PERCEPTIONS OF ALABAMA SCHOOL PERSONNEL OF RESEARCH-BASED INSTRUCTIONAL STRATEGIES TO IMPROVE STUDENT ACHIEVEMENT

A Dissertation

Presented to

The Faculty of the School of Education
Liberty University

In Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

by

Christopher Glenn Pritchett

March 2007

Perceptions of Alabama School Personnel of Research-based
Instructional Strategies to Improve Student Achievement
By Christopher Glenn Pritchett

ΛD	DD	ZO.	ים ל	٠.
AH	PR	. UV	/ P. L.	, :

COMMITTEE CHAIR

Ellen Lowrie Black, Ed.D.

Comie McDavald, Ph. D.

Ellen Lowiel Black

COMMITTEE MEMBERS

Connie McDonald, Ph.D.

Samuel James Smith, Ed.D

ASSOCIATE DEAN GRADUATE STUDIES

Scott B. Watson, Ph.D.

Abstract

Christopher Glenn Pritchett. PERCEPTIONS OF ALABAMA SCHOOL PERSONNEL OF RESEARCH-BASED INSTRUCTIONAL STRATEGIES TO IMPROVE STUDENT ACHIEVEMENT. (Under the direction of Dr. Ellen Lowrie Black) School of Education, March 2007. This study was designed to explore the perceptions of school personnel concerning the use of research-based instructional strategies as outlined in School Improvement Plans of selected Alabama school districts to improve student achievement. The principal and School Improvement Chairperson at 281 Alabama public secondary schools, identified for School Improvement as mandated by NCLB, composed the population. All subjects received a mailed survey developed by the researcher. Collected data were analyzed with SPSS 11.0 using descriptive statistics, ttest, ANOVA, multiple regression, and Pearson product moment coefficient of correlation. A significant positive correlation was found between the implementation and perceived importance for each of the nine research-based instructional strategies presented in the study. Alabama educators also indicated a need for more time for planning, increased budgets for professional development, and extra resources for achieving school goals.

Acknowledgements

This product is due to the support and encouragement of many people. Special thanks are extended to my committee chair, Dr. Ellen Lowrie Black, for her leadership, guidance, time, and encouragement. The other members of my committee, Dr. Samuel James Smith and Dr. Connie McDonald, have been a constant source of quality advice and ongoing support.

Completion would have never been possible without God, my doctoral committee, and the prayers and support of my family and friends. A heartfelt acknowledgement of my appreciation to my beloved wife, Christal, is extended for her love, support, and ability to spur me forward in obtaining my educational goals. I would like to offer a genuine thank you to my cherished children, Beth and Wynn, for their continuous love and understanding. The sacrifice and love of my family allowed me to complete this venture. I will be eternally thankful.

Contents

Pag	ge
Introduction	1
Background of the Study	4
Statement of the Problem	6
Null Hypotheses	7
Objectives	7
Professional Significance of the Study	8
Overview of Methodology	9
Definitions of Key Terms1	1
Literature Review	3
Accountability Demands14	4
No Child Left Behind2	1
School Improvement Plans 25	5
Research-based Instructional Strategies29	9
Instructional Focus34	4
Student Achievement36	6
Alabama Efforts38	8
Success of Schools4	1
Conclusion4	3
Method4	5
Subjects4!	5
Instrument40	6
Design of the Study50	0

	Prod	cedure	52
	Data	a Analysis	54
	Cond	clusion	57
Resu:	lts		58
	Resp	pondents	58
	Scho	ool Demographics	60
	Scho	ool Improvement Process	61
	Inst	tructional Strategies	64
Disc	ussio	on	78
	Rev	iew of the Problem and Methodology	78
	Sumr	mary of Results	79
	Cond	clusions	84
	Lim	itations	84
	Reco	ommendations	85
Refe	rence	es	87
Apper	ndix		
	A.	Researcher Cover Letter	97
	В.	AL State Department of Education Cover	Letter98
	C.	Researcher Developed Survey	99
	D.	Postcard Follow-up	105

Tables

able	ge
1. Demographic Data of Respondents	59
2. School Demographics6	61
3. Percentages of Degrees of Perceptions of the School Improvement Process	63
4. Correlation Analysis of the Degree of Implementation and the Degree of Perceived Importance	68
5. Rank Order of Pearson Product-Momentum Coefficients for Each Instructional Strategy	69
6. Degree to Which Instructional Strategies Are Implemented	71
7. Percentages of Degrees of Implementation	72
8. Degree of Perceived Importance of Instructional Strategies	73
9. Percentages of Degrees of Perceived Importance	74
10. Factors Preventing Implementation	76
11. Discovery of Research-based Instructional Strategies	77

Chapter One Introduction

With increased accountability, American schools and the people who work in them are being asked to do something new- to engage in systematic, continuous improvement in the quality of the educational experience of students and to subject themselves to the discipline of measuring their success by the metric of students' academic performance. Most people who currently work in public schools weren't hired to do this work, nor have they been adequately prepared to do it either by their professional education or by their prior experience in schools (Elmore, 2002, p. 3).

A new era of school accountability began when President

George W. Bush signed the No Child Left Behind Act of 2001

(NCLB) into law in 2002. Guilfoyle (2006) portrays NCLB as
a two-tiered system in which schools either make adequate
yearly progress (AYP) or are considered in need of
improvement. "The NCLB Act of 2001 sets unprecedented
forceful provisions on using state-mandated assessments to
hold schools accountable for their students' attainment of
prescribed performance standards" (Wang, Beckett, & Brown,

2006, p. 306). NCLB accountability began on the basis of 2001-2002 test scores (Guilfoyle, 2006). Wang, Beckett, and Brown (2006) further stated that the act ambitiously aims to close the achievement gap among all students regardless of their race, class, or disability status and attaches high-stakes consequences to the assessment outcomes. The question facing state and national leaders now is whether they will succumb to the pressure to retreat from the ambitious goals of NCLB, or whether they will rise to the continuing challenge of bringing those goals to life in classrooms across the nation (Wanker & Christie, 2005).

This study examined the perceptions of Alabama school personnel concerning the use of research-based instructional strategies to improve student achievement. The extent to which Alabama school personnel perceive the importance of specified instructional strategies and implement specified instructional strategies were also examined. Additionally, the factors which prevent implementation of specified instructional strategies by school personnel were evaluated.

A School Improvement Plan must be developed by Alabama public schools to address the program(s), grade(s), subjects(s), teacher(s), leadership, and other factors that directly impact the area(s) for which AYP was not achieved

(Alabama Department of Education, 2005). The Alabama

Department of Education (2006) describes the School

Improvement Plan as a practical process for schools to

analyze data, link the data to evidenced-based improvement

strategies, and design a plan for improving the learning of

all students. A School Improvement Plan in the state of

Alabama represents a school's blueprint to meet the

accountability measures outlined by NCLB and enforced by

the Alabama State Department of Education.

While school improvement is not a new educational idiom, its definition and how it is evaluated has changed. School Improvement Plans have professional significance at all public education schools in the United States. The Alabama State Department of Education has expressed interest in the findings of this study. Additionally, the findings generated by this study are likely to have a continuing interest in the future.

The first chapter of the dissertation presents the background of the study, indicates the problem of the study, describes the impact of the study, and presents an overview of the methodology used. The chapter concludes by defining several distinctive terms used in this study.

Background of the Study

"Standardized assessment, defined as a large-scale, externally developed and mandated, uniformly administered and scored evaluation of student learning has been a conspicuous part of the education reform landscape throughout American history" (Wang, Beckett, & Brown, 2006, p. 306). After the publication of the Coleman Report in 1966, all subsequent waves of educational reform have used standardized achievement tests for accountability purposes (Wang, Beckett, & Brown, 2006). NCLB is now the prescribed treatment for the achievement gaps in United States public schools (Cawelti, 2006). School districts and states are required to disaggregate data by student groups and raise achievement for all student groups (Zavadsky, 2006). addition, schools are now held accountable for the achievement of all students. The focus on holding schools accountable for student achievement on standardized assessments sets NCLB apart from previous versions of the law (Guilfoyle, 2006). Thus, schools now function in a society where achievement tests are greatly scrutinized.

"Despite its overwhelming public support, high-stakes accountability systems have met strong resistance and vocal opposition from educators, on whom most of the stakes are leveled" (Wang, Beckett, & Brown, 2006, p. 318). Failing

districts and schools are required to take an active approach to facilitate the improvement all areas of deficiency. The development of a School Improvement Plan is an example of a requirement to indicate how schools that have been labeled as inadequate propose to increase student achievement. This requirement is an active exercise that schools must entertain immediately after receiving word that AYP has not been met.

A school must develop a plan or revise an existing one not later than three months after the school has been identified for school improvement (United States Department of Education, 2006). The United States Department of Education (2006) emphasizes that the plan be focused primarily on a school's instructional program. One component of the mandatory plan is the use of research-based instructional strategies to improve student achievement.

The professional design of this study assesses two existing theories that have been brought together into one premise with a planned outcome. School Improvement Plans are being required to assist schools who need to increase student achievement. Use of research-based instructional strategies in the classroom has been demonstrated to have positive effects on student achievement. This study

examined the theory that bringing these two variables together actually produces desired results in an age of high-stakes testing and increased accountability of schools. The study will be valuable to teachers, administrators, central office personnel, and educators at the state department level. Colleges of education can use this study in preparing teachers to teach in the high-stakes classroom of the twenty-first century.

Statement of the Problem

Available data should be used to identify low-scoring skills and then improve instruction and assessment in those areas (Schmoker, 2006). Local Education Agencies (LEAs) must help schools choose effective instructional strategies and methods and ensure that the school staff receives high-quality professional development relevant to their implementation (United States Department of Education, 2006). "The chosen strategies must be grounded in scientifically based research and address the specific instructional issues that caused the school to be identified for improvement" (United States Department of Education, 2006, p. 14).

The research problem of this study is to determine the perceptions of Alabama school personnel about the use of research-based instructional strategies as outlined in

School Improvement Plans of selected Alabama schools to improve student achievement. The requirement of including research-based instructional strategies to improve student achievement within School Improvement Plans as required by the Alabama Department of Education will also be studied.

Null Hypotheses

- 1. There is no significant difference in the perceived level of importance of research-based instructional strategies and implementation of research-based instructional strategies among selected demographic groups: (a) Type of educator, (b) Type of school, and (c) Size of school.
- 2. There is no significant relationship between the degree to which selected Alabama educators perceive the importance of research-based instructional strategies and the degree to which the strategies are implemented.

Objectives |

To obtain additional information, the following objectives were addressed:

1. To what degree, as measured by a Likert-type scale, are research-based instructional strategies associated with higher levels of student achievement currently implemented into selected Alabama schools?

- 2. To what degree, as measured by a Likert-type scale, do selected Alabama educators perceive the importance of the specified instructional practices associated with higher levels of student achievement?
- 3. What are the factors preventing selected Alabama schools from "Always" or "Often" implementation of specified instructional strategies associated with higher levels of student achievement?

Professional Significance of the Study

The problem addressed in the study has natural importance as it will affect people at multiple levels of the education system. Participants of the study are in the trenches at schools that have been told that they are not making adequate progress and are in the midst of the school improvement process. The findings of this study will impact educators at the state, local system, and individual school levels.

This study will be able to provide information that may be utilized to improve the overall effectiveness of the school improvement plan process. The study will be valuable to school administrators in planning professional development activities and in supervising teachers. It may also be beneficial to Alabama State Department of Education employees as they oversee school improvement efforts of

public schools. Teachers will be able to analyze the use of research-based strategies and the impact the strategies have on student achievement. As a result of this study, educational practitioners will have an opportunity to improve their work.

Overview of Methodology

This section offers a concise overview of this study's methodology. A complete discussion of the methodology of this study is discussed at a later point in the dissertation.

This quantitative study examined the perceptions of school personnel about the use of research-based instructional strategies to improve student achievement.

Furthermore, the study may be classified as nonexperimental research since variables were identified by the researcher but not manipulated. This quantitative study used surveys to collect data. "Survey research uses instruments such as questionnaires and interviews to gather information form groups of subjects" (Ary, Jacobs, & Razavieh, 2002, p. 25).

Mailed questionnaires were used to gather data in this study.

In this study, surveys were mailed to the principals and School Improvement Committee chairpersons at 281

Alabama public secondary schools who were required to

submit a School Improvement Plan for the 2005-2006 school year based on 2004-2005 school year data. A list of schools in the school improvement process was found on the Alabama State Department of Education webpage. A total of 562 surveys were mailed. Each survey was accompanied by a cover letter from the researcher and from the Alabama State Department of Education. Copies of both cover letters may be found in the appendix of this dissertation (Appendix A and Appendix B). Statistical Package for Social Sciences (SPSS) was used for statistical treatment of the data.

Communication with the Accountability Roundtable

Coordinator for the Alabama Department of Education was maintained throughout the dissertation process by the researcher. Enabling schools and systems to achieve and maintain annual measurable objectives is the goal of the Accountability Roundtable according to the Alabama

Department of Education. The cover letter from the Alabama State Department of Education was obtained by the researcher which conveyed a message of anonymity and that there was no threat to the survey respondents.

Additionally, the cover letter from the Alabama State Department of Education stated that the study will provide invaluable information for continued efforts toward student achievement.

Definitions of Key Terms

Accountability - Using the results of some standardized assessment to hold states, districts, schools, and/or students accountable for the failure or success of reaching predetermined standards.

Adequate Yearly Progress (AYP) - The term used to describe whether a school or LEA has met its annual accountability goals.

Professional Development - Time allocated by districts and schools to increase teachers' knowledge of the academic subjects they teach and in their use of effective, scientifically based instructional strategies.

Research-based Instructional Strategies - Strategies grounded in scientifically based research that have demonstrated over time and in varied settings, an effectiveness that is documented by high-quality educational research.

School Improvement Chairperson - The educator at each school identified to lead the school improvement process.

School Improvement Plan - A framework to address instructional issues in a school that has not made sufficient progress in student achievement.

School Improvement Status - A school that does not make AYP for two consecutive years.

School Personnel - The principal and school improvement chairperson for each school surveyed.

Stipend - A sum of money allotted for individuals who serve on the School Improvement Committee at their respective school.

Title I School - A school who receives federal funding to help students who are behind academically or at risk of falling behind.

Chapter Two Literature Review

Wynne (1972) proposed that if accountability to the public became widespread, then conflicts between schools and the public would arise resulting in public expectations about how schools should be run which would generate new demands on schools. Educational movements such as A Nation at Risk in 1983, the 1994 Elementary and Secondary Education Act, and Goals 2000 each placed an emphasis on standardized assessment. Approximately two and one-half decades later since Wynne's proposal, public education in America is facing high levels of scrutiny in an age of data driven decisions centered upon student achievement. Seventy-three percent of adults favor testing student achievement and holding teachers and school administrators responsible for student learning (Hart & Teeter, 2002). As a result, policymakers have developed increasingly sophisticated accountability and support systems to steer schools towards improved performance (Goertz & Massell, 2005). Resonating with the mounting public pressure on schools to improve student achievement has been the increasing use of standardized achievement test scores to guide instruction and curriculum (Henning, 2006).

way to change public perception of failing schools is to adopt universal measures of accountability (Senge, 1990).

Accountability for performance requires schools to change their internal capacity for instruction (Elmore & Fuhrman, 2001). Instruction is one premise in which the United States Department of Education has required every state in the nation to improve. Student performance in the United States is a recurring problem.

Accountability Demands

The standards and accountability movement is broadbased politically and persistent over time. It
involves state legislators, governors, advocacy groups
and professional organizations. It stems from the
basic belief that schools, like other public and
private organizations in society, should be able to
demonstrate what they contribute to the learning of
students and that they should engage in steady
improvement of practice and performance over time.
The accountability movement expresses society's
expectation that schools will face and solve the
persistent problems of teaching and learning that lead
to academic failure of large numbers of students and
the mediocre performance of many more. Over time, if
schools improve, increased accountability will result

in increased legitimacy for public education. Failure will lead to erosion of public support and a loss of legitimacy (Elmore, 2002, p. 3).

Wynne (1972) identified Henry Barnard as one of the first reformers who sought better data to improve education. Barnard believed that such data might be a key tool for fostering educational improvement and for identifying the most successful practices (Wynne, 1972). In 1867, the Department of Education formed and Henry Barnard was the first commissioner (Wynne 1972). The testing movement in the United States began with emphasis on pupil performance rather than how well schools taught (Wynne, 1972).

The contemporary accountability movement in education started in the 1970s (Pipho, 2000). Between 1972 and 1983, 34 states established minimum competency standards and began testing students on them (Linn & Gronlund, 2000). Marzano (2000) identified Ron Edmonds as the figurehead of the school effectiveness movement. Edmonds was passionate that schools can and do make a difference in student achievement (Marzano, 2000). Hence, Edmonds listed high expectations for student achievement as one of his five school-level variables (Marzano, 2000). Because of President Ronald Reagan's role in promoting A Nation at

Risk and its recommendations, the federal government had, by the end of the 1980s, become associated with a highly visible education reform agenda that focused on improved educational quality and higher student achievement (McDonnell, 2005). It was after the publication of A Nation at Risk, the standards-based reform movement began. The National Commission on Excellence in Education (1984) listed many indicators to represent why the public should have a heightened concern about education in America. Indicators of risk listed by The National Commission on Excellence in Education (1984) include:

- 1. "International comparisons of student achievement, completed a decade ago, reveal that on 19 academic tests American students were never first or second and, in comparison with other industrialized nations, were last seven times" (p. 8).
- 2. "Average achievement of high school students on most standardized tests is now lower than 26 years ago when Sputnik was launched" (p. 8).
- 3. "There was a steady decline in science achievement scores of U.S. 17-year-olds as measured by national assessments of science in 1969, 1973, and 1977" (p. 9).

- 4. Both the number and proportion of students demonstrating achievement on the SATs (i.e., those with scores of 650 or higher) have declined.
- 5. Average tested achievement of students graduating from college is lower.

Subsequent decades of falling or stagnating scores on two key nationally administered tests, the Scholastic Aptitude Test (SAT) and the National Assessment of Educational Progress (NAEP), along with poor performance on international tests contributed to the publication of A Nation at Risk in 1983 (Smith, 2005). Goals 2000, adopted in 1994 by President Bill Clinton, placed academic standards and assessment at the forefront by encouraging the expanded use of standardized tests at various grade levels (Reyes & Rorrer, 2001). The Clinton administration was a strong proponent of standards-based reforms that were based on the notion that setting high academic standards and then expecting schools to teach and students to learn those standards could serve as a potent force in improving overall educational quality (McDonnell, 2005). McDonnell (2005) reported that while states varied in the quality and precision of their standards and the extent to which they were linked to assessment systems, all but a few had chosen

to pursue using standardized tests by the mid-1990s (McDonnell, 2005). Only seventeen states ever fully complied with the 1994 Elementary and Secondary Education Act (ESEA) (Wanker & Christie, 2005). Most recently, the No Child Left Behind (NCLB) legislation reauthorized the ESEA. Wanker and Christie (2005) claimed that NCLB differs from past education initiatives in two important ways:

- 1. It is a more systemic approach to achieving reform and improvement, tying together a variety of requirements and incentives in areas ranging from student testing, school safety, and reading instruction to professional development for teachers and technical assistance for low-performing schools.
- 2. It significantly raises the stakes for states, districts, and schools if they fail to make steady, demonstrable progress toward improving student achievement.

NCLB now seeks to assist students in meeting high standards by mandating School Improvement Plans in all districts and schools that do not make designated academic targets (United States Department of Education, 2002).

Basic strategies employed during the age of accountability have been to evaluate schools, provide information to schools and policy makers, report test

scores to the public, and provide rewards or sanctions (Mazzeo, 2001). Additionally, Mazzeo (2001) reports that states take on the role of being a change agent based on the premise that test results can trigger intervention. Student performance, as measured by standardized tests, has emerged as the tool for evaluating states, school districts, and schools.

"Most states are implementing statewide assessment programs that are being used for high-stakes purposes" (Stone & Lane, 2003, p. 1). Stone and Lane (2003) report that these assessments involve performance-based tasks that are assumed not only to serve as motivators to improve student achievement and learning, but to also encourage instructional strategies and techniques in the classroom. "In 2002-2003, 84% of districts with schools identified for improvement reported school planning or the use of student achievement data to plan improvement or monitor student progress as among their two most important improvement strategies" (Goertz, 2005, p. 83). Looking at student achievement results in conjunction with the context of the school and the processes that create the results gives administrators and teachers significant information about what they need to do to improve learning for all students (Bernhardt, 2003). Regardless of the national standards,

goals, and testing, without good teachers and a focus on what happens inside the classroom, education reform was bound to fail (Biddle & Berliner, 2002).

"Traditionally, assessments have been used as agents for change, and, more recently, to hold schools accountable to state learning outcome standards through the use of rewards and sanctions" (Stone & Lane, 2003, p. 1). Questions about how to analyze and use data effectively have become urgent as states and districts throughout the United States have developed high-stakes accountability plans" (Doran, 2003, p. 55). Teachers and administrators currently function under a microscope in a way that they have never had to do before which has increased the demands for better performance and greater accountability (Fullan, 2000). Changes in instruction have a direct impact on students; however, stakes for students are not as high as those for administrators and teachers (Stone & Lane, 2001). Many state governments have designed policies that combine standards, school performance assessments, productivity targets, rewards, and sanctions to deal with poorly performing schools that are proliferating throughout the United States (Mintrop & MacLellan, 2002). As of 2001, every state had student testing programs and defined school accountability systems (Boser, 2001). School

accountability systems are proliferating, and the stakes attached to the systems are increasing (Parkes & Stevens, 2003).

Elmore and Fuhrman (2001) shared several findings from a body of research on accountability systems conducted by the Consortium for Policy Research in Education (CPRE).

One such finding centers on instructional practices.

Elmore and Fuhrman (2001) state that accountability for performance requires changes in schools' internal capacities for instruction as expectations of student performance are being raised. The call for increased student achievement inherently descends upon the pedagogy of classroom teachers and how needed changes will be assessed and implemented.

No Child Left Behind

The No Child Left Behind Act of 2001 was designed to help create high-performing schools with cornerstone accountability features built upon rigorous academic content and achievement standards, and assessments based on those standards (United States Department of Education, 2006). The United States Department of Education (2006) has set an ambitious, long-term goal for proficiency in mathematics and reading. Goertz (2005) lists the public reporting of test scores, the identification of schools

that do not make adequate yearly progress, and the threat of consequences for schools that fail to improve as assumptions that will make educators work harder. These consequences range form district level monitoring to giving parents the option to transfer their children out of a failing school and providing students who remain in the school with additional tutoring (Smith, 2005). In more extreme cases, where a school fails to make AYP for four or more consecutive years, a school can be faced with having to replace staff, change aspects of the curriculum, or be totally restructured (Smith, 2005). NCLB assumes that states and local school districts possess or can develop the ability to assist school improvement efforts (Goertz, 2005).

NCLB requires states to test specified subjects and grades, to establish minimum performance standards for students, schools and school districts, and to provide assistance and impose sanctions on schools and districts that do no meet performance goals as a condition of receiving federal aid (Goertz, 2005). This is done primarily through student achievement test score data (Doran, 2003). Accountability plans must also include other indicators of achievement, but high achievement on the other indicators cannot make up for weak performance as

determined by test scores (Doran, 2003). "The stakes are highest for administrators and teachers when assessment programs are intended primarily to improve and monitor the educational system" (Stone & Lane, 2003, p. 3). Stone and Lane (2003) state that these stakes are particularly the case when rewards and sanctions are attached to school score gains. NCLB holds districts accountable for the performance of their students and are to help schools analyze student achievement data and put in new instructional practices that have shown evidence of effectiveness (Goertz & Massell, 2005).

NCLB is based on four pillars: stronger accountability for results, more freedom for states and communities, proven education methods, and more choices for parents (United States Department of Education, 2004).

Under the pillar of proven education methods, NCLB put emphasis on determining which educational programs and practices have been proven effective through rigorous scientific research (United States Department of Education, 2004). During the 1990s, states found different ways to define success and outline what the ramifications would be (Goertz, 2005). NCLB was designed, in part, to address this variability in state policy (Goertz, 2005).

Garrison (2004) researched how the instructional strategies of public school teachers interact with the achievement levels of their students. Instruction in low achieving classrooms generally was less coordinated than in classes of average achieving students, while instructional strategies and lesson focus in classes of high achieving students were linked in ways that resulted in more continuity and greater productivity (Garrison, 2004). NCLB is widely known to promote the learning of all students. Thus, teachers need to develop a level of pedagogical expertise, including knowledge about how people learn, to reach all students (Garrison, 2004).

AYP is the foundation of accountability provisions (Doran, 2003). "AYP must be thoroughly analyzed to ensure it measures school and district effects on student progress" (Wanker & Christie, 2005, p. 71). All schools, not just Title I schools, fall under the accountability system summarized in NCLB. "NCLB spells out a set of actions that states and districts must take with Title I schools identified for improvement and may take with non-Title I schools that are similarly designated" (Goertz, 2005, p. 83). NCLB specifies that districts provide technical assistance in analyzing data, identifying and implementing effective professional development and

instructional strategies, and analyzing and modifying school budgets (Goertz, 2005). It is an underlying assumption of NCLB that using data will lead to school improvement (Heritage & Chen, 2005).

"A school identified for improvement must make AYP as defined in its State's accountability system for two consecutive school years in order to exit school improvement status" (United States Department of Education, 2006, p. 6). However, Linn, Baker, and Betebenner (2002), reported the development and adherence to AYP goals is an ambitious undertaking for most states. Once a school is designated for school improvement, the school must develop a required plan to serve as a framework so that greater numbers of students achieve proficiency in the core academic subjects of reading and mathematics (United States Department of Education, 2006). One part of the improvement plan is the strategies teachers will employ to instruct students and ensure the proficiency of all students as mandated within NCLB.

School Improvement Plans

School improvement is one of seven categories of requirements listed in NCLB (Wanker & Christie, 2005).

"The category of school improvement includes NCLB requirements involving timely identification of schools in

need of improvement, corrective action and restructuring, the provision of technical assistance to such schools, public school choice, rewards and sanctions, school recognition, school restructuring, and corrective action for local education agencies" (Wanker & Christie, 2005, p. 69). School Improvement Plans represent one method of dealing with accountability issues which are mandated by NCLB. Accountability plans, like School Improvement Plans, measure the effectiveness of public schools primarily through student achievement test score data (Doran, 2003). Teacher quality, professional development, scheduling, and class size are factors that are within the scope of a district's plan to improve student achievement (McLaughin & Talbert, 2003). However, efforts to improve student achievement still need to be focused within the classroom in such areas as teacher quality and practices (Stigler & Hiebert, 1999).

School Improvement Plans serve as an instrument to direct schools toward improvement and translate external expectations into schools' internal obligations (Mintrop & MacLellan, 2002). Schlechty (2001) points out that it is essential that those in charge of creating School Improvement Plans identify specific target areas that must be measured, the instrument that would accurately measure

those areas, and interpret the results form the measurements. Schools and teachers involved in data-driven school improvement efforts must identify teacher-level innovations, such as the use of effective instructional strategies, believed to have a high potential for enhancing student achievement (Marzano, 2000). True data can help school administrators modify school practices and reallocate resources to fully support areas in need (Doran, 2003). Furthermore, Doran (2003) states that appropriately analyzed data can also meet the external, public purposes of accountability, inspiring public actions to support the improvement of education for children and fostering community engagement, community leadership, and community resource allocation. "School Improvement Plans facilitate an effective, internalized, and self-sustained process of school improvement" (Mintrop & MacLellan, 2002, p. 276).

Mintrop and MacLellan (2002) studied 46 School
Improvement Plans from the state of Maryland's
accountability system; additionally, they reviewed case
study data from three elementary and four middle schools.
Each Maryland school involved in the study was on probation
for low performance. The School Improvement Plan is
accepted by many regular teachers as a tool that district
and school administrators use to focus the faculty and to

standardize operations (Mintrop & MacLellan, 2002).

Without the strong support and monitoring of the plan by the school principal, most teachers in the Maryland study ignored the plan despite professed compliance (Mintrop & MacLellan, 2002). Furthermore, support from the district or central office is paramount. Elmore (2003) cited a research study that found on a typical day, the district office focused less than nine percent of the time on schools and less than three percent on curriculum.

Instructional strategies are at the heart of school improvement efforts. Hendrix (2003) concluded that school improvement can be used as a means by which school corporations and schools can encourage administrators and staff members to develop a professional community through their collegial relationships and their instructional practices. However, a problem facing school improvement is how to ensure that the effort that goes in to the school improvement process impacts teacher practice and student learning (West, 2000). The effort includes the analysis of needs, the development of strategies, and the monitoring of the plan (West, 2000). The general method to implement school improvement plans is to give clear expectations at the start of the plan and provide support where appropriate (Vrabel, 1999). Teachers are at the epicenter of school

improvement plans. Buckshaw (2006) reported that teachers' involvement in the school improvement process is associated with their level of use of the strategies identified in the School Improvement Plan. Without the wide scale commitment and involvement of the teachers in a school, the implementation of a School Improvement Plan may be stagnant and only affect a few select teachers and their students instead of the entire school (Cooper, Slavin, & Madden, 1998). The daily process of executing a School Improvement Plan means constantly carrying out its strategies. If the strategies are properly aligned with the goals and objectives of the plan, then they are advancing toward the goals outlined in the plan (Vrabel, 1999).

Research-based Instructional Strategies

The assessment of classroom teaching practices is essential to develop a picture of overall school climate (Garrison, 2004). In a meta-analysis study, Marzano (2000) identified Benjamin Bloom as the first researcher to demonstrate the powerful influence that effective instruction can have on student achievement. "Strategies grounded in scientifically based research are those that have demonstrated, over time and in varied settings, an effectiveness that is documented by high-quality educational research" (United States Department of

Education 2004, p. 10). Schools were directed to locate and implement research-based instructional strategies. These research-based teaching methods have been proven to work. Scientifically-based research provides a standard by which the principal and teachers can critically evaluate the many instructional strategies available to them and choose those with the greatest likelihood of producing positive results (United States Department of Education, 2006). A school's use of instructional strategies is one piece of data that can give schools a better picture of how to improve the learning of students (Bernhardt, 2003).

"The concept of adequate yearly progress is addressed by reviewing the types of instructional strategies that would most likely yield progress" (Browder & Cooper-Duffy, 2003, p. 157). Failure to meet AYP is the determinant that gives rise to schools entering the school improvement process. Grant and Gillette (2006) identify pedagogical skills, or the ability to successfully implement teaching strategies to meet the educational and social needs of students, as a key factor in effective teaching. A key component to translate curriculum into effective lessons is the ability to gather and use data to improve practice (Grant & Gillette, 2006). It is this process in which NCLB is devoted.

School Improvement Plans depend on the location and use of research-based instructional strategies. Not to be overlooked is the ability of educators to collect and analyze data and set goals and targets based on their analysis (Heritage & Chen, 2005). In a study of 48 low performing high schools in six different states, Goertz and Massell (2005) found that some educators find searching for information about new instructional strategies difficult. Heritage and Chen (2005) observed educators at an elementary school who had these abilities which were a significant factor in the success of their respective school improvement efforts. Use of research-based instructional strategies has been confirmed to improve student achievement. However, surveys have found mixed levels of implementation of evidence-based practices among general educators (Browder & Cooper-Duffy, 2003). "Rarely do current accountability systems rely on the procedures or the processes which teachers use to affect those outcomes" (Fisher, 2002, p. 46). Nevertheless, educators are at a point where school and curricular decisions need to be made on current and relevant data (Hanson, Burton, & Guam, 2006).

Iowa has been focusing on teacher quality to move into compliance with NCLB requirements (O'Connell & Phye, 2005).

One segment of Iowa's plan is to disseminate effective strategies and best practices. The main purpose of Iowa's efforts has been to focus on the academic needs of students by improving its instructors' repertoire of teaching strategies so they can reach all students (O'Connell & Phye, 2005).

Alabama recognizes the importance of training teachers to utilize research-based instructional strategies. One of the standards for effective professional development for the state of Alabama states that, "effective professional development deepens educators' content knowledge, provides them with research-based instructional strategies to assist students in meeting rigorous academic standards, and prepares them to use various types of classroom assessments appropriately" (Alabama State Department of Education, 2005, Appendix A). It is expected that failing schools in the state of Alabama embrace research-based instructional strategies in their School Improvement Plan.

The literature reviewed indicates that the use of research-based instructional strategies improves student achievement. Strategies such as cooperative learning and nonlinguistic representations have been documented to foster the achievement of students. Marzano (2003) recommends implementing research-based instructional

strategies that research has shown to have positive effects on student achievement. Marzano, Pickering, and Pollock (2001) reported that the following categories of instructional strategies have a strong effect on student achievement for all students in all subject areas at all grade levels:

- 1. Identifying similarities and differences.
- 2. Summarizing and note taking.
- 3. Reinforcing effort and providing recognition.
- 4. Homework and practice.
- 5. Nonlinguistic representations.
- 6. Cooperative learning.
- 7. Setting objectives and providing feedback.
- 8. Generating and testing hypotheses.
- 9. Questions, cues, and advance organizers.

Individual teachers must use the most effective instructional strategies (Marzano, 2000). Not to be overlooked are the instructional materials utilized by teachers. Instructional materials should reflect the most current applications of technology in appropriate curriculum areas, the best scholarship in each discipline, and research in learning and teaching (The National Commission on Excellence in Education, 1984).

Lists of established instructional strategies do not promulgate how to plan for effective instruction (Marzano, 2003). Thus, meaningful professional development experiences are needed to enhance, edify, and inspire teachers. Professional development for novice teachers should be assembled on a framework of research-based instructional strategies (Freiberg & Driscoll, 2000). Professional development training should concentrate on the teaching and learning process such as the use of scientifically based instructional strategies (United States Department of Education, 2002). Americans clearly associate quality teaching with quality education; furthermore, when it comes to quality teaching, it is not what the teacher knows, but how well the teacher can convey what is known to students (Hart & Teeter, 2002). Hart and Teeter (2002) reported adults and educators both agree that having skills to design learning experiences that inspire children best defines quality teaching. Instructional planning to employ specific strategies can raise the quality of teaching and, more importantly, enhance student achievement (Marzano, Pickering, & Pollock, 2001).

Instructional Focus

A common theme for reforming districts is a focus on instruction (McLaughlin & Talbert, 2003). Stronge and

Hindman (2003) report that the teacher is the clear common denominator in both school improvement and student success. One domain of teaching effectiveness is that of implementing instruction (Stronge and Hindman, 2003).

"Effective teachers foster higher student learning gains by providing instruction that meets individual needs through the use of such strategies as hands-on learning, problem solving, questioning, guided practice, and feedback" (Stronge and Hindman, 2003, p. 51). "Instructional strategies in literacy and mathematics that are now proven to make a difference for student achievement will become better known to teacher educators, school administrators, and teachers alike" (Barnett, 2005, p. 272).

Changes in scores on the Maryland State Performance
Assessment Program were found to be related to classroom
factors, including instruction-related predictors (Stone &
Lane, 2003). These classroom factors fall under the
direction of the teacher as Marzano (2003) described
teacher-level factors in his book. D'Agostino (2000) found
that there are instructional variables that are powerful
predictors of student achievement. Instructional factors
within the school-level organization do influence students'
achievement within the classroom (D'Agostino, 2000).

"The success of our efforts to educate children hinges on our ability to adapt instruction to individual needs, optimizing every child's chances for success in the public education system" (Garrison, 2004, p. 378). Elmore (2002) declared the knowledge necessary for successful teaching lies within three domains:

- 1. Deep knowledge of the subject matter and skills.
- 2. Expertise in instructional practices that cut across specific subject areas.
- 3. Expertise in instructional practices that address the problems of teaching and learning associated with specific subjects and bodies of knowledge.

Successful school districts embrace a culture committed to continuous improvement and focus on the quality of instruction that promotes student achievement (Datnow & Cohn, 2004).

Student Achievement

NCLB has evolved considerably since its inception; however, the one part of the Act that has remained constant is that of a level of accountability for student achievement (Hanson, Burton, & Guam, 2006). Achievement data must be broken down by all student subgroups outlined in NCLB for analysis. Failure of subgroups to meet

expected achievement rates for AYP determination triggers the onset of possible sanctions.

Henning (2006) reports that a half century ago, standardized achievement test scores were utilized to:

- Inform teachers and parents about students' achievement relative to their peers.
- 2. Help place students in appropriate programs.
- 3. Justify the allocation of supplemental resources.

 Advances in the technology of standardized tests and the accepted belief that testing improves student achievement have led to using standardized test results in ways not originally intended (Henning, 2006). "In this era of high-stakes assessments, stricter accountability, and greater public scrutiny, staff members in schools across the country are taking stock, assessing their practices, and determining which types of changes will lead to improvements in student achievement" (Dean, Galvin, & Parsley, 2005, p. 1). Analyzing trends, disaggregating data, and examining relationships between student achievement scores and other indicators of student performance are now common approaches for using student achievement data (Henning, 2006).

Goertz (2005) reported that in 2002-2004, 84% of districts with schools who had been identified for

improvement reported that the use of student achievement data to plan improvement or monitor student progress as one of their two most important improvement strategies. The overall goal of NCLB is to have all students achieving proficient levels by 2014 (Hanson, Burton, & Guam, 2006).

NCLB will make disparities in student achievement much more visible than in previous reform attempts (Goertz, 2005).

In a ranking of states centered on academic achievement from 1981 -2003, LeFevre (2004) ranked the state of Alabama 47th. Based on data from the 2004-2005 school year, 470 schools in the state of Alabama entered or continued in the school improvement process due to a lack of achievement. Title I schools represented 66.6 percent of those schools. Two hundred eighty-one (59.8%) of the schools were high schools, junior high schools, or middle schools and represent more than 20 percent of Alabama high schools, junior high schools. These 281 schools were selected for this study.

Alabama Efforts

Every State Educational Agency (SEA) has developed an approved system for implementing the accountability provisions of NCLB by creating a single definition of AYP for all schools and local educational agencies throughout the state (United States Department of Education, 2006).

Annual targets for academic achievement, participation in assessments, graduation rates for high schools, and at least one other academic indicator are included in this definition (United States Department of Education, 2004). The state of Alabama has been recognized for the rigor of its developed system of testing and reporting (Richardson, 2002).

Alabama makes extensive use of high-stakes testing (Amrein & Berliner, 2003). Amrein and Berliner (2003) report that Alabama has the following stakes:

- 1. Graduation is contingent on a high school graduation exam.
- 2. The state publishes annual school or district report cards.
- 3. Alabama identifies low-performing schools according to whether they meet state standards or improve year-to-year.
- 4. The state has the authority to close, reconstitute, or revoke accreditation or take over low-performing schools.
- 5. The state has the authority to replace school personnel, principals or teachers, due to low test scores.

Proposed sanctions by the state of Alabama adhere to the following principles (Alabama State Department of Education, 2005):

- Increased learning opportunities for students should be the result of sanctions.
- 2. Intensive support should be given to schools that are not making academic progress.
- 3. Assistance will begin in the first year of failure to make AYP.
- 4. The degree of sanctions should reflect the degree of the need for academic improvement.

Requirements for a school or LEA to make AYP in the state of Alabama include: annual measurable objectives in reading and mathematics, participation rates in reading and mathematics, and additional academic indicators (Alabama State Department of Education, 2005). Additional academic indicators include attendance and graduation rates. These requirements are presented in published school accountability report cards by the Alabama State Department of Education. States must indicate how both schools and school districts will demonstrate AYP towards full proficiency and make public their test results (Smith, 2005). "One common outcome of school accountability systems is the labeling of schools" (Parkes & Stevens,

2003). School report cards are given to schools to distribute to students and their parents. School report cards can also be found on the Alabama State Department of Education website (www.alsde.edu).

To aid schools in their efforts to improve student achievement, The Alabama State Department of Education has funded several initiatives. The Alabama Math, Science, and Technology Initiative (AMSTI), the Alabama Reading Initiative (ARI), and the Alabama Middle School Initiative (AMSI) are available at no cost to schools. Each program is centered upon proven and effective methods in the specialized areas applicable to each initiative. Schools apply for acceptance by agreeing to meet conditions set forth by each initiative. Teachers receive meaningful professional development to put into practice the established methods emphasized by each program in their classrooms.

Success of Schools

In a study reported by Fisher (2002), a high school in San Diego, California, identified specific teaching strategies applicable to all content areas to improve student achievement. After a period of two years, students demonstrated increased achievement (Fisher, 2002). In a study of data collected in the early 1990s, students who

had the highest mathematics gains over a period of time had teachers who effectively employed key instructional strategies (D'Agostino, 2000). Newmann and Wehlage discovered that some schools they studied changed their instructional practices to improve the performance of students (Fullan, 2000). Included in a school's attempt to make AYP is the inclusion of students with disabilities in the testing population. Browder and Cooper-Duffy (2003) cite several studies that demonstrate that students with significant cognitive disabilities can acquire new skills with the use of specific strategies utilized by special education instructors. Furthermore, special educators have experience in developing empirically supported individualized instructional strategies to promote learning (Browder & Cooper-Duffy, 2003).

Schools have recognized the importance of research-based instructional strategies. Rigeman and McIntire (2005) described a school district's response to improve state math scores and assist teachers in using technology more in the classroom by providing participating teachers with research-based instructional strategies supported by technology that facilitate school improvement processes.

One of five design principles that have been found effective in high performing urban school districts is a

focus on classroom instruction at all levels of the organization (Hightower, Knapp, Marsh, & McLaughlin, 2002). Goertz and Massell (2005) concluded that the response of high schools to external accountability depends in part on the ability and willingness of their staff to bring in fresh ideas to meet the challenges posed by policies that ask them to educate all students to high levels of academic achievement.

Conclusion

The use of proven education methods is one of the four pillars in which NCLB was built. Teachers with proven methods of instruction at their disposal can positively impact student learning. Effective teaching includes an understanding of the organization and presentation of subject matter in a way that makes it comprehensible to and relevant to others (Grant & Gillette, 2006). Assessment of the use of research-based instructional strategies is paramount to the School Improvement Plan process and to the requirements of NCLB. Grant and Gillette (2006) state the science of teaching may lie in the content, but the art of teaching is in the delivery of the content. It is the delivery of the content that highlights the importance of the utilization of research-based instructional practices.

Evaluation of School Improvement Plans as a foundation for improving student achievement is warranted. A school identified for improvement is told formally that it is not meeting the challenge of successfully teaching all of its students (United States Department of Education, 2004). The literature reviewed clearly relates to the stated problem of the study.

The preceding selection of literature reviewed clearly reflects ongoing concern related to School Improvement

Plans and student achievement. "NCLB will have major consequences for how states and school districts hold schools accountable for student performance" (Goertz, 2005, p. 87).

Chapter Three Method

This chapter of the dissertation explains the methods used to execute this quantitative study with a particular emphasis on how data were secured and analyzed. The Alabama State Department of Education formed the Accountability Roundtable to provide technical assistance to schools in meeting accountability measures, including the area of instruction. Support for the execution of this study was given by the Alabama State Department of Education (see Appendix B) to the researcher via communication with the Coordinator of the Accountability Roundtable. Subjects agreed to take part of the research by the return of a completed survey.

Subjects

The target population of interest for the research was Alabama public secondary schools. The accessible population was Alabama public middle, junior high, and senior high schools who were required to complete a School Improvement Plan for the 2005-2006 school year based on 2004-2005 school year data in which the schools did not meet AYP. A list of the schools in the school improvement

process was available on the Alabama State Department of Education webpage.

Two-hundred and eighty one Alabama public secondary schools composed the population of this study. Subjects included the school principal and the School Improvement Committee chairperson from each school for a total population of 562 (N=562). School principals and School Improvement Committee chairpersons were selected as the population of this study because they are in the best position to provide pertinent information concerning the use of research-based instructional strategies and the school improvement process at each respected school. The entire population was surveyed.

Instrument

Data were collected through a researcher-designed survey (Appendix C) entitled Assessment of Research-based Instructional Strategies Within School Improvement Plans. The researcher developed the survey instrument after an applicable instrument addressing all variables of this study was not discovered in the review of literature and evaluating comparable surveys that already exist such as the Wisconsin's Information Network for Successful Schools (WINSS) for high academic standards. Face validity for the researcher-designed survey was established via several

methods. First, the Alabama State Department of Education submitted specific items for inclusion in the survey. For example, professional development activities to train teachers was one topic of interest to the Alabama State Department of Education. Second, previously validated surveys were analyzed to ascertain appropriate methods of collecting demographic information. Third, following many iterations and revisions, draft surveys were completed by several Alabama public educators. These persons were selected to evaluate the instrument as they function in the same capacity as survey recipients. These steps provide face validity for the survey instrument.

The survey included the following components: (a) demographic data; (b) experience with and perceptions of the school improvement process; (c) perceptions of the importance of research-based instructional strategies; (d) degree of implementation of research-based instructional strategies; and (e) factors preventing the implementation of research-based instructional strategies.

The demographic data in section one includes current position, gender, years as educator, teacher, and/or administrator, type of school, level of school, school enrollment, and Title I or non-Title I school.

In section two of the survey instrument, subjects were asked about their experience with the school improvement process and their perceptions about the school improvement process. Four questions in this section were simple yes or no questions. A five-point Likert-type scale was utilized to evaluate experiences with and perceptions of the school improvement process for the remainder of the section with the following scale: (1) Strongly Agree; (2) Agree; (3) No Opinion; (4) Disagree; and (5) Strongly Disagree.

The third section of the instrument specifically addressed perceptions of the importance of research-based instructional strategies (column A), degree of implementation of research-based instructional strategies (column B), and factors preventing the implementation of research-based instructional strategies (column C). In column (A), a four-point Likert-type scale was employed with the following scale: (4) Very Important; (3) Somewhat Important; (2) Not Very Important; and (4) Not At All Important. In column (B), a four-point Likert-type scale was used with the following scale: (4) Always; (3) Often; (2) Sometimes; and (1) Never. For column (C), subjects were asked to only answer if they failed to select (4) Always or (3) Often in column (B). Respondents were provided a list of inhibiting factors that prevented the

implementation of specific research-based instructional strategies. The following inhibiting factors were listed for subjects to check all that applied: necessary time, necessary resources, necessary knowledge and skills, administrative support, lack of personal interest, lack of professional development/training, and other.

The foremost internal validity concern in designing the survey was the presence and degree of measurement error. The degree and presence of measurement error was controlled by developing unambiguously worded instructions and questions in the survey instrument. Questions not clearly stated leading to individual respondent interpretation and assumption, vague questions, and confusing instructions could lead to some degree of systematic or non-random error. Subjects must understand clearly what is wanted of them if they are to respond (Dillman, 2000). Reducing these sources of error was addressed during survey development and validated by the panel of experts review. Panel comments, input, and recommendations were considered and included into the final instrument.

Usability of the survey was determined through a panel of expert judges, a review by colleagues, and feedback from the Alabama State Department of Education. Based on the

recommendations of the panel, minor adjustments were made to the survey instrument. Colleagues were asked to read the survey for clarity. A copy of the survey was sent to and approved by the Coordinator of the Accountability Roundtable for the Alabama State Department of Education. Packets were then mailed to the population for data collection.

Design of the Study

Every state educational agency has developed an approved system for implementing the accountability provisions of NCLB by defining AYP for all schools and LEAs throughout that individual state (United States Department of Education, 2006). The definition includes annual targets for academic achievement, participation in assessments, graduation rates for high schools, and at least one other academic indicator for elementary and middle schools (United States Department of Education, 2006). NCLB requires both state and local education agencies to review annually the status of every school to ensure that the school is making adequate progress (United States Department of Education, 2006).

In response to the mandates of NCLB, the state of Alabama has a single accountability system that encompasses state and federal requirements. The Alabama State

Department of Education gathers, analyzes, and maintains student academic assessment data. A list of schools not making AYP are published yearly and can be found on the webpage for the Alabama State Department of Education (www.alsde.edu). Moreover, the school improvement status of each school is provided. This list, generated in 2005, served as the foundation to research the problem addressed in this dissertation.

Four hundred and seventy schools in the state of Alabama failed to meet AYP during the 2004-2005 school year and were identified for school improvement. Two hundred eighty one secondary schools were identified on the list. The entire population of secondary schools was surveyed in this study.

One aspect of the School Improvement Plan that these schools are mandated to complete is the use of research-based instructional strategies. Schools are to incorporate strategies based on scientifically based research that will strengthen the core academic subjects in the school and address the specific academic issues that caused the school to be identified for school improvement (United States Department of Education, 2006).

The design of this study was prepared with these processes in mind as the research was planned and the

instrument was constructed. The research problem is an ongoing challenge faced by many schools in which educators have experiences and perspectives. "Surveys permit the researcher to summarize the characteristics of different groups or to measure their attitudes and opinions toward some issue" (Ary, Jacobs, & Razavieh, 2002, p. 25). research method was survey research. The survey instrument was devised with the intent to give a feeling of intrinsic value and meaning to the respondents, that the study was legitimately concerned in their perceptions and opinions, and that their responses were valuable and key to a better understanding of the role and needs of Alabama educators who work directly with the school improvement process. developed instrument was mailed to the entire population. Statistical Package for Social Sciences (SPSS) was employed for statistical treatment of the data to determine the effect of using research-based instructional strategies in School Improvement Plans on student achievement as perceived by school personnel.

Procedure

A packet of information was prepared and mailed to the entire population. A mailed questionnaire to each individual in the sample has the advantage of guaranteeing confidentiality, thus perhaps eliciting more truthful

responses (Ary, Jacobs, & Razavieh, 2002). An explanation of the purpose and need for the survey was provided in a cover letter from the researcher. Protection provided the respondent by the researcher was also conveyed. Directions for completing the actual survey were found directly on the survey at the beginning of each part. Dillman (2000) recommends not placing instructions in a separate instruction book or in a separate section of the questionnaire. The survey packet mailed to subjects contained the following items:

- A cover letter from the researcher (Appendix A)
 describing the study and outlining the procedures to
 be followed in completing the survey.
- 2. A cover letter from the Alabama State Department of Education (Appendix B).
- 3. A survey instrument (Appendix C).
- 4. A pre-addressed stamped envelope was included for the convenience of the respondent to encourage greater participation.

To preserve the confidentiality of the subjects, each return envelope was assigned a code number to be used for the follow-up of non-returned surveys. During the data collection process, only the researcher had access to the codes. As the surveys were returned, the subject was

removed from the list and the coded returned envelopes were destroyed. The purpose of the coding system was described to subjects in the cover letter written by the researcher. Postcards (Appendix D) were utilized as a follow-up procedure conducted with subjects who had not returned the survey. At the end of data collection, 183 surveys were returned. Fifteen surveys were returned blank or were not usable, which resulted in a 30% participation rate. One hundred and forty-three schools of the 281 selected schools (50.9%) were represented by the returned surveys. In some schools, the School Improvement Chairperson can also be the school principal as surveys returned suggest.

Data Analysis

Statistical treatment of the data was performed with Statistical Package for Social Sciences (SPSS), Student Version 11.0 for Windows. A multiple regression design was used to determine if significant differences existed in the implementation of research-based instructional strategies and type of educator (Administrator, Teacher, School Improvement Chairperson). Likewise, a multiple regression design was used to determine if significant differences existed in the perceived level of importance of research-based instructional strategies and type of educator (Administrator, Teacher, School Improvement Chairperson).

An alpha level of .05 was used for both multiple regression tests.

A t-test design was used to determine if significant differences existed in the implementation of research-based instructional strategies and type of school (City, County). Additionally, a t-test was utilized to determine if a significant difference was found in the perceived level of importance of research-based instructional strategies and type of school (City, County). An alpha level of .05 was employed.

A one-way ANOVA was utilized to determine if a significant difference existed in the implementation of research-based instructional strategies and type of school (High School, Junior High School, Middle School). In addition, a one-way ANOVA design was used to determine if there was a statistically significant difference in the perceived level of importance of research-based instructional strategies among the type of school (High School, Junior High School, Middle School). In both cases, an alpha level of .05 was utilized.

A t-test was applied to determine if a significant difference existed in the implementation of research-based instructional strategies and type of school (Title I School - yes or no). Furthermore, a t-test was also used to

determine if a significant difference was found in the perceived level of research-based instructional strategies and type of school (Title I School- yes or no). An alpha level of .05 was applied to both t-tests.

An ANOVA, alpha level .05, was utilized to determine if there was a statistically significant difference in the implementation of research-based instructional strategies among the size of school (1-200, 201-400, 401-700, or 701 or higher). To determine if a significant difference was found in the perceived level of importance of research-based instructional strategies and size of school (1-200, 201-400, 401-700, or 701 or higher), a one-way ANOVA was used. An alpha level of .05 was used. To examine the relationship between the degree to which selected Alabama educators perceive the importance of research-based instructional strategies and the degree to which the strategies are implemented, a Pearson product-moment correlation design was employed. The level of significance was < .05.

Descriptive statistics were used to organize, summarize, and describe the data collected in this research concerning respondents' demographics, school demographics, and respondents' perceptions of School Improvement processes including research-based instructional

strategies. Frequencies and percentages were calculated to analyze factors preventing selected Alabama school from "Always" or "Often" implementing research-based instructional strategies and how proven research-based instructional strategies were discovered by School Improvement Committee members.

Conclusion

This chapter has explained the methods used in this quantitative study of the problem: Perceptions of Alabama school personnel of research-based instructional strategies to improve student achievement. The following chapter communicates the results attained with those methods.

Chapter Four Results

As stated earlier, this dissertation is a report of a quantitative study that examined the perceptions among Alabama school personnel of using research-based instructional strategies to improve student achievement. This chapter presents the analysis of the data collected from Alabama educators utilizing the researcher-developed survey, Assessment of Research-based Instructional Strategies Within School Improvement Plans, described in Chapter 3.

Respondents

Descriptive statistics, including frequencies and percentages, were run in SPSS to summarize, analyze, organize, and describe the data and to provide an indication of the relationships between variables.

The Assessment of Research-based Instructional
Strategies Within School Improvement Plans instrument was
designed to collect data regarding the current positions
held by the responding educators, the gender of the
respondent, and the total enrollment of the respondent's
school. Table 1 presents this information. The largest
percent of respondents held an administrator's position

(70.8%), were female (54.8%), and had a total school enrollment of 401-700 (42.9%).

Table 1

Demographic Data of Respondents

Categories	n	Percent			
Current Position ^a					
Administrator	119	70.8			
Teacher	35	20.8			
School Improvement Chair	53	31.5			
Gender					
Male	75	45.2			
Female	91	54.8			
Total Enrollment					
1-200	3	1.8			
201-400	28	16.7			
401-700	72	42.9			
701 or higher	65	38.7			

^a Respondents could serve in more than one position.

The respondents also reported the number of years that they have served in education, as an administrator, and/or as a teacher. The mean number of years in education of the

respondents was 20. The mean number of years serving as a teacher was 13 and as an administrator was 7.

School Demographics

The descriptive statistics also identified the various types of schools of the responding educators. Table 2 reflects the collected data regarding school demographics.

The largest percentage of schools includes county schools (69.6%), high schools (56.0%), and non-Title I schools (52.4%).

Table 2
School Demographics

Categories		n	Percent				
Location							
	City	51	30.4				
	County	117	69.6				
Type of School							
	High School	93	56.0				
	Junior High School	12	7.2				
	Middle School	61	36.7				
Title I School							
	No	88	52.4				
	Yes	80	47.6				

School Improvement Process

The majority of respondents (92.9%) stated that no stipend was provided for School Improvement Committee members. Only 12 subjects, or 7.1%, acknowledged receiving a stipend. The majority of subjects reported implementing research-based instructional strategies was heavily emphasized during the 2005-2006 school year at their school (89.8%); state achievement scores did increase during the 2005-2006 school year from the previous school year

(94.0%); and research-based instructional strategies were evaluated for their effectiveness by teachers, administrators, or central office personnel during the 2005-2006 school year (84.8%).

Table 3 indicates the degree of the respondents'

perceptions of the school improvement process. The number

listed under question corresponds to the questions on the

survey (Appendix C). Percentages are (1) Strongly agree;

(2) Agree; (3) No opinion; (4) Disagree; (5) Strongly

disagree. Agree received the highest percentage on each

statement in this section regarding the School Improvement

process.

Table 3

Percentages of Degrees of Perceptions of the School
Improvement Process

		Dergont						
		Percent	Percentages of Degrees					
Question ^a	(1) ^b	(2)	(3)	(4)	(5)			
13	21.7	54.8	6.6	14.5	2.4			
14	10.7	53.6	3.6	27.4	4.8			
15	16.8	64.1	14.4	4.2	0.6			
16	10.2	46.1	4.2	33.5	6.0			
17	17.9	61.3	10.1	9.5	1.2			
18	24.6	62.9	5.4	6.6	0.6			
19	42.5	53.3	2.4	1.8	0.0			
20	48.2	49.4	1.2	1.2	0.0			
21	14.3	48.8	4.2	28.0	4.8			
22	14.9	55.4	6.0	21.4	2.4			
23	17.9	63.7	4.2	13.1	1.2			
24	13.8	66.5	5.4	14.4	0.0			
25	13.3	57.2	9.0	19.9	0.6			
26	18.0	60.5	12.0	9.0	0.6			

a n = 168 for each question.

Note: Question number corresponds with survey (Appendix C).

b 1=Strongly agree, 2=Agree, 3=No opinion, 4=Disagree, 5=Strongly disagree

Instructional Strategies

Null Hypothesis 1

There is no significant difference in the implementation of research-based instructional strategies and perceived level of importance of research-based instructional strategies among demographic groups: (a) Type of educator, (b) Type of school, and (c) Size of school.

To determine if significant differences existed in the implementation of research-based instructional strategies and type of educator (Administrator, Teacher, School Improvement Chairperson) a multiple regression design was utilized. With an alpha level of .05, the effect of type of educator was not statistically significant, $F_{3,145} = .254$, p = .858. Adjusted R square = -.015. None of the variables were a significant predictor in this model.

A multiple regression design was used to determine if a significant difference was found in the perceived level of importance of research-based instructional strategies and type of educator (Administrator, Teacher, School Improvement Chairperson). With an alpha level of .05, the effect of type of educator on the perceived level of importance of research-based instructional strategies was not statistically significant, $F_{3,155} = .347$, p = .792.

Adjusted R square = -.013. None of the variables were a significant predictor in this model.

To determine if a significant difference existed in the implementation of research-based instructional strategies and type of school (City, County) a t-test was utilized. With an alpha level of .05, the effect of type of school was not statistically significant, t(149) = -1.544, p = .125 (two-tailed), d = .016.

A t-test was used to determine if a significant difference was found in the perceived level of importance of research-based instructional strategies and type of school (City, County). With an alpha level of .05, the effect of type of school on the perceived level of importance of research-based instructional strategies was not statistically significant, t(159) = -.266, p = .790 (two-tailed), d = .000.

To determine if a significant difference existed in the implementation of research-based instructional strategies and type of school (High School, Junior High School, Middle School) a one-way ANOVA design was utilized. With an alpha level of .05, the effect of type of school was not statistically significant, F (2, 149) = .350, p = .705. No further tests were necessary.

A one-way ANOVA design was used to determine if a significant difference was found in the perceived level of importance of research-based instructional strategies and type of school (High School, Junior High School, Middle School). With an alpha level of .05, the effect of type of school on the perceived level of importance of research-based instructional strategies was not statistically significant, F(2, 159) = 1.764, p = .175. No further tests were necessary.

To determine if a significant difference existed in the implementation of research-based instructional strategies and type of school (Title I School-yes or no) a t-test was utilized. With an alpha level of .05, the effect of type of school was not statistically significant, t(149) = -.181, p = .857 (two-tailed), d = .000.

A t-test was used to determine if a significant difference was found in the perceived level of importance of research-based instructional strategies and type of school (Title I School-yes or no). With an alpha level of .05, the effect of type of school on the perceived level of importance of research-based instructional strategies was not statistically significant, t(159) = -.639, p = .524 (two-tailed), d = .003.

To determine if a significant difference existed in the implementation of research-based instructional strategies and size of school (1-200, 201-400, 401-700, 701 or higher) a one-way ANOVA design was utilized. With an alpha level of .05, the effect of size of school was not statistically significant, F (3, 149) = .459, p = .711. No further tests were necessary.

A one-way ANOVA design was used to determine if a significant difference was found in the perceived level of importance of research-based instructional strategies and size of school (1-200, 201-400, 401-700, 701 or higher). With an alpha level of .05, the effect of size of school on the perceived level of importance of research-based instructional strategies was not statistically significant, F(3, 159) = .679, p = .566. No further tests were necessary.

Based on the results of the tests conducted for each demographic group, null hypothesis one is accepted.

Null Hypothesis 2

There is no relationship between the degree to which selected Alabama educators perceive the importance of research-based instructional strategies and the degree to which the strategies are implemented.

Questions 27A-35A were compared with questions 27B-35B using a Pearson product-moment correlation design for each of the strategies. Each of the nine research-based instructional strategies indicated a significant positive relationship between the degree of perceived importance and the degree of implementation. Table 4 reports the results.

Table 4

Correlation Analysis of the Degree of Implementation and the Degree of Perceived Importance

Instructional Strategies	Pearson Product-Moment Coefficients
Identifying Similarities & Differe	ences .399
Summarizing & Note Taking	.273
Reinforcing Effort & Providing Rec	cognition .323
Homework & Practice	.326
Nonlinguistic Representations	. 457
Cooperative Learning	.337
Setting Goals & Providing Feedback	. 469
Generating & Testing Hypotheses	.259
Activating Prior Knowledge	.280

^{*} p < .05 for each strategy.

A significant positive correlation was found between the implementation and perceived importance for each of the

research-based instructional strategies. Therefore, null hypothesis two is rejected. As a result, there is a significant relationship between the implementation and perceived importance of research-based instructional strategies used by school personnel. Table 5 ranks each instructional strategy from highest to lowest in terms of their Pearson product-moment coefficients.

Table 5

Rank Order of Pearson Product-Moment Coefficients for Each Instructional Strategy

Instructional Strategies	Pearson Product-Moment Coefficients
Setting Goals & Providing Feedback	.469
Nonlinguistic Representations	. 457
Identifying Similarities & Differe	nces .399
Cooperative Learning	.337
Homework & Practice	.326
Reinforcing Effort & Providing Rec	ognition .323
Activating Prior Knowledge	.280
Summarizing & Note Taking	. 273
Generating & Testing Hypotheses	. 259

^{*} p < .05 for each strategy.

The highest coefficient between the degree of implementation and the degree of perceived importance was for the instructional strategy setting goals and providing feedback (.469) followed by nonlinguistic representations (.457). Generating and testing hypotheses was the instructional strategy with the lowest coefficient (.259). Objective 1

To what degree, as measured by a Likert-type scale, are research-based instructional strategies associated with higher levels of student achievement currently implemented into selected Alabama schools?

Questions 27B-35B on The Assessment of Research-based Instructional Strategies Within School Improvement Plans instrument were used to address this research question. A four-point Likert-type scale was used for analysis. The scale consisted of the following choices: (4) Always; (3) Often; (2) Sometimes; and (1) Never. Table 6 reflects the Mean and Standard Deviation for each of the nine recommended research-based instructional strategies.

Table 6

Degree to Which Instructional Strategies are Implemented

Instructional Strategy ^a	М	SD
Identifying Similarities & Differences	2.89	.708
Summarizing & Note Taking	2.99	.632
Reinforcing Effort & Providing Recognition	3.10	.650
Homework & Practice	3.14	.643
Nonlinguistic Representations	2.90	.693
Cooperative Learning	2.95	.644
Setting Goals & Providing Feedback	2.97	.737
Generating & Testing Hypotheses	2.61	.667
Activating Prior Knowledge	3.20	.616

a n = 168 for each instructional strategy.

Generating and testing hypotheses, identifying similarities and differences, nonlinguistic representations, and cooperative learning had a mean below the "often" level of implementation. The highest implemented strategy was activating prior knowledge.

Table 7 indicates the percentage of the various levels of implementation for each of the nine research-based instructional strategies. Degrees are (4) Always, (3) Often, (2) Sometimes, and (1) Never.

Table 7

Percentages of Degrees of Implementation

	Percent	ages	of De	grees
Instructional Strategy ^a	(4) ^b	(3)	(2)	(1)
Identifying Similarities & Differences	17	59	21	3
Summarizing & Note Taking	18	64	17	1
Reinforcing Effort & Providing Recognition	25	61	13	1
Homework & Practice	29	57	15	0
Nonlinguistic Representations	18	55	26	1
Cooperative Learning	18	60	21	1
Setting Goals & Providing Feedback	25	50	25	1
Generating & Testing Hypotheses	7	50	40	3
Activating Prior Knowledge	31	58	11	0

a n = 168 for each instructional strategy.

Objective 2: To what degree, as measured by a Likert-type scale, do selected Alabama educators perceive the importance of the specified instructional practices associated with higher levels of student achievement?

Questions 27A-35A on The Assessment of Research-based Instructional Strategies Within School Improvement Plans instrument were used to address this research question. A four-point Likert-type scale was used for analysis. The

b 4=Always, 3=Often, 2=Sometimes, 1=Never.

scale consisted of the following choices: (4) Very important; (3) Somewhat important; (2) Not very important; and (1) Not at all important. Table 8 reflects the Mean and Standard Deviation for each of the nine recommended research-based instructional strategies.

Table 8

Degree of Perceived Importance of Instructional Strategies

Instructional Strategy ^a	М	SD
Identifying Similarities & Differences	3.53	.579
Summarizing & Note Taking	3.77	.451
Reinforcing Effort & Providing Recognition	3.74	.516
Homework & Practice	3.66	.500
Nonlinguistic Representations	3.53	.601
Cooperative Learning	3.62	.547
Setting Goals & Providing Feedback	3.69	.539
Generating & Testing Hypotheses	3.51	.603
Activating Prior Knowledge	3.77	.421

a n = 168 for each instructional strategy.

All nine research-based instructional strategies were reported by respondents as being somewhat important to very important.

Table 9 reflects the percentage of the various degrees of perceived importance for each of the nine research-based instructional strategies. Degrees are (4) Very important, (3) Somewhat important, (2) Not very important, and (1) Not at all important.

Table 9

Percentages of Degrees of Perceived Importance

	Percenta	ages	of Deg	grees
	1-			
Instructional Strategy ^a	(4)	(3)	(2)	(1)
Identifying Similarities & Differences	56	42	1	1
Differences	50	42	Τ	Т
Summarizing & Note Taking	78	21	1	0
Reinforcing Effort & Providing				
Recognition	77	20	2	1
Homework & Practice	67	32	1	0
Nonlinguistic Representations	58	37	4	1
Cooperative Learning	65	32	3	0
Setting Goals & Providing Feedback	72	26	2	1
Generating & Testing Hypotheses	56	38	6	0
Activating Prior Knowledge	77	23	0	0

 $^{^{}a}$ n = 168 for each instructional strategy.

^b 4=Very important, 3=Somewhat important, 2=Not very important, 1=Not at all important.

Objective 3: What are the factors preventing selected

Alabama schools from "Always" or "Often" implementation of
specified instructional strategies associated with higher
levels of student achievement?

Questions 27C-35C on The Assessment of Research-based Instructional Strategies Within School Improvement Plans instrument were used to address this research question.

Table 8 contains the frequencies for the factors and resources preventing implementation of each of the research-based instructional strategies. The number listed under strategy corresponds to the instructional strategies on the survey (Appendix C). Frequency numbers are (1)

Necessary time; (2) Necessary resources; (3) Necessary knowledge and skills; (4) Administrative support; (5) Lack of personal interest; (6) Lack of professional development/training.

Lack of necessary time was listed the most frequently by respondents as a factor preventing implementation, followed by lack of necessary resources, lack of knowledge and skills, and lack of professional development/training.

Table 10

Factors Preventing Implementation

	Frequency					
Strategy ^a	(1) ^b	(2)	(3)	(4)	(5)	(6)
27	36	24	19	6	21	17
28	34	20	20	7	17	23
29	25	19	7	5	14	12
30	25	12	8	4	12	4
31	27	18	22	6	19	25
32	29	14	17	4	17	24
33	33	17	22	4	14	20
34	33	37	35	2	14	31
35	17	11	12	4	8	9

a n = 168 for each instructional strategy.

Note: Strategy number corresponds with survey (Appendix C).

Question 36 on The Assessment of Research-based
Instructional Strategies Within School Improvement Plans
instrument addressed how proven research-based
instructional strategies were located or discovered by
School Improvement Committee members. Table 11 outlines
the frequencies and percentages for the discovery of
research-based strategies. A majority of respondents

b (1)=Necessary time; (2)=Necessary resources; (3)=Necessary knowledge and skills; (4)=Administrative support; (5)=Lack of personal interest; (6)=Lack of professional development/training.

reported that school administration (84.5%), faculty consensus (64.9%), and book study (57.7%) were utilized by School Improvement Committee members to locate or discover proven research-based strategies.

Table 11

Discovery of Research-based Instructional Strategies

Categories	n	Percent
Faculty Consensus	109	64.9
Book Study	97	57.7
Internet	65	38.7
Educational Journals	77	45.8
Guest Speakers	68	40.5
School Administration	142	84.5
Students' Evaluation of Teaching Strategies	38	22.6

Chapter Five Discussion

In the previous chapter, data collected from Alabama educators utilizing the researcher-developed survey instrument, Assessment of Research-based Instructional Strategies Within School Improvement Plans, were presented and evaluated. This chapter includes a discussion of the results, conclusions, and recommendations.

Review of the Problem and Methodology

A survey instrument was developed to assess the perceptions of utilizing research-based instructional strategies as outlined in the School Improvement Plans of selected Alabama school districts to improve student achievement. Surveys were mailed to the principal and School Improvement Committee chairperson at 281 Alabama public secondary schools. The population was selected based on each school's requirement to construct a School Improvement Plan for the 2005-2006 school year as a result of insufficient yearly progress during the 2004-2005 school year according to the Alabama State Department of Education. Analysis was conducted to determine the degree of perceived importance and implementation of research-based instructional strategies, the inhibiting factors of

implementing research-based instructional strategies, and perceptions of the school improvement process. Descriptive and inferential statistics were used to analyze collected data.

Summary of Results

Most of the respondents were in an administrator's position (70.6%), were female (54.7%), were at a school with an enrollment of 401-700 (43.6%), and had 20 years of experience in education. The average respondent had 13 years of experience as a teacher and seven years of experience as an administrator. Furthermore, more responding educators served at a county school system (69.9%), were at a high school setting (56.5%), and were not at a Title I school (51.5%).

Next, 92.9% of respondents reported that School
Improvement Committee members at their school do not
receive a stipend. A majority of subjects (90.7%)
indicated a significant emphasis placed on implementing
research-based instructional strategies during the 20052006 school year, with 93.8% of subjects reporting an
increase in student achievement scores from the prior
school year. Moreover, research-based instructional
strategies were evaluated for their effectiveness by school
personnel (85.6%).

School personnel were asked their perceptions of the school improvement process. A significant amount of school personnel (95.8%) acknowledged that their school has a plan to collect and review data about student achievement. A majority of respondents (97.6%) agreed or strongly agreed that achievement scores for the 2004-2005 school year were analyzed during the process. Most respondents (87.5%) believe School Improvement members possess sufficient skills to pilot the development and implementation of research-based instructional strategies. A considerable amount of respondents (39.5%) disagreed or strongly disagreed that sufficient time for School Improvement planning was allotted. Additionally, it is noted that 32.2% of the subjects disagreed or strongly disagreed that their budget for professional development is sufficient. Furthermore, 32.8% of school personnel disagreed or strongly disagreed that their school has adequate resources to achieve its goals.

No significant difference $[F\ (3,145)=.254,\ p=.858]$ was found between the implementation of research-based instructional strategies and type of educator (Administrator, Teacher, School Improvement Chairperson). There was also no significant difference $[F\ (3,155)=.347,\ p=.792]$ in the perceived level of importance of research-

based instructional strategies and type of educator (Administrator, Teacher, School Improvement Chairperson).

Type of school (City, County) is not significant in relation to the implementation of research-based instructional strategies, t(149) = -1.544, p = .125 (two-tailed), d = .016. Additionally, no significance was found between type of school (City, County) and the perceived level of importance of research-based instructional strategies, t(159) = -.266, p = .790 (two-tailed), d = .000.

No significant difference $[F\ (2,149)\ =\ .350,\ p\ =\ .705]$ was found between the implementation of research-based instructional strategies and type of school (High School, Junior High School, Middle School). Furthermore, there was no significant difference $[F\ (2,159)\ =\ 1.764,\ p\ =\ .175]$ relating perceived level of importance of research-based instructional strategies and type of school (High School, Junior High School, Middle School).

Data revealed that there is no significant difference between the implementation of research-based instructional strategies and type of school (Title I School-yes or no), $t(149) = -.181, \ p = .857 \ (\text{two-tailed}), \ d = .000. \ \text{Moreover},$ no significant difference existed linking the perceived level of importance of research-based instructional

strategies and type of school (Title I School-yes or no), t(159) = -.639, p = .524 (two-tailed), d = .003.

A significant difference $[F\ (3,149)=.459,\ p=.711]$ was not discovered between the implementation of research-based instructional strategies and size of school (1-200, 201-400, 401-700, 701 or higher). Likewise, a significant difference $[F\ (3,159)=.679,\ p=.566]$ was not revealed between the perceived level of importance of research-based instructional strategies and size of school (1-200, 201-400, 401-700, 701 or higher). Based on the results of the tests conducted for each demographic group, null hypothesis one is accepted.

Additionally, a significant positive correlation (range of .259 to .469) was found between the implementation and perceived importance for each of the nine research-based instructional strategies. Therefore, null hypothesis two is rejected.

Nine research-based instructional strategies
associated with higher levels of student achievement were
presented for subjects to indicate their perception of the
importance of each and the degree to which each was
implemented. All nine research-based instructional
strategies were reported to be at least "Somewhat
Important" with the following statistics: identifying

similarities and differences (M = 3.53, SD = .579); summarizing and note taking (M = 3.77, SD = .451); reinforcing effort and providing recognition (M = 3.74, SD = .516); homework and practice (M = 3.66, SD = .500); nonlinguistic representations (M = 3.53, SD = .601); cooperative learning (M = 3.62, SD = .547); setting goals and providing feedback (M = 3.69, SD = .539); generating and testing hypotheses (M = 3.51, SD = .603); and activating prior knowledge (M = 3.77, SD = .421). Respondents were asked to identify the degree to which they implemented the nine research-based instructional strategies. Strategies implemented "Often" were activating prior knowledge (M = 3.20, SD = .616); homework and practice (M = 3.14, SD = .643); and reinforcing effort and providing recognition (M = 3.10, SD = .650).

A majority of respondents reported that school administration (84.5%), faculty consensus (64.9%), and book study (57.7%) were utilized by School Improvement Committee members to locate or discover proven research-based instructional strategies. Students' evaluation of teaching strategies (22.6%) was reported as the least frequent method of locating or discovering research-based instructional strategies.

Conclusions

The following conclusions were based on the findings of the study:

- There is a significant positive correlation found between the implementation and perceived importance for each of the research-based instructional strategies.
- School personnel perceive higher levels of student achievement were associated with the use of researchbased instructional strategies.
- 3. The study indicates that student achievement scores are being analyzed by secondary Alabama public schools in order to increase student achievement.
- 4. In regard to the perceptions of the school improvement process, Alabama educators have indicated a need for more time for planning, increased budgets for professional development, and extra resources for achieving school goals.

Limitations

Limitations are the boundaries beyond which the study is concerned. This study involved 281 Alabama secondary public schools who currently are in the school improvement process. At least one of two respondents from each school

completed the survey at 145 of the 281 schools, which is a way the findings may lack generalizability.

Limitations of selected methods also exist.

Limitations are the conditions beyond the control of the researcher that may place restrictions on the conclusions of the study and their applications to other situations.

Limitations in this study include: (a) the number of participants responding to the survey, (b) the survey is a self-reporting instrument, and (c) the external variables that influence standardized test scores.

Recommendations

Based on the conclusions, the following recommendations are made:

- The requirement of including research-based instructional strategies to improve student achievement within School Improvement Plans should continue.
- 2. Alabama educational leaders should continue to take a leadership role in the identification and implementation of research-based instructional strategies due to the importance of utilizing research-based instructional strategies.
- 3. A similar study should be conducted at the elementary level (K-6) of Alabama public schools.

- 4. This study can be replicated for other parts of the School Improvement Plan. Other parts of the School Improvement Plan include professional development, technical assistance, parental involvement, and measurable goals (United States Department of Education, 2006).
- 5. A suggestion for future research is to replicate the exact study in other states.
- 6. A study should be conducted to compare the perceptions of school personnel with research-based instructional strategies and actual student achievement data.

REFERENCES

- Alabama Department of Education (2005, August). Rewards and sanctions plan: Alabama accountability system.

 Retrieved September 12, 2006, from

 http://www.alsde.edu/html/doc_download.asp?id=3713§ion=91
- Alabama Department of Education (2006, August). School

 Improvement Guidebook. Retrieved September 12, 2006,

 from

 http://www.alsde.edu/html/doc_download.asp?id=5296§ion=88
- Amrein, A. L., & Berliner, D. C. (2003). The effects of high-stakes testing on student motivation and learning. Educational Leadership, 60(5), 32-38.
- Ary, D., Jacobs, L.C., & Razavieh, A. (2002). Introduction to Research in Education. Belmont, CA:

 Wadsworth/Thomson Learning.
- Bernhardt, V. L. (2003). No schools left behind.

 Educational Leadership, 60(5), 26-30.
- Berry, B. (2005). The future of teacher education. *Journal* of Teacher Education, 56(3), 272-278.

- Biddle, B. & Berliner, D. (2002). What research says about small classes and their effects [Electronic Version].

 WestEd Policy Perspective. Retrieved August 6, 2006, from www.wested.org/cswewview/rs/670
- Boser, U. (2001). Pressure without support. *Education*Week, 20(17). [On-line]. Available: www.edweek.org.
- Browder, D. M., & Cooper-Duffy, K. (2003). Evidence-based practices for students with severe disabilities and the requirement of accountability in "No Child Left Behind". Journal of Special Education, 37(3), 157-163.
- Buckshaw, L. C. (2006). An examination of principal and teacher perceptions of the school improvement process.

 Unpublished doctoral dissertation, University of Rochester.
- Cawelti, G. (2006). The side effects of NCLB. Educational Leadership, 64(3), 64-68.
- Cooper, R., Slavin, R. E., & Madden, N. A. (1998). Success for all: Improving the quality of implementation of whole-school change through the use of a national reform network. Education and Urban Society, 30(3), 385-408.
- D'Agostino, J. V. (2000). Instructional and school effects on student's longitudinal reading and mathematics

- achievements. School Effectiveness & School Improvement, 11(2), 197-235.
- Datnow, A., & Cohn, C. (2004). District role in school improvement. In *Dissertation Seminar*. Symposium conducted at the meeting of the Dissertation Seminar Cohort, University of California.
- Dean, C. B., Galvin, M., & Parsley, D. (2005). Noteworthy perspectives: Success in sight. Denver, CO: Mid-continent Research for Education and Learning.
- Dillman, D.A. (2000). Mail and Internet surveys: The tailored design method (2nd ed.). New York: John Wiley & Sons.
- Doran, H. C. (2003). Adding value to accountability.

 Educational Leadership, 61(3), 55-59.
- Elmore, R. (2003). Knowing the right thing to do: School improvement and performance-based accountability

 [Electronic Version]. CPRE: NGA Center for best practices. Retrieved August 6, 2006, from www.nga.org/cda/files/0803KNOWING.PDF

- Elmore, R. F., & Fuhrman, S. H. (2001). Holding schools accountable: Is it working? *Phi Delta Kappan*, 83(1), 67-70.
- Fisher, D. (2002). Before accountability, teach the teachers to teach the kids. *Education Digest*, 67(7), 46-51.
- Freiberg, H. J., & Driscoll, A. (2000). *Universal teaching* strategies. Boston, MA: Allyn and Bacon.
- Fullan, M. (2000). The three stories of education reform.

 Phi Delta Kappan, 81(8), 581-584.
- Garrison, W. M. (2004). Profiles of classroom practices in U.S. public schools. School Effectiveness and School Improvement, 15(3-4), 377-406.
- Geortz, M. E. (2005). Implementing the No Child Left Behind act: Challenges for the states. *Peabody Journal of Education*, 80(2), 73-89.
- Geortz, M. E., & Massell, D. (2005, January). Holding high hopes: How high schools respond to state accountability policies (Policy Brief No. RB-42).

 Philadelphia, PA: University of Pennsylvania,

 Consortium for Policy Research in Education.
- Grant, C. A., & Gillette, M. (2006). A candid talk to teacher educators about effectively preparing teachers

- who can teach everyone's children. *Journal of Teacher Education*, 57(3), 292-299.
- Guilfoyle, C. (2006). NCLB: Is there life beyond testing.

 Educational Leadership, 64(3), 8-13.
- Hanson, D., Burton, D, & Guam, G. (2006). Six concepts to help you align with NCLB. *Technology Teacher*, 66(1), 17-20.
- Hart, P. D., & Teeter, R. M. (2002). A national priority:

 Americans speak on teacher quality. Princeton, NJ:

 Educational Testing Service.
- Henning, J. E. (2006). Teacher leaders at work: Analyzing standardized achievement data to improve instruction.

 Education, 126(4), 729-737.
- Heritage, M., & Chen, E. (2005). Why data skills matter in school improvement. *Phi Delta Kappan*, 86(19), 707-710.
- LeFevre, A. T. (2004). Report Card on American Education:

 A State-by-State Analysis, 1981-2003. Washington,

 D.C.: American Legislative Exchange Council.
- Linn, R. L., Baker, E. L., & Betebenner, D. W. (2002).

 Accountability systems: Implications of requirements of the No Child Left Behind Act of 2001. Educational Researcher, 31(6), 3-16.

- Linn, R. L., & Gronlund, N. E. (2000). Measurement and

 assessment in teaching (8th ed.). Upper Saddle River,

 NJ: Merrill Publishing.
- Marzano, R. J. (2000). A new era of school reform: Going

 where the research takes us. Aurora, CO: Mid-continent

 Research for Education and Learning.
- Marzano, R. J. (2003). What works in schools: Translating research into action. Alexandria, VA: Association for Supervision and Curriculum Development.
- Marzano, R. J., Pickering, D. J., & Pollock, J. E. (2001).

 Classroom instruction that works: Research-based

 strategies for increasing student achievement.

 Alexandria, VA: Association for Supervision and

 Curriculum Development.
- Mazzeo, C. (2001). Frameworks of state: Assessment policy
 in historical perspective. Teachers College Record,
 103(3), 367-397.
- McDonnell, L. M. (2005). No Child Left Behind and the federal role in education: Evolution or revolution?

 Peabody Journal of Education, 80(2), 19-38.
- McLaughlin, M., & Talbert, J. (2003, September). Reforming districts: How districts support school reform

 [Electronic Version]. Center for the study of teaching

- and policy research report. Retrieved August 6, 2006,
 from www.ctpweb.org/
- Mintrop, H., & MacLellan, A. M. (2002). School improvement plans in elementary and middle schools on probation.

 The Elementary School Journal, 102(4), 275-302.
- O'Connell, J., & Phye, G. (2005). Creating strategies for improved teaching and learning. *The Journal*, 32(12), 26-29.
- Parkes, J., & Stevens, J. J. (2003). Legal issues in school accountability systems. Applied measurement in education, 16(2), 141-158.
- Pipho, C. (2000). The sting of high-stakes testing and accountability. Phi Delta Kappan, 81(9), 645-646.
- Reyes, P., & Rorrer, A. (2001). U.S. school reform policy, state accountability systems and the limited English proficient student. *Journal of Education Policy*, 16(2), 163-178.
- Richardson, E. (2002). Alabama must R.E.A.C.H for the future. CLAS School Leader, 29(4), 6-7.
- Rigeman, S., & McIntire, N. (2005). Enhancing curriculum and instruction through technology. *The Journal*, 32(12), 31-34.

- Schlechty, P. (2001). Shaking up the schoolhouse: How to support and sustain educational innovation. San Francisco, CA: Jossey-Bass.
- Schmoker, M. (2006). High-leverage data analysis in schools: Keep it simple. SEDL Letter, 18(2), 10-13.
- Senge, P. M. (1990). The fifth discipline: The art and practice of the learning organization. New York, NY:

 Doubleday.
- Smith, E. (2005). Raising standards in American schools:

 The case of no child left behind. *Journal of Education*Policy, 20(4), 507-524.
- Stigler, J. W., & Hiebert, J. (1999). The teaching gap:

 Best ideas from the world's teachers for improving education in the classroom. New York, NY: The Free Press.
- Stone, C. A., & Lane, S. (2003). Consequences of a state accountability program: Examining relationships between school performance gains and teacher, student, and school variables. Applied Measurement in Education, 16(1), 1-26.
- Stronge, J. H., & Hindman, J. L. (2003). Hiring the best teachers. *Educational Leadership*, 60(8), 48-52.

- The National Commission on Excellence in Education (1984).

 A nation at risk: The full account. Portland, OR: USA

 Research.
- United States Department of Education. (2002). No Child

 Left Behind Act (PL 107-110). Washington, DC: United

 States Government Printing Office.
- United States Department of Education. (2006, July 21).

 LEA and school improvement: Non-regulatory guidance.

 Retrieved October 13, 2006, from

 http://www.ed.gov/policy/elsec/guid/schoolimprovement
- United States Department of Education. (2004, July 1).

 Four pillars of NCLB. Retrieved February 10, 2006,

 from

 http://www.ed.gov/print/nclb/overview/intro/4pillars.h
- Vrabel, D. (1999). Reference guide to continuous

 improvement planning for Ohio school districts.

 Columbus, OH: Ohio State Department of Education.

tml

Wang, L., Beckett, G.H., & Brown, L. (2006). Controversies of standardized assessment in school accountability reform: A critical synthesis of multidisciplinary research evidence. Applied Measurement in Education, 19(4), 305-328.

- Wanker, W. P., & Christie, K. (2005). State implementation of the No Child Left Behind Act. *Peabody Journal of Education*, 80(2), 57-72.
- West, M. (2000). Supporting school improvement:

 Observations on the inside, reflections from the outside. School Leadership & Management, 20(1), 43-60.
- Wynne, E. (1972). The policies of school accountability.

 Berkeley, CA: McCutchan Publishing Corportation.
- Zavadsky, H. (2006). How NCLB drives success in urban schools. Educational Leadership, 64(3), 69-73.

Appendix A

Researcher Cover Letter

Christopher G. Pritchett 61 Lilac Circle Guntersville, Alabama 35976 (256) 582-5885

November 28, 2006

Dear Educator:

In a time of high-stakes accountability for educators, School Improvement Plans have been introduced as a means to improve student learning. Furthermore, the use of research-based instructional strategies has been demonstrated to have positive effects on student achievement.

You are invited to participate in a research study designed to provide information on the effectiveness of research-based instructional strategies as outlined in School Improvement Plans by selected schools in the State of Alabama. This study is being conducted by Christopher G. Pritchett, a doctoral candidate, under the supervision of Dr. Ellen Black, Professor of Education at Liberty University.

It should take approximately 15 minutes to complete this survey. You are receiving a survey and a return envelope that is preaddressed and stamped.

Your input, as a professional educator, is very important to the success of this research. Any information obtained in connection with this study will remain anonymous. Information collected through your participation may be used as partial fulfillment of the requirements for the Degree of Doctorate of Education and future publications. The ONLY purpose of the coding on the envelope is for follow-up of non-returned surveys. If you choose not to participate in the research study, please return the blank survey as indication of your non-participation. If you choose to participate, please return the completed survey by December 15, 2006.

Your decision whether or not to participate will not jeopardize your future relations with Liberty University or the Alabama State Department of Education.

If you have any questions, you may contact Christopher G. Pritchett at (256)582-5885 (cgpritchett@liberty.edu) or Dr. Ellen Black at (434)593-4104 (elblack@liberty.edu).

Sincerely,

Christopher G. Pritchett Doctoral Candidate Principal Investigator

Appendix B

Alabama State Department of Education Cover Letter



STATE OF ALABAMA DEPARTMENT OF EDUCATION



Alabama State Board of Education

Governor Bob Riley

Randy McKinney District I President Pro Tem

> Betty Peters District 11

Stephanie W. Bell District III

Dr. Ethel H. Hall District IV Vice President Emerita

Ella B. Bell

David F. Byers, Jr. District VI

> Sandra Ray District VII

Dr. Mary Jane Caylor District VIII

Joseph B. Morton Secretary and Executive Officer July 17, 2006

Mr. Chris Pritchett Guntersville High School 14227 Highway 431 Guntersville, AL 35926-2599

Dear Mr. Pritchett:

The Alabama Department of Education is aware of the study that you are conducting concerning the use of research-based instructional strategies as outlined in School Improvement Plans to improve student achievement. We understand that all the data collected by the survey will remain completely anonymous and that there is no threat to the survey participants.

You will find all information needed to complete the data collection for this study on our Web site located at www.alsde.edu. Click on the Accountability Reporting Button, and then click on Accountability Reporting. You may select systems and schools from the drop-down menu to gather information for your study.

Participation of those surveyed during this study will provide invaluable information for continued efforts toward improved student achievement. We understand the results of the study will be dispersed to all participants who desire a copy of the results.

Good luck with your research study. We look forward to reviewing your results.

Sincerely, Illowmanle—

Anita Buckley Commander
Director, Classroom Improvement

ABC:DKS: SSM

Appendix C

Researcher Developed Survey



Assessment of Research-based Instructional Strategies Within School Improvement Plans



Please let me know about yourself. Check the appropriate response.

1)	Please check all that apply to your current position.							
	☐ Administrator	☐ Teacher	☐ School Improvement Chairperson					
2)	What is your gender?							
	☐ Male ☐ Female							
3)	How many years have you educator (total years)? teacher? administrator?							
4)	Is your school a city or cou	inty school?						
	☐ City ☐ County							
5)	What is the type of school	in which you a	re teaching?					
	☐ High School							
	☐ Junior High School							
	☐ Middle School							
6)	What is the total enrollmen	nt of your scho	ool?					
	□ 1-200							
	□ 201-400							
	□ 401-700							
	□ 701 or higher							

7)	Is your school	l a Ti	itle I school	1?		
	☐ Yes		No			
mpro				ence with and you Check the approp		about the school or respond to questions in
8)	Was a stipend	l prov	ided for So	chool Improvem	ent Committee	members?
	☐ Yes		No			
9)	If yes, how m	uch v	was the stip	oend?		_
10	_	_		d instructional s year at my schoo	_	eavily emphasized
	☐ Yes		No			
11) Did state ach previous scho			increase during	the 2005-2006	school year from the
	☐ Yes		No			
12						heir effectiveness by the 2005-2006 school
	☐ Yes		No			
13				opment activities instructional str		l to train faculty
	☐ Strongly A	gree	☐ Agree	☐ No Opinion	☐ Disagree	☐ Strongly Disagree
14) The budget f	or pr	ofessional d	development is a	dequate.	
	☐ Strongly A	gree	☐ Agree	☐ No Opinion	☐ Disagree	☐ Strongly Disagree
15	5) Professional	devel	opment res	sulted in improv	ed practice.	
	☐ Strongly A	gree	☐ Agree	☐ No Opinion	☐ Disagree	☐ Strongly Disagree
16	5) Sufficient tim	ne for	planning v	was allotted amo	ong staff.	
	☐ Strongly A	gree	☐ Agree	☐ No Opinion	☐ Disagree	☐ Strongly Disagree

17)	17) Support from Central Office personnel was evident.						
	☐ Strongly Agree	☐ Agree	☐ No Opinion	☐ Disagree	☐ Strongly Disagree		
18)	School Improvement and i		-		_		
	☐ Strongly Agree	☐ Agree	☐ No Opinion	☐ Disagree	☐ Strongly Disagree		
19)	My school has a pl	an to collec	ct and review da	ta about studen	t achievement.		
	☐ Strongly Agree	☐ Agree	☐ No Opinion	☐ Disagree	☐ Strongly Disagree		
20)	Standard achieven the planning proce		for the 2004-20	05 school year v	were analyzed during		
	☐ Strongly Agree	☐ Agree	☐ No Opinion	☐ Disagree	☐ Strongly Disagree		
21)	My school has ade	quate reso	urces to achieve	its goals.			
	☐ Strongly Agree	☐ Agree	☐ No Opinion	☐ Disagree	☐ Strongly Disagree		
22)	Technology is used	l effectively	y in my school.				
	☐ Strongly Agree	☐ Agree	☐ No Opinion	☐ Disagree	☐ Strongly Disagree		
23)	School faculty hav	e access to	mentoring and/	or coaching.			
	☐ Strongly Agree	☐ Agree	☐ No Opinion	☐ Disagree	☐ Strongly Disagree		
24)	Teachers are comp needs of all studen		nd use a variety	of teaching stra	tegies that meet the		
	☐ Strongly Agree	☐ Agree	☐ No Opinion	☐ Disagree	☐ Strongly Disagree		
25)	All teachers used a Improvement Plan				isted in the School		
	☐ Strongly Agree	☐ Agree	☐ No Opinion	☐ Disagree	☐ Strongly Disagree		
26) Student achievement and/or standardized test scores increased during the 2005-2006 school year due to the utilization of research-based instructional strategies as outlined in the School Improvement Plan.							
	☐ Strongly Agree	☐ Agree	□ No Opinion	☐ Disagree	☐ Strongly Disagree		

RESEARCH-BASED INSTRUCTIONAL STRATEGIES ASSOCIATED WITH HIGHER LEVELS OF STUDENT ACHIEVEMENT

PLEASE COMPLETE COLUMNS (A,B,C) BY:

- 1. Choosing the degree to which you perceive the importance of the instructional strategy (Column A).
- 2. Choosing the degree to which you <u>implemented</u> the instructional strategy at your school during the 2005-2006 school year (Column B). If you cannot choose "Always (4)" or "Often (3)" in Column (B), indicate the factors or resources preventing thorough implementation in Column (C).

		, ,	
INCEDITORIAL	COLUMN (A)	COLUMN (B)	COLUMN (C)
INSTRUCTIONAL STRATEGY	DEGREE TO WHICH YOU PERCEIVE THE IMPORTANCE OF THE INSTRUCTIONAL STRATEGY 4 Very Important 3 Somewhat Important	DEGREE TO WHICH YOU IMPLEMENTED THE INSTRUCTIONAL STRATEGY 4 Always 3 Often	INHIBITING FACTORS Factors or Resources Preventing You From Selecting "Always" or "Often" in Column (B). (CHECK ALL THAT APPLY.)
	•	2 Sometimes	AILI.)
	2 Not Very Important	1 Never	
	1 Not At All Important	1 Never	
27) IDENTIFYING SIMILARITIES &	☐ 4 Very Important	☐ 4 Always	☐ Necessary Time
DIFFERENCES:	☐ 3 Somewhat Important	□ 3 Often	☐ Necessary Resources ☐ Necessary Knowledge
Helping students compare, classify, and create metaphors and analogies.	☐ 2 Not Very Important	☐ 2 Sometimes (Move to C)	and Skills ☐ Administrative Support ☐ Lack of Personal
metaphors and analogies.	☐ 1 Not At All Important	☐ 1 Never (Move to C)	Interest ☐ Lack of Professional
			Development/Training ☐ Other
28) SUMMARIZING & NOTE TAKING:	☐ 4 Very Important	☐ 4 Always	☐ Necessary Time
Helping students analyze,	☐ 3 Somewhat Important	□ 3 Often	☐ Necessary Resources ☐ Necessary Knowledge and Skills
sift through, and synthesize information in	☐ 2 Not Very Important	☐ 2 Sometimes (Move to C)	☐ Administrative Support ☐ Lack of Personal
order to decide which new information is most	☐ 1 Not At All Important	☐ 1 Never (Move to C)	Interest
important to record and remember.			☐ Lack of Professional Development/Training
			□ Other

SOURCE for Instructional Strategies: Adapted from McREL researchers, www.mcrel.org

29) REINFORCING EFFORT & PROVIDING RECOGNITION: Teaching students about the role that effort can play in enhancing achievement and recognizing students for working toward an identified level of performance.	☐ 4 Very Important ☐ 3 Somewhat Important ☐ 2 Not Very Important ☐ 1 Not At All Important	☐ 4 Always ☐ 3 Often ☐ 2 Sometimes (Move to C) ☐ 1 Never (Move to C)	□ Necessary Time □ Necessary Resources □ Necessary Knowledge and Skills □ Administrative Support □ Lack of Personal Interest □ Lack of Professional Development/Training □ Other
30) HOMEWORK & PRACTICE: Providing students with opportunities to learn new information and skills and to practice skills they have recently learned.	☐ 4 Very Important ☐ 3 Somewhat Important ☐ 2 Not Very Important ☐ 1 Not At All Important	☐ 4 Always ☐ 3 Often ☐ 2 Sometimes (Move to C) ☐ 1 Never (Move to C)	 □ Necessary Time □ Necessary Resources □ Necessary Knowledge and Skills □ Administrative Support □ Lack of Personal Interest □ Lack of Professional Development/Training □ Other
31) NONLINGUISTIC REPRESENTATIONS: Helping students generate nonlinguistic representations of information, including graphic organizers, pictures and pictographs, mental pictures, concrete representations, and kinesthetic activity.	☐ 4 Very Important ☐ 3 Somewhat Important ☐ 2 Not Very Important ☐ 1 Not At All Important	☐ 4 Always ☐ 3 Often ☐ 2 Sometimes (Move to C) ☐ 1 Never (Move to C)	 □ Necessary Time □ Necessary Resources □ Necessary Knowledge and Skills □ Administrative Support □ Lack of Personal Interest □ Lack of Professional Development/Training □ Other
32) COOPERATIVE LEARNING: Creating opportunities for students to develop positive interdependence, face-to-face interaction, individual and group accountability, interpersonal and small group skills, and group processing.	☐ 4 Very Important ☐ 3 Somewhat Important ☐ 2 Not Very Important ☐ 1 Not At All Important	☐ 4 Always ☐ 3 Often ☐ 2 Sometimes (Move to C) ☐ 1 Never (Move to C)	□ Necessary Time □ Necessary Resources □ Necessary Knowledge and Skills □ Administrative Support □ Lack of Personal Interest □ Lack of Professional Development/Training □ Other
33) SETTING GOALS & PROVIDING FEEDBACK: Helping students set their own learning goals in order to establish direction and providing students with timely feedback about their progress.	☐ 4 Very Important ☐ 3 Somewhat Important ☐ 2 Not Very Important ☐ 1 Not At All Important	☐ 4 Always ☐ 3 Often ☐ 2 Sometimes (Move to C) ☐ 1 Never (Move to C)	□ Necessary Time □ Necessary Resources □ Necessary Knowledge and Skills □ Administrative Support □ Lack of Personal Interest □ Lack of Professional Development/Training □ Other

34) GENERATING & TESTING HYPOTHESES: Helping students generate and test hypotheses through a variety of tasks, through systems-analysis, problem-solving, historical investigation, invention, experimental inquiry, and decision-making.	☐ 4 Very Important ☐ 3 Somewhat Important ☐ 2 Not Very Important ☐ 1 Not At All Important	☐ 4 Always ☐ 3 Often ☐ 2 Sometimes (Move to C) ☐ 1 Never (Move to C)	□ Necessary Time □ Necessary Resources □ Necessary Knowledge and Skills □ Administrative Support □ Lack of Personal Interest □ Lack of Professional Development/Training □ Other
35) ACTIVATING PRIOR KNOWLEDGE: Helping students retrieve what they already know about a topic.	☐ 4 Very Important ☐ 3 Somewhat Important ☐ 2 Not Very Important ☐ 1 Not At All Important	☐ 4 Always ☐ 3 Often ☐ 2 Sometimes (Move to C) ☐ 1 Never (Move to C)	□ Necessary Time □ Necessary Resources □ Necessary Knowledge and Skills □ Administrative Support □ Lack of Personal Interest □ Lack of Professional Development/Training □ Other
36) How were pro	oven research-based strategi	ies located or discovered by	committee members?

(Check all that apply.)				
Faculty Consensus				
Book Study				
Internet				
Educational Journals				
Guest Speakers				
School Administration				
Students' Evaluation of Teaching Strategies				
Other				

Thank you for participating in this study!

Your assistance in providing this information is greatly appreciated!

Please place the completed survey in the return envelope and place in the mail by <u>December 15, 2006</u>.

Appendix D

Postcard Follow-up

IT'S NOT TOO LATE!!!!



You still have time to complete the survey,
Assessment of Research-based
Instructional Strategies Within School
Improvement Plans, which was sent to
you last month.



Please complete it and drop it in the mail today. It will take only a few minutes of your time and provide valuable research information. You will want your input included!

If you have any questions, please e-mail me at capritchett@liberty.edu or call me at 256-582-5885.

Thanks for your time-Christopher G. Pritchett