responding to survey items.
5. When finished answering survey questions, the participant will click the "submit" button. This action will conclude the participants participation.
6. Each week, for three weeks, follow-up requests for survey completion will be sent to participants in an attempt to maximize response rate.
7. The researcher will compile and analyze the acquired data.

13c. List all data collection instruments used in this project, in the order they appear in Appendix C.
(e.g., surveys and questionnaires in the format that will be presented to participants, educational tests, data collection sheets, interview questions, audio/video taping methods etc.)

The instrument is entitled, Reading Strategies Inventory. It contains four parts: Part 1, Demographics collection; Part 2, Rating scale of identified strategies; Part 3, Likert scale to measure frequency of use of identified strategies; and Part 4, Likert scale to measure degree of support in the use of strategies. See Appendix C

d. Data analysis: Explain how the data will be analyzed.
The researcher will use quantitative data analysis methods including frequency counts and descriptive statistics.

14. RISKS & DISCOMFORTS: List and describe all of the risks that participants might encounter in this research. ***If you are using deception in this study, please justify the use of deception and be sure to attach a copy of the debriefing form you plan to use in Appendix D.*** *(Examples of possible risks are in section #6D on page 1.)*

The researcher does not anticipate that any risks or discomforts will be encountered in the execution of this study.

15. **PRECAUTIONS.** Identify and describe all precautions you have taken to eliminate or reduce risks as listed in #14. If the participants can be classified as a "vulnerable" population, please describe additional safeguards that you will use to assure the ethical treatment of these individuals. ***Provide a copy of any emergency plans/procedures and medical referral lists in Appendix D.***

As mentioned in question #14, no risks or discomforts are anticipated. Moreover, the survey is anonymous and relatively short in length/ duration; therefore, there is no risk in taking it.

**If using the Internet to collect data, what confidentiality or security precautions are in place to protect (or not collect) identifiable data? Include protections used during both the collection and transfer of data.**
*(These are likely listed on the server's website.)*

All electronic data will be collected and stored on the researcher's password protected home computer. QuestionPro provides protection via a firewall that acts as a gateway for access to all other servers on the system. Survey owners are checked into the administrative portion of the system using their ID and password. This is the only way to access the data collected for the individual survey. QuestionPro provides a secure web link and an anonymous connection which enables will survey participants to complete the survey without the site collecting email or IP addresses or any other identifying information. in addition, QuestionPro is compliant with the following regulatory and certification agencies: Federalwide Assurance, Truste, HIPPA, Respondent Anonymity Assurance, SAS 70 Type II. QuestionPro is also approved for research by more than 1000 universities.

16. **BENEFITS.**
    a. **List all realistic direct benefits participants can expect by participating in this specific study.**
    *(Do not include "compensation" listed in #12d.)* Check here if there are no direct benefits to participants. ✓

While the participants will receive no tangible and direct benefits from participating in this survey, they may find value in completing the survey as they reflect on their instructional techniques and methodologies. Reflecting on one's practice often results in new insights. Participants may benefit from this reflection while participating in this study.

    b. **List all realistic benefits for the general population that may be generated from this study.**

This study is important because it can have implications for practitioners seeking to understand which best practice strategies are widely used among teachers in high and low performing schools. Teachers want to know which instructional practices are effective. Moreover, this study will identify the degree to which teachers feel supported by building leadership and administration in the use of said strategies. This data will hopefully inform thought and discourse about ways in which administrators and building leaders can support literacy reform efforts at the middle school level.

17. PROTECTION OF DATA.

a. Will data be collected as anonymous? ☑ Yes ☐ No *If "YES", skip to part "g".*
*("Anonymous" means that you will not collect any identifiable data.)*

b. Will data be collected as confidential? ☐ Yes ☐ No
*("Confidential" means that you will collect and protect identifiable data.)*

c. If data are collected as confidential, will the participants' data be coded or linked to identifying information?
■ Yes (If so, describe how linked.) No ■

d. Justify your need to code participants' data or link the data with identifying information.

N/A

e. Where will code lists be stored? (Building, room number?)

N/A

f. Will data collected as "confidential" be recorded and analyzed as "anonymous"? ☑ Yes ☐ No
(If you will maintain identifiable data, protections should have been described in #15.)

g. Describe how and where the data will be stored (e.g., hard copy, audio cassette, electronic data, etc.), and how the location where data is stored will be secured in your absence. For electronic data, describe security. If applicable, state specifically where any IRB-approved and participant-signed consent documents will be kept on campus for 3 years after the study ends.

All electronic data will be collected and stored on the researcher's password protected home computer.

h. Who will have access to participants' data?
*(The faculty advisor should have full access and be able to produce the data in the case of a federal or institutional audit.)*

1. Donnella Carter, Researcher
2. Dr. Cynthia Reed, Faculty Advisor

i. When is the latest date that confidential data will be retained? (Check here if only anonymous data will be retained. ✓)

j. How will the confidential data be destroyed? *(NOTE: Data recorded and analyzed as "anonymous" may be retained indefinitely.)*
Data are anonymous and will be kept indefinitely.

## PROTOCOL REVIEW CHECKLIST

**All protocols must include the following items:**

1. ✓ Research Protocol Review Form (All signatures included and all sections completed)

(Examples of appended documents are found on the OHSR website: http://www.auburn.edu/research/vpr/ohsr/sample.htm )

2. ✓ **Consent Form or Information Letter** and any Releases (audio, video or photo) that the participant will sign

3. ✓ **Appendix A**, "Reference List"

4. ✓ **Appendix B** if e-mails, flyers, advertisements, generalized announcements or scripts, etc., are used to recruit participants.

5. ✓ **Appendix C** if data collection sheets, surveys, tests, other recording instruments, interview scripts, etc. will be used for data collection. Be sure to attach them in the order in which they are listed in # 13c.

6. **Appendix D** if you will be using a debriefing form or include emergency plans/procedures and medical referral lists (A referral list may be attached to the consent document).

7. **Appendix E** if research is being conducted at sites other than Auburn University or in cooperation with other entities. A **permission letter** from the site / program director must be included indicating their cooperation or involvement in the project. NOTE: If the proposed research is a multi-site project, involving investigators or participants at other academic institutions, hospitals or private research organizations, a letter of **IRB approval** from each entity is required prior to initiating the project.

8. **Appendix F** - Written evidence of acceptance by the host country if research is conducted outside the United States.

**FOR FULL BOARD REVIEW, NUMBER ALL PAGES, INCLUDING APPENDICES**

Appendix 6

Cover Letter and Survey Link to Principals

AUBURN UNIVERSITY

COLLEGE OF EDUCATION

EDUCATIONAL FOUNDATIONS, LEADERSHIP AND TECHNOLOGY

February 9, 2012

Dear Principal:

My name is Donnella Carter and I am a doctoral candidate at Auburn University majoring in Administration of Elementary and Secondary Education. As a requirement of the PhD program, I am working on a research study entitled, "**The Effectiveness of Instructional Strategies to Improve Literacy in the Middle Grades: Literacy and Justice for All?**"

The study requires input from middle ($6^{th}$ – $8^{th}$) grade teachers whose schools have not been trained in modules for adolescent literacy offered by the Alabama Department of Education. Teachers will be asked to complete a brief, anonymous, web-based survey on reading strategies. I would be grateful if you would encourage your teachers of grades 6 -8 to complete the survey. Again, the survey is completely confidential. No teacher or school will be identified in any way.

Your superintendent has given me permission to survey your teachers. If you would kindly forward the attached letter to targeted teachers, they will find detailed information in the letter. The attached letter provides teachers with a summary of the study and additional information for participants. The link to the survey is also contained in the letter.

Your expediency in encouraging teachers to complete the web-based survey will be greatly appreciated as the survey site will become inactive to participants on March 16, 2012. If you have any questions about the survey or if you would like to receive a summary of the results of this survey when complete, please contact Donnella Carter by phone at 334-672-6757 or by email at dgc0002@auburn.edu.

Thank you in advance for your support of and cooperation in this study.

Sincerely,

Donnella Carter, Investigator

1036 Haley Center, Auburn, AL 36849-5221; Telephone: 334-844-4460; Fax: 334-844-3072

www.auburn.edu