FOSTERING SUCCESS IN READING:

A SURVEY OF TEACHING METHODS AND COLLABORATION PRACTICES

OF HIGH PERFORMING ELEMENTARY SCHOOLS IN TEXAS

A Dissertation

by

RICHARD AUSTIN EVANS JR.

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May 2005

Major Subject: Educational Psychology

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Approved as to style and content by:

Richard I. Parker (Chair of Committee)	Laura Stough (Member)
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ABSTRACT

Fostering Success in Reading:

A Survey of Teaching Methods and Collaboration Practices

of High Performing Elementary Schools in Texas. (May 2005)

Richard Austin Evans Jr., B.S., Angelo State University;

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Chair of Advisory Committee: Dr. Richard I. Parker

This study examined reading programs in 68 Texas elementary schools that were identified as successful by their scores on TAAS assessment results in the 1999-2000 school year. These schools' student populations had a high proportion of culturally diverse and low-SES students. The purposes of this study were: (1) to determine if and how teaching methods and collaboration (intervention/support teams) were used by effective schools to foster reading success in all students; (2) to identify cohesive patterns (clusters) or models in schools' use of collaboration and teaching methods; (3) to examine these clusters of similar schools and see if the patterns differed based on the school/community demography (urban, suburban, or rural). The study was conducted in 68 schools in 33 school districts that represented various demographic settings from 12 different Education Service Centers across Texas. From these original 332 variables, 26 variables were selected that were of medium frequency and strongly correlated with high TAAS scores over a 4-year period. These 26 variables were used to examine the 68 high-performing Texas elementary schools for clusters. K-means analysis and HCA

were both applied to the 26 response variables, using them as complementary techniques to arrive at a five cluster solution. Results from correlations of individual characteristics and from identifying school clusters suggested that school community type could possibly be moderately predictive of student performance on the TAAS/TAKS over time.

DEDICATION

To My Family

This dissertation is dedicated to my wife, for without her love and encouragement I would not have had the determination to accomplish this dream or receive this degree. Her support, temperament, and love pushed me to finish each class, do the dissertation research, and finally write the dissertation. I dedicate this dissertation to my lovely and loving wife, Arlene Evans.

Also, I dedicate this dissertation to my sons and my parents, who through their own struggle taught me how to persevere. Without their pooled knowledge, understanding, help, and prayers I would have never made it to this point.

Thank you, my loving family.

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And last but not least, to my wife Arlene Evans and our two sons and two daughters-in-law, (Chris and Allison Evans and Ray and Lauri Evans) because without these individuals' encouragement and support, I would have never even attempted to further my education.

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CHAPTER I

INTRODUCTION

Reading Is Basic

Despite the importance of literacy in our society, over half of all students in our schools fail to develop adequate reading skills (Snow, Burns, & Griffin, 1998). Recently the National Assessment of Educational Progress Survey of Fourth-Grade Reading 2000 (Donahue, Finnegan, Lutkus, Allen, & Campbell, 2001) noted that during the 1999-2000 school year, only 32% of the nation's fourth-graders read at an acceptable level of proficiency. In addition only 14% of students from low-income families (based on the number of students eligible for free or reduced-price lunches) performed at or above the proficient level (Donahue et al., 2001). According to Lerner (1989), reading problems are the main reason for student failure and special education referral. Moreover, without the ability to read, students will have a difficult time being successful, not only in school, but in the world of work (Snow, Burns, & Griffin, 1998).

In January 1996, then Texas Governor George W. Bush established the Texas Reading Initiative and challenged all Texans to focus on teaching children to read (Texas Education Agency, 2001a). Governor Bush advocated for better reading instruction in grades K-2 and for the diagnostic testing of all students in these grades to identify students having reading problems. Bush also supported training to assist

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This dissertation follows the format of the journal *Exceptional Children.*

teachers in the early identification and remediation of reading difficulties (Texas Education Agency, 2001b). Later, in the 2000 presidential campaign, education was at the center of most political debates and George W. Bush referred to these same initiatives to improve reading nationwide.

After becoming president, Bush signed the No Child Left Behind Act into law on January 8, 2002 (NCLB, 2002). The NCLB stressed the funding of effective public education and gave states more flexibility in spending their federal education dollars. In so doing, however, it required states to set standards for student achievement and to hold students, teachers, and other educators accountable for results. NCLB also suggested that all but a very small number of children could be taught to read and affirmed that preventing reading problems was more cost-effective than remediation in the higher grades.

Research on reading suggests that for children to be good readers, they must possess phonemic awareness, phonics skills, fluency, and reading comprehension skills (National Reading Panel, 2000; Taylor, Pearson, Clark, & Walpole, 1999). Researchers also have found that a quality reading program emphasizes these same skills (Duffy-Hester, 1999; Reading Summit, 1998; Taylor et al. 1999) and that these skills are critical in the early grades for students who lag behind in reading skill acquisition (Vellutino, Scanlon, Sipay, Small, Pratt, Chen & Deckla, 1996). Additionally, research on effective reading instruction has identified instructional practices that have significant impact on literacy development for struggling readers, including class-size reduction (Ragland, Clubine, Constable, & Smith, 2001), one-to-one peer coaching, small-and-large group

instruction (Bickel & Bickel, 1986; Elbaum, Vaughn, Hughes, & Moody, 1999; Stockard & Mayberry, 1992; Taylor et al., 1999; Vaughn, Moody, & Schumm, 1998), scaffolding, intervention or support teams (Byrne & Fielding-Barnsley, 1991; Felton & Pepper, 1995; Haskell, Foorman, & Swank, 1992; Smith, Simmons, & Kame'enui, 1998), early identification (Chard & Dickson, 1999; Coyne, Kame'enui, & Simmons, 2001; Francis, Shaywitz, Stuebing, Shaywitz, & Hetcher, 1996; Juel, 1988; Reading Summit, 1998; Vaughn, Gersten, & Chard, 2000; Vellutino et al., 1996), and explicit instruction (Allington, 2002; Blachman, 1994; Fielding-Barnsley, 1997; Spear-Swerling & Sternberg, 1996; Torgesen, Wagner, Rashotte, Rose, Lindamond, Conway & Garvan, 1999).

According to Edmonds (1979), by closely examining the structure and practices of our most successful schools, we can create models for other schools and districts to employ. Such was the beginning of effective school research that developed into the effective school correlates in the early 1980s. Originally there were only four correlates, but the list has since expanded to seven and includes: (1) safe and orderly environment, (2) clear school mission, (3) instructional leadership, (4) high expectations, (5) opportunity to learn and student time on task, (6) frequent monitoring of student progress, and (7) home-school relations (Guillemard, 1999). In this dissertation study, the hypothesis proposed was that by closely examining the structure and practices of our most successful reading programs, we should be able possibly to develop models that other schools and districts might use to improve reading instruction.

Problem

Past research in reading has identified a number of key characteristics of effective early reading instruction (Blachman, 1994; Duffy-Hester, 1999; Fielding-Barnsley, 1997; Reading Summit, 1998; Spear-Swerling & Sternberg, 1996; Taylor et al., 1999; Torgesen et al., 1999), as well as instructional practices that significantly impact literacy development in the elementary grades (Byrne & Fielding-Barnsley, 1991; Felton & Pepper, 1995; Haskell, et al., 1992; Ragland, et al, 2001; Smith, et al, 1998). Yet limited research has been conducted on the extent to which teacher collaboration and teaching methods relate to effective schools. Additionally, little information exists on the extent to which these practices are effective in schools with different demographics (e.g., urban and rural schools) and/or in culturally diverse schools (Edmonds, 1979). This limited knowledge base reduces the dependability with which "effective interventions" or "effective instructional practices" can be generalized or transported from one type of school to another (Vaughn, et al., 1998). Research on the generalizability of effective reading practices could provide field-based practitioners, administrators, and government agencies with support for developing policies for school programs for struggling readers across a wide variety of contexts.

Successful reading programs across differing demographic compositions and at the school, program, and classroom levels should be investigated. This investigation should be conducted from a multilevel perspective, with the understanding that student success is dependent on effective practices at multiple levels within a school. Such an investigation should consider collaboration among educators, administrative

arrangements, and teaching methods of individual teachers. Close examination of the structure and practices of these most successful reading programs may allow educators to establish models for other school districts to use in improving reading instruction for all students. The current study acknowledges that rather than a single best model, multiple models may be required to meet the needs of schools with different demographic profiles.

Purpose of Study

This study examined reading programs in 68 Texas elementary schools that were identified as successful by their scores on Texas Assessment of Academic Skills (TAAS) assessment results in the 1999-2000 school year. Student populations in these schools had a high ratio of culturally diverse students, and many of the students were of low socioeconomic status (SES). The first purpose of this study was to determine if and how teaching methods and collaboration (intervention or support teams) were used by these effective schools to foster reading success in all students. The second purpose was to identify cohesive patterns or models in the school's use of collaboration and teaching methods. The final purpose of this study was to examine whether these models of similar patterns vary by school based on the school's community demography (urban, suburban, or rural).

Research Questions

This research will address the following questions in the reading program at elementary grades in low-SES schools, with low special education exemption rates, that were rated as successful by the Texas Education Agency (TEA) based on TAAS scores:

(1) What types of teaching methods are used for reading instruction within "successful elementary schools?"

(2) What types of collaborative practices do teachers use to disseminate instructional practices and interventions to foster success in struggling readers within these same successful elementary schools?

(3) How do the variables identified in Questions 1 and 2 cluster? That is, do patterns of these variables tend to co-occur in schools?

(4) Do the models identified in Question 3 vary in occurrence by school or community types: urban, suburban, or rural?

Terms

Collaborate: To work jointly with others in a scholarly enterprise (Merriam-Webster's Collegiate Dictionary, 1996).

Collaborative Practices: For this research project collaboration can include the use of intervention teams, support teams, prereferral teams, staff development follow-up meetings, and regular staff meetings that allow teachers to disseminate, share, and acquire information from each other.

Grouping Practices: Type may include but are not limited to whole group, small group, pairs, and one-on-one

Whole Group: The majority of the class works together

Small Group: Two or more students but less than the majority of the class are gathered together regularly to accomplish a purpose

Pairs: Two students gather together to accomplish a purpose

One-on-One: Two individuals, one designated the student and the other the tutor or teacher gather together to accomplish a purpose

Model: A pattern or configuration of variables existing in multiple schools

Special Education Exemption: The process of excluding (exempting) a student who is eligible for special education services from taking the state-mandated accountability exam (For this study the exam in Texas was the TAAS.)

Community Type: Based on TEA definitions (see Appendix F for full descriptions), all categories will be grouped into the following community types: (School/Community type will be referred to as community type for the rest of this study)

Urban - Major Urban and Other Central City

Suburban - Major Suburban, Other Central City Suburban, and Independent Town

Rural - Non-Metro: Fast Growing, Non-Metro: Stable and Rural

Successful Elementary Schools: For this research project successful elementary schools are defined schools that have achieved a passing rate of 90% or above on the reading portion of the TAAS assessment results and in which the student population consists of a high percentage of poor and culturally diverse students

Poor Students: Students of low socioeconomic status (SES). Students who qualify for free or reduced-cost lunches based on reported family income level

Socioeconomic Status (SES): The social factors such as income, education, place of residence, and occupation that affect the daily experiences of individuals.

Culturally Diverse Students: Students who come from backgrounds different from mainstream society

Teaching Methods: For this research project teaching methods will include a variety of events, for example type of instruction, instructional materials, instructional arrangement, instructional focus, and use of instructional modifications or scaffolding

Type of Instruction: These include direct instruction, indirect instruction, balanced approach, cooperative learning, independent discovery, lecture with and without discussions, video lessons, computer-aided instruction, individualized instruction, small-group instruction, worksheets, and guest speakers or readers

Instructional Materials: For this study instructional materials can include specific reading program materials, parts of the basal series, manipulatives, games, literature books, teacher-made materials, computer programs or labs, word lists, word wall, sight word lists, commercial materials, and special campus-wide programs

Instructional Focus: For this study instructional focus can be various types of applications including fluency skills, vocabulary, word families, phonics, phonemic awareness, phonological skills, spelling, grammar, word identification skills, oral reading individually or in groups, choral reading, round-robin reading, echo reading, students reading to volunteers, timed readings, tutoring, comprehension skills, summarizing, prereading activities, regular assessment of learned skills, writing activities, identifying student

needs, practice and repetition, integration of reading and writing lessons, journaling, sentence writing (use of vocabulary words, copying, creating, or correcting sentences), and summarizing stories

Instructional Support: Supports are elements added to the instructional routine to accommodate different learning styles and needs of students with special needs (Smith, 2004), Examples include the use of extended time, assignment modifications, scaffolding, individualized instruction computer # technology programs, multiple modalities for learning, special pull-out services, incentive programs (book it, gift certificates, etc.), continual monitoring of student progress, build on strengths, and test-taking strategies

Scaffolding: An instructional technique wherein students are given support while learning new skills by systematically building on learners' experiences and knowledge (Smith, 2004; Taylor, et al., 1999; Wharton-McDonald, et al., 1998)

CHAPTER II

REVIEW OF THE LITERATURE

Effective Reading Instruction

Acquiring literacy is one of the most important elements in building a foundation for success in education and life. School administrators across the country are aware that quick fixes to help children learn reading skills are nonexistent. Yet in a survey of 20 elementary school administrators, Diamantes and Collins (2000) found wide differences in the definition of reading and in which aspects of reading are most important. Researchers have been able to identify various characteristics that foster reading growth in children with and without a risk of reading problems. Table 1 summarizes this research.

Gambrell, Morrow, Neuman, and Pressley (1999) note that literacy practices found in schools today should include, directly teaching decoding and comprehension strategies, building on background knowledge, allowing ample time for reading in class, working with a variety of grouping structures, balancing teacher-and student-guided discussions, reading for authentic meaning; using multiple texts that link and expand concepts, using a combination of methods (such as direct instruction, guided instruction, and independent learning) and using a variety of assessment techniques to deliver instructional objectives. Additionally, Morrow, Tracey, Woo, and Pressley (1999) have documented a number of key teacher practices that foster literacy learning. These include advocating extended time to develop language arts, using a balanced approach,

TABLE 1
Characteristics of Effective Reading Instruction

Research Area	*Researchers*
	Instruction
Vocabulary	Kueker, 1990; Nagy, 1988; Nagy et al., 1985
Comprehension strategies	Chard & Dickson, 1999; National Reading Panel, 2000; Vaughn et al., 1998
Reading fluency with accuracy	Chard & Dickson, 1999; National Reading Panel, 2000;
Phonemic awareness and principles	Chard & Dickson, 1999
Instructional balance	Duffy-Hester, 1999; Reading Summit, 1998
Direct instruction (Explicit, direct, and systematic)	Allington, 2002; Blachman, 1994; Duffy-Hester, 1999; Fielding-Barnsley, 1997; McCray et al., 2001; McKeown & Beck, 1988; National Reading Panel, 2000; Spear-Swerling & Sternberg, 1996; Torgesen et al., 1999, 2001
Using multiple grouping strategies	Bickel & Bickel, 1986; Elbaum, et al., 1999; Stockard & Mayberry, 1992; Taylor et al., 1999; Vaughn, et al., 1998
Integration of reading and writing activities into other subjects	Wharton-McDonald et al. 1998
Time spent on reading instruction	Allington, 2001; Rieth & Evertson, 1988; Snow et al., 1998
	Monitoring
Frequent assessment	Goetze et al., 1997; Good & Brophy, 2000; Morrow et al., 1999; O'Connor & Jenkins, 1999; Taylor et al., 1999
	Early Involvement
Early identification	Allington, 2002; Blachman, 1994; Chard & Dickson, 1999; Coyne et al., 2001; Fielding-Barnsley, 1997; Francis et al., 1996; Juel, 1988; Spear-Swerling & Sternberg, 1996; Torgesen et al., 1999; Torgesen & Davis, 1996; Vaughn et al., 2000
Early intervention	Chard & Dickson, 1999; Coyne et al., 2001; Francis et al., 1996; Juel, 1988; Reading Summit, 1998; Vaughn et al., 2000; Vellutino et al., 1996
Early reading programs (pre-K and K levels)	O'Connor et al., 1998; Whitehurst & Lonigan, 1998
	Collaboration
Scaffolding, intervention	Byrne & Fielding-Barnsley, 1991; Felton & Pepper, 1995; Haskell et al., 1992; Smith et al., 1998
Support (teams)	Reading Summit, 1998; Sanacore, 1990

integrating content areas, using small-group instructions based on specific needs, insuring frequent assessment and monitoring, teaching skill development in context, carefully designing delivery of instruction, raising teachers' expectations of students' for work and achievement, and using grouping (whole-group, small-group, paired, and one-to-one instruction).

Reading Instruction and Skills

Current research indicates that for children to be good readers, they must have phonemic awareness, phonics skills, the ability to read with accuracy, speed, expression, and fluency, and good reading comprehension strategies to understand what they read (National Reading Panel, 2000; Taylor et al., 1999). A good reading program needs to emphasize phonemic awareness, phonics skills, fluency, and comprehension (Duffy-Hester, 1999; Reading Summit, 1998; Taylor et al., 1999). Yet the National Center for Education Statistics (1996 reported that more than 40% of fourth-and eighth-grade students fail to read at levels considered essential to performing on grade level. These numbers suggest that fewer and fewer readers in fourth and eighth grade are proficient at reading through text and have the skills to understand how to continually monitor their comprehension by assessing and revising their predictions.

Vaughn et al. (1998) found that in many of the educational communities of today, teachers have shifted away from what research has suggested is effective reading instruction (Snow et al., 1998). Accordingly Vaughn et al. (1998) noted that these new educational communities have replaced basal reading series and ability-group instruction with whole-class instruction. The driving philosophy of this method is that specific skills

are taught only as needed, as evidenced by the motto, "Reading should be caught, not taught." This movement toward whole-class instruction has led some researchers to suggest that the academic outcomes of schoolchildren in Texas and the nation have suffered over the last decade (Snow et al., 1998; Vaughn et al, 1998).

Instructional Balance

Recent research suggests a number of components are found in an identifiable reading program that will contribute to improved acquisition of reading skills of most children (Fletcher & Lyon, 1998). These components include instruction in phonemic awareness, the alphabetic principle, fluency in word and text reading, vocabulary instruction, and instruction in reading comprehension strategies (Chard & Dickson, 1999; Duffy-Hester, 1999; National Reading Panel, 2000; Reading Summit, 1998). Fletcher and Lyon (1998) also suggest that instruction should take place within a literature-rich environment that offers a combination of both decodable and predictable textbooks that will assist readers in the development of adequate reading skills. Additionally, Duffy-Hester (1999) reports that a highly effective reading teacher models reading to their students by reading aloud to them from a variety of literature types.

Phonemic Awareness

In the late 1960s, researchers demonstrated that individual phonemes or speech sounds are difficult to perceive because they fuse or blend together within a spoken syllable (Liberman, Cooper, Shankweiler, & Studdert-Kennedy, 1967). In 1972 Mattingly put forth the idea that phoneme awareness, or conscious attention to individual sounds within a spoken word, might be a critical factor in learning to read. About the

same time Clay (1972) was among the first to discuss the importance of beginning readers' developing an awareness of word units in text. Clay (1991) noted that in order to read simple texts, the child must break up speech into words, then locate a visual pattern, and then coordinate the timing of all this with an utterance.

Reviews of the reading literature by Hurford, Darrow, Edwards, Howerton, Mote, Schauf, and Coffee (1993) and Mann (1993) have indicated that the presence of phonemic awareness is a hallmark of good readers, whereas its absence is a consistent characteristic of poor readers. Phonemic awareness can be defined as the ability to hear and manipulate phonemes or sounds that correspond to letters of the written alphabet (Walton & Walton, 2002). Phonemes are the smallest units making up spoken language. Most words consist of a blend of phonemes. Phonemic awareness refers to the ability to focus on and manipulate these phonemes in spoken words (National Reading Panel, 2000).

Students need to understand that the words they say can be segmented into sounds, that those sounds are represented by letters, and that those letter-sound associations can be used to decode unknown words (Chard & Dickson, 1999). According to Adams (1990) phonemic awareness in students has proven to be the best early predictor of future reading difficulties. Similarly, explicit, systematic instruction in phonics has proven to be a significantly effective method of reading instruction with children of different ages, abilities, and SES backgrounds (National Reading Panel, 2000). Research has demonstrated that once children have mastered phonemic awareness, useful

knowledge of the alphabetic principle generally follows with remarkable ease (Fielding-Barnsley, 1997).

Research suggests that phonics instruction improves word reading skills and text comprehension in struggling readers (National Reading Panel, 2000). According to Fletcher and Lyon (1998), many children require explicit word recognition instruction integrated with reading fluency instruction, along with instruction in spelling skills and strategies, to improve comprehension and to become skilled readers.

The National Reading Panel (2000) determined that effective reading instruction consists of three steps. First, children should be taught to break apart and manipulate the sounds in words (phonemic awareness). Then, they should be made aware that these sounds (phonemes) are represented by letters of the alphabet. Finally, they should be taught how to blend these sounds together to form words. This is the fundamental process of phonics instruction. Instruction should also be functional, useful, and contextual and should be planned, systematic, and explicit to be of value (Fielding-Barnsley, 1997; Foorman, Fletcher, Schat, Schneider, and Mehta, 1998).

Oral Reading

Research over the years into classroom instructional practices has revealed that oral reading continues as a mainstay of reading instructions (Austin & Morrison, 1963). According to Rasinski and Hoffman (2003) some forms of guided oral reading promote reading growth through most of the elementary grades. Additionally, Eldredge, Reutzel, and Hollingsworth (1996) found that oral reading was used primarily as a method of checking students' word recognition after silent reading. Researchers such as Huey

(1968) noted that oral reading had become an activity that was found only in schools and that in normal daily life, individuals focused more on silent reading and comprehension. At the beginning of the standardized testing movement, group-administered reading achievement tests that were read silently began to be used to evaluate individual students and schools (Rasinski & Hoffman, 2003).

Recent research has suggested an association between classroom oral reading and student achievement in reading (Stallings, 1980; Wilkinson, Wardrop, & Anderson, 1988). Additionally, oral reading fluency has been explored as a way to enhance student achievement in reading (National Reading Panel, 2000). According to Schreiber (1987, 1991), students who read orally with the greatest fluency tend to score highest in overall reading achievement and those who read with the least fluency tend to have the lowest levels of reading achievement. According to Kuhn and Stahl (2000), the method of repeated readings is the best-known oral reading method for developing fluency.

Fluency

Reading fluency is the speed and effortlessness with which a reader processes text. Fluency (rate + accuracy) is highly correlated with reading comprehension (reference?). Students with poor reading fluency read sluggishly; this limits their overall understanding of the passage and contributes to limited comprehension (Allington, 2002). For this reason fluency is considered a key component in the decoding, comprehension, and motivation of readers (Adams, 1990; Hasbrouck, Ihnot, & Rogers, 1999).

Research in the area of fluency finds instructional methods for increasing reading fluency include hearing fluent reading modeled, repeated readings, and progress monitoring (Adams, 1990; Hasbrouck, etal., 1999; Wolf and Katzir-Cohen, 2001). Perhaps the most popular version of assisted reading has been paired reading (Rasinski & Hoffman, 2003). According to Topping (1987, 1989), numerous studies have demonstrated that, on average, students involved in paired reading make significant growth in the areas of reading accuracy and comprehension compared to students doing independent reading. Additionally, research has found that repeated reading instruction that offers guidance and feedback is effective for improving word recognition, fluency, comprehension, and overall reading achievement through Grade 5 (National Reading Panel, 2000).

Comprehension Strategies

Skilled readers differ from less skilled readers in their comprehension abilities (Chard & Dickson, 1999). Recent research has established that for children to become good readers, they must be taught to apply reading comprehension strategies to enhance understanding and enjoyment of what they read (National Reading Panel, 2000; Snow et al., 1998; Taylor et al., 1999; Torgesen, 2000). Skilled readers draw valid inferences from text, which means they comprehend what they read (National Research Council, 1998). Reading comprehension and vocabulary knowledge are closely related, and numerous studies have shown the strong correlation between the two (Nagy, 1988; Smith, 1997). Additionally, the National Research Council (1998) has suggested that

aiding readers in accessing background knowledge is a key element for improving comprehension.

Williams (2000) suggests that narrative text (i.e., fiction) is easier to comprehend and remember than expository text (i.e., factual and informational material). Most research on narrative text has focused on teaching students to utilize story structure as an organizing framework for understanding critical aspects of the stories (Williams, 2000). Average classroom instruction does not provide adequate guidance for struggling readers to be successful with expository text. Klingner, Vaughn, and Schumm (1998) indicate that using multiple strategies, such as explaining, modeling the strategy, and providing rehearsal opportunities, is a promising practice for improving reading comprehension.

Vocabulary

Knowledge of word meanings (vocabulary) is critical to reading comprehension (Marzano, Pickering, & Pollock, 2001; National Reading Panel, 2000). Advocates of different instructional approaches debate whether skills-based or meaning-based programs are best in early instruction, yet there is some agreement that before a child can read the child should be familiar with the majority of the words on a page (Adams, 1990; Levy & Lysynchuk, 1997). Levy and Lysynchuk (1997) also reported that rapid acquisition of new reading vocabulary came faster through instruction of word segmentation than with whole-word instruction, whereas Nagy, Herman, and Anderson (1985) found that reading new words in context increases vocabulary and comprehension growth.

However, Jenkins, Stein, and Wysocki (1984) found that to learn a new word in context (without instruction), students need to be exposed to the word at least six times before they have enough experience with the word to ascertain and remember its meaning. Nagy and Herman (1987) estimated that without direct instruction students have about a 5% chance of learning a new word encountered while reading. Studying vocabulary, Stahl and Fairbanks (1986) found that teaching general vocabulary directly positively affected student learning and that direct instruction on words that are critical to new content produces the most powerful learning.

Instructional Time Spent Reading

How children spend time in classrooms has been a long-standing concern of educators. Research over the years (Fisher & Berliner, 1985) has confirmed that the amount of time students spend actively engaged in learning will be positively related to academic achievement. Hollowood, Salisbury, Rainforth, and Palombaro (1994) noted that time-related instructional variables are predictive of academic achievement. This would suggest that additional time spent on reading and reading instruction could be critical to the development of reading proficiency.

According to Allington (2002), providing students the occasion or time for reading practice will allow them the opportunity to blend the skills and strategies they have been taught. Similarly Allington also notes that students who are successful at reading do more guided and independent reading from a variety of different texts, including social studies and science, than do less successful students. In addition, students need to

experience vast quantities of “successful reading experiences” to become independent, proficient readers (Allington, 2002).

Direct Instruction (Explicit, Direct, and Systematic)

The most straightforward way to help students identify new information is simply to present that information to them directly (see Marzano et al., 2001). For example, in identifying similarities and differences, Chen, Yanowitz, and Daehler (1996) found that students who received explicit guidance showed enhanced understanding and the ability to use that new knowledge. Likewise, explicit instruction is an essential feature of effective interventions for struggling readers, including students with learning disabilities (National Reading Panel, 2000). According to current research, to be effective at teaching reading skills, schools should start intervention and remediation as early as possible (Reading Summit, 1998) using well-designed intervention programs implemented by highly qualified teachers (Elbaum, Vaughn, Hughes, Moody, & Schumm, 2000; Fletcher & Lyon, 1998). Research suggests that providing a direct, consistent, and systematic approach is an important key to good reading instruction (Duffy-Hester, 1999; McCray, Vaughn, & Neal, 2001; National Reading Panel, 2000), along with regular systematic assessment (Morrow et al., 1999; Taylor et al., 1999) and regular opportunities for writing with systematic spelling instruction. The use of these strategies enhances and extends both reading and writing growth (Adams, 1990).

Instructional Grouping

According to Taylor et al. (1999), exceptional teachers spend 50% more time using small-group instruction than do less effective teachers. Likewise, researchers have noted

that the most effective schools spend more time in small-group instruction (Duffy-Hester, 1999; Morrow et al., 1999; Taylor et al., 1999; Wharton-McDonald et al., 1998). Taylor et al. (1999) concluded that more successful reading teachers use small-group instruction and ability grouping along with regular systematic assessment in the classroom. Group membership should not be static; rather, it should be flexible and dynamic (Adler & Fisher, 2001).

Students benefit from working in a variety of grouping formats that change to reflect their knowledge, skills, interests, and progress (Elbaum et al., 2000). Students with reading difficulties who are taught in small groups learn more than students who are instructed as a whole class (National Reading Panel, 2000). Students in one-to-one instruction do not make significantly higher gains than students in groups of one to three (Vaughn, Hughes, Moody, & Elbaum, 2001). The use of class-size reduction, peer coaching, and small- and large-group instruction improves student success in reading (Ragland et al., 2001). In addition, the use of scaffolding and intervention or support teams can lead to improved reading success (Byrne & Fielding-Barnsley, 1991; Felton & Pepper, 1995; Haskell, et al., 1992; Smith, et al., 1998).

Elbaum et al. (1999) recently reported research that is extremely supportive of alternative grouping practices, such as cross-age tutoring and cooperative learning groups, for teaching reading. A review of small-group instruction conducted by Lou et al. (1996) confirmed that small-group teaching is associated with higher academic achievement than whole-class instruction without grouping. Additionally, Elbaum, et al.,

(1999) indicated a positive effect for alternative grouping formats compared to whole-class instruction and suggested strong support for student pairing.

Bickel and Bickel (1986) found that one-to-one peer coaching and small-and large-group instruction were effective in teaching reading to struggling readers. Similarly, Mathes and Fuchs (1994) conducted a synthesis of 11 studies on peer tutoring in reading and found that peer tutoring was an effective intervention for struggling students. Only in the past decade has research addressed the outcomes associated with the use of multiple grouping formats or of outcomes associated with a particular grouping format (Barr & Dreeben, 1991). Yet Allington (2002) suggests that what matters most is providing exemplary reading instruction designed to fit children's individual needs.

Indicators of a Quality Reading Program

The primary goal of education is to help foster a well-educated citizenry. In the 1970s, to foster this idea, schools in the United States began to require that students meet a minimum competency to ensure that all students learned the minimum skills needed to be productive citizens (Amrein & Berliner, 2002). In the 1980s, the minimum competency test movement was almost entirely discarded in favor of high-stakes testing (Amrein & Berliner, 2002). Suggestions were made for states to implement higher standards to improve curriculum, and these resulted in rigorous assessments to hold schools accountable for meeting these standards (National Commission on Excellence in Education, 1983).

After signing NCLB (2002) into law, President Bush brought to the public school system a new demand that all students, regardless of race or SES, be held to the same

academic expectations. NCLB stated that all students, regardless of race or SES, must have their academic progress measured using the concept of adequate yearly progress. President Bush stressed that Americans expect public schools to give their children a good education and state education agencies are responsible for achieving this goal. For that reason, state education agencies, including the TEA, established policies and provided resources for assisting in the education of the students in their states.

In Texas the TAAS is used as an indicator of the quality of elementary and secondary education. Although this test has its detractors (McNeil, 2000; McNeil & Valenzuela, 2000), the scores of the reading portion of the TAAS are used as the single indicator of reading achievement in Texas schools (Texas Education Agency, 2001a). Performance on the TAAS contributes largely to the TEA's rating of campuses and districts (TEA, 2001a). The TAAS is designed to measure how well students are doing on a specified set of education goals and outcomes (the Texas Essential Knowledge and Skills, or TEKS) that form the statewide curriculum (Bond, 1996). Agreement is general that gains on the TAAS scores are attributable to rising student achievement (Klein, Hamilton, McCaffrey, & Stecher, 2000). The TAAS was revised and renamed the Texas Assessment of Knowledge and Skills (TAKS) in the 2002-2003 school year (Texas Education Agency, 2002) , so the term "TAAS" is used throughout most of this dissertation. Only in answering Research Question 3 were TAAS and TAKS data both used, and for that question the term "TAAS/TAKS" is used. For the purpose of this research study, high scores in the area of the reading portion of the TAAS will be considered an indicator of the quality of reading instruction in Texas schools.

Effective Instruction

The effective schools movement was a reaction by educators and researchers to the assumptions drawn from a number of studies, including the Equal Educational Opportunity Survey, also referred to as the Coleman Report (Coleman, Campbell, Hobson, McPartland, Mood, Weinfeld, and York, 1966). These studies by Coleman et al. claimed that schools were not affecting the achievement of culturally diverse and poor students. Coleman and colleagues concluded that the vast majority of differences in student achievement can be attributed to factors such as the students' natural ability or aptitude, SES and home environment. These findings were corroborated by Jencks, Smith, Acland, Bane, Cohen, Ginits, Heyns, and Michelson, (1972), who suggested the differences in student achievement were due to factors out of the schools' control. However, later reviews of the Coleman and Jencks studies (see Marzano et al., 2001)suggest small differences found in earlier studies on student achievement actually translated into a larger percentile gain which suggests that schools definitely can make a difference in student achievement.

Prior to Coleman, et al., (1966), studies on school quality focused on explaining variability in students' academic achievement without considering variables such as school processes. When these variables are considered, peers, quality of teachers, and money were the factors that most accounted for differences in academic achievement (Coleman, 1990; Jencks et al., 1972). Later studies by Wimpelberg, Teddlie, and Stringfield, (1989) set out to prove the Coleman Report wrong by demonstrating that schools contribute to the achievement of poor children. Research on effective schools

has been linked to the need for a positive and hopeful message about the ability of schools to educate (Bickel, 1983; Corcoran, 1985).

The focus of early research studies on effective schools moved from quantitative to descriptive case studies of successful schools. Studies such as those of Brookover and Lezotte (1979); Brookover, Schweitzer, Schneider, Beady, Flood and Wisenbaker (1978); Edmonds (1979); Rutters, Maughan, Mortimore, Ouston, and Smith, (1979), Weber (1971) identified school characteristics (later called correlates) that distinguished some schools as being more effective than others. In 1971, despite much criticism, Weber identified eight characteristics that he considered key to effective schools: high expectations, positive atmosphere, strong leadership, emphasis on reading, additional reading personnel, use of phonics, individualized instruction, and regular evaluation of pupil progress. This early research on the structure and practices of successful schools provided the origin of the effective schools correlates in the early 1980s. The effective correlates most associated with successful schools are: safe and orderly environment, clear school mission, instructional leadership, high expectations, opportunity to learn and student time on task, frequent monitoring of student progress, and home-school relations

The Coleman, et al., (1966), and Jencks, et al., (1972), also noted that although the school makes little difference, an individual teacher can have a powerful effect on students' achievement. They suggested that effective teacher practices could possibly be one of the most important factors, aside from the factors their research found (student ability or aptitude, family SES and the student’s home environment to affect student learning and achievement. These researchers suggested that more should be done to

improve education by improving the effectiveness of teachers. Research based on and effective instruction would aid teachers by guiding classroom practice in such a way as to enhance student achievement (Coleman et al., 1966; Jencks et al., 1972).

Van Secker and Lissitz (1999) found that an emphasis on student-centered instruction will increase the science achievement of boys and that emphasis on critical thinking will increase the achievement of non-culturally diverse students and students with high socioeconomic status SES. However, they found little to improve achievement of culturally diverse students and students from low-SES families. Although we should draw no hard and fast conclusions from the Van Secker and Lissitz study, it does illustrate the need to study the effects of instructional strategies on specific types of students in specific situations with specific subject matters. Marzano et al. (2001) suggest that studying the structure and practices of highly effective schools and teachers may result in the ability to make a real difference in the achievement of all students.

Instructional Leadership

Research suggests that strong educational leadership is a key element of school success (Bickel & Bickel, 1986; Donaldson, 2001; Fullan, 2001), yet most schools are lacking this essential component and consequently are not run effectively (Donaldson, 2001; Fullan, 2001). A study by Evans and Teddlie (1995) compared the differences in the leadership styles of principals working in effective schools to those working in ineffective schools and noted that principals from effective schools were identified as initiators (leaders who were proactive in dealing with school leadership needs), but

principals from ineffective schools were mostly identified as responders (leaders who tended to react to problems instead of being proactive in dealing with school needs). These results replicated previous findings demonstrating that leadership is an important variable related to effectiveness in schools, particularly in low-SES schools.

The need for leadership in schools is growing more critical as the pressure to increase student performance on standardized tests increases. The teacher shortage, higher mobility rates among students, and the low retention rate of teaching staff all add to the cry for better leadership in schools. The major problem is that one person cannot be the only one called upon to provide this leadership amid the call for change and the demand for excellence in the schools. The entire staff needs to lead. Administrators are normally seen as the leaders in a school, but teachers can also be seen as leaders. When that occurs, administrators are seen as the leaders of leaders (Ash & Persall 2000).

The literature also suggests that development of new working relationships between teacher leaders and administrators is a complex matter, influenced substantially by the organizational, social, and political structure in schools (Deal, 1985; Smylie & Brownlee-Conyers, 1992; Smylie & Denny, 1990). An insightful instructional leader will work cooperatively with teachers and guide them to match the best teaching approaches with the needs of the students (Sanacore, 1990). The research study reported here presumed that effective school leaders were present in the successful elementary schools and as such would be able to effectively answer questions about elements of the campus reading program. The study also explored the effect of SES as a contextual variable.

Principal

The principal can make a major difference in the lives of remedial and at-risk students by supporting independent or contextual reading (Sanacore, 1990). Not only teachers but principals and other school administrators should be considered instructional leaders. The role of the principal cannot be overstated. In many cases the administrators will provide encouragement and create leadership roles for teachers, opportunities for professional learning and leadership development, creative time management solutions, and time for collaboration. Principals thereby foster real change (Ash & Persall; 2000; Childs-Bowen, Moller, & Scrivner, 2000; Paulu & Winters, 1998; Ryan, 1999).

Principals need to create a strong commitment to mission, goals, values, and an environment where teacher decision-making input is valued and encouraged (Ash & Persall, 2000; Ryan, 1999). They need to foster an environment where teachers are in each other's classrooms for purposes of seeing, shaping, learning from, commenting on, and planning for each other's work with students (Donaldson, 2001; Little, 2000; Odell, 1997). The strategy of the principal looking for or creating leadership roles for teachers is echoed by Ash and Persall (2000), Childs-Bowen et al. (2000), and Ryan (1999), with the last adding the suggestion that the leadership role of the teacher will fall outside his or her classroom responsibilities. The principal needs to encourage and then support innovative practices on campus (Ash & Persall, 2000). Principal characteristics as reported by Morrow et al. (1999) include the need to provide extensive staff development for teachers to assume a major role in instructional issues, to foster a

collaborative climate among principals, teachers, and parents, and to expect outstanding performance from students and teachers.

Teacher

The teacher as leader is an emerging topic in the literature associated with the movement to restructure schools (Ovando, 1994). Teacher leaders extend the capacity of administrators by functioning through the community of leaders to affect student learning (Andrew, 1974; Ash & Persall, 2000; Barth, 1999; Childs-Bowen et al., 2000). These teachers should contribute to school improvement and inspire excellence by empowering stakeholders to contribute to educational improvement (Andrew, 1974; Ash & Persall, 2000; Barth, 1999). They should improve the teaching profession by providing support and motivation to other teachers, and they should assist in school reform (Katzenmeyer & Moller, 1996; Smylie & Denny, 1990; Stone, Horejs, and Lomas, 1997; Suranna & Moss, 1999). These teachers must be willing to accept a collaborative role that extends beyond their own classrooms (Childs-Bowen et al., 2000; Clemson-Ingram & Fessler, 1997).

Parker and Leithwood (2000) found that teachers in leadership roles find opportunities for sharing and disseminating the information gained during professional development in order to influence classroom practice. In order for teachers to assume leadership roles, they must have the ability to build trust and collaborate (Mitchell, 1997; Ryan, 1999) and they must be motivated by what is best for their students (Moller, 1999). These teachers as leaders must learn to work together in a school-based professional community that encourages reflective dialogue among teachers about

instructional practices and student learning, supports development of practices in which teachers observe each other's classes in order to participate in joint problem-solving models, and supports peer collaboration in which teachers engage in actual shared work (Bryk, Camburn and Louis, 1999; Little, 2000; Wynne, 2001). Morrow et al. (1999) found that teachers who are considered leaders encompass all the skills research has noted in the most effective teachers.

Good teacher leaders review and check the previous day's work and reteach students if necessary, while continuously checking for understanding. They provide feedback, allow time for independent practice, and use weekly and monthly reviews to assess student performance (Allington, 2002; Allington, McGill-Franzen, Brocks and Yokoi, 2000). According to Taylor et al. (1999), the most effective teachers spent twice as much time in small-group reading instruction than did the moderately or least effective teachers. Effective teachers grouped students on the basis of ability and regularly moved students from group to group. Taylor et al., also found that effective teachers provided time for students to read authentic texts and used coaching or scaffolding to help students apply word identification and phonics skills while reading. Taylor et al. also suggested that effective teachers used a balance of instructional tools to teach word recognition and strategies to figure out unknown words in text. These teachers used higher level questioning to foster comprehension, considered reading to be a priority in the school building, and communicated more with parents.

Wharton-McDonald et al. (1998) added some additional characteristics found in exemplary teachers: instructional balance, instructional density, extensive use of

scaffolding, encouragement of self-regulation, integration of reading and writing activities, high expectations for all students, successful classroom management, and an awareness of purpose.

Collaboration

The growing demand for qualified teachers has become increasingly evident. Newspaper reports, popular magazines, professional journals, and employment advertising provide documentation that teachers are in high demand. The growing demand especially for teachers for challenging students originates from the inability of teacher education programs to meet the need through new graduates and teacher retention (Miller, Brownell, & Smith, 1999). According to Ryndak and Kennedy (2000), school districts are becoming increasingly concerned about accessing and providing professional development experiences to build the capacity of their teachers and are creating support structures that will facilitate the retention of qualified teachers in their districts. In many districts the retention and development of qualified teachers represent a major challenge. Additionally, Ryndak and Kennedy report that the teacher shortage and retention crisis has become even more complex with an examination of issues and trends in teaching students with severe disabilities. The field of special education faces an even larger crisis of how to recruit, train, and retain qualified teachers.

Schools have two opportunities to acquire good teachers: hiring them or developing them (Allington, 2002; Allington et al., 2000). Allington suggests that developing good teachers requires retooling average teachers to create effective teachers using quality professional development, mentoring, and collaboration. Hiring or developing effective

teachers by retooling average teachers will ultimately depend upon a strong working relationship between classroom teachers and administrative staff. Developing such a working relationship is a complicated matter, influenced substantially by the organizational, social, and political structure in schools (Smylie & Brownlee-Conyers, 1992; Smylie & Denny, 1990).

Teachers who work with challenging students have discovered they are better able to diagnose and solve learning problems in the classroom when they work together (Snell & Janney, 2000). Instructional leaders and teachers collaborate with teachers and other instructional staff to guide and match the best approaches with the needs of the students (Sanacore, 1990). Researchers have discovered that collaboration has become a necessary practice in the classroom (Friend & Cook, 2000; Heron & Harris, 2001; Walther-Thomas, Korinek, McLaughlin, and Williams, 2000) and according to some researchers, good teachers and their practices matter as much as or more than any particular curriculum, material, or approach (Allington, 2001, 2002; Bickel & Bickel, 1986; Taylor et al., 1999).

However, instructional personnel need ongoing support to learn, practice, reflect and integrate new skills into their daily routines and to keep abreast of the latest reform efforts, new technology, and strategies that continue to surface as best practice in educating students with severe disabilities (Lieberman, 1995). Providing professional development for teachers typically has involved disseminating information according to district agendas that may or may not relate to the particular context or the students and that provide little or no follow-up (Corcoran, 1995; Lieberman, 1995). This approach

fails to consider the complexity of the organization or the needs of the individual participant and is typically focused on transmitting information rather than promoting inquiry and problem solving (Ball, 1996).

According to Joyce and Showers (1995), who synthesized research on staff development practices, when volunteer teachers participated in the traditional workshop with no follow-up activities, the level of implementation of trained practices was 10% or less. However, when teachers received training and follow-up with study groups and peer-coaching teams, implementation neared 90%. Moreover, when whole school campuses were provided training with study groups and peer-coaching teams as follow-up, the implementation was above the 90 % reported when only small groups of individual staff received the training. Joyce and Showers also cited findings on the usefulness of various training components and combinations. They noted that training that provided a combination of theory, demonstration, practice, feedback, and coaching was up to five times more effective than staff development that was designed for basic knowledge growth.

Additionally, professional development activities should be grounded in real life experiences and support the participant in engaging in the actual tasks of teaching, assessment, observation, and reflection (Darling-Hammond & McLaughlin, 1995; McGregor, Halvorsen, Fisher, Pumpian, Bhaerman, and Salisbury, 1998). Teachers need to become actively engaged in learning and the analysis of their learning experiences through observation, demonstration, and providing and receiving feedback (Birman, Desimore, Porter, and Garet, 2000). Professional development that facilitates teacher

participation and allows teachers to address their own research questions can include conducting action research, experimenting, reflecting, collaborating, modeling, coaching, problem solving, observing, mentoring, studying students' work, and participating in study groups. Further, professional development strategies will need to ensure that teachers receive regular feedback supported by follow-up after initial training has been provided and that they are given the opportunity to collaborate and dialogue with colleagues on problem solving strategies (Lang & Fox, 2003).

Traditional professional development has regularly been criticized as a piecemeal approach of disconnected topics (Ball, 1996), but according to Sanacore (1990) collaboration could be used with these professional development opportunities to help develop effective teachers. Sanacore suggests that collaboration can be used in schools to guide, support, and develop key teacher practices to match the best instructional approaches with the needs of students and teachers. Collaborative strategies provide a context for teachers to explore, question, and discuss teaching practices with other professionals in order to integrate those practices into school life. These strategies also provide a social, emotional, and intellectual engagement with colleagues that is needed to change practice (Corcoran, 1995; Sykes, 1996). Collaboration requires opening classroom doors and supporting teachers with opportunities to dialogue about practice, give and receive constructive feedback, engage in collaborative problem solving, and reflect on their practice. Partnerships of this nature provide the professional community and teachers the support needed for continuous improvement (Lang & Fox, 2003).

School Contextual Factors

Community Demographics

Studies on the characteristics of effective elementary schools for children from low-SES families suggest that the seven effective school correlates (Edmonds, 1979) are applicable to this group. Yet later studies conducted in poor urban elementary schools yielded inconclusive results; the researchers suggested that future investigations should consider how contextual variables influence school characteristics (Stringfield & Teddlie, 1991). Some researchers have suggested that contextual variables such as family background, ethnicity, family structure, maternal employment status, SES, and gender can have an impact on a student's academic achievement (Lee & Croninger, 1994; Zimilies & Lee, 1991). Their investigations suggest that future inquiries consider contextual variables to determine school effectiveness. The research study reported here considered the effects of a number of contextual factors on schools with differing demographic profiles. The scope of this study included only those schools that employ effective reading strategies with students from low-SES families.

Culturally Diverse Students

Rashid (1992) has pointed out that African-American children need to be viewed as members of a culture endowed with specific modes of cognition. However, in order to offer an educational experience that is nurturing as well as valid for students of color, Rashid suggests that early learning experiences provide a dynamic blend of culture.

As noted previously, effective schools work deliberately to provide a caring, respectful community for all students. In addition to creating ongoing relationships that

involve a serious commitment to antiracist teaching, effective schools promote respect for diversity and establish a context within which students of color can be understood, appreciated, and academically successful. Yet there is increasing concern about the academic failure and behavioral problems that occur among many students of color and culturally diverse students (Rashid, 1981; Tucker, 1999).

The inability to reduce and prevent failure by these students is most likely due to the fact that efforts have been based on experiences and research with Anglo- American children and on practices that are culturally insensitive to the needs of students of color (Rashid, 1981; Tucker, 1999). This consequently used schools with a high percentage of culturally diverse students.

Socioeconomic Status

In addition to the Donahue et al. (2001) report on the lack of acceptable levels of proficiency in reading by students related to their SES, earlier studies reported by Hallinger and Murphy (1986) and Teddlie and Stringfield (1985) also noted the differences in school effectiveness in relationship to SES of school campuses. These researchers compared performance of students from middle and low SES at effective, typical, and ineffective schools to determine the impact of SES on school effectiveness.

Teddlie and Stringfleld (1985) included a sample of 76 elementary schools from Louisiana. Third-grade teachers and third-grade students, as well as the school principals, were surveyed, and the results from an analysis of students' socioeconomic data reported noticeable differences among effective, typical, and ineffective schools. Teddlie and Stringfleld noted that teachers from effective low-SES schools spent more

time on reading, math, and homework than teachers from less effective low-SES schools. Additionally, principals from effective low-SES schools visited classrooms frequently and participated more in the process of hiring teachers than did principals from ineffective and typical low-SES schools. Schools with a high percentage of low-SES students and high reading scores on the TAAS assessment were purposely solicited to participate in the SPED/Reading and this dissertation study.

Struggling Readers

Reading difficulty is a primary reason for student failure and special education referral (Lerner, 1989). Often, struggling readers are merely tracked into special education programs (Reading Summit, 1998). Yet Aaron (1997) suggests that students with learning disabilities in reading and students who are poor readers may be one and the same. A number of researchers (Goetz, etal., 1997; Reading Summit, 1998; Snow et al., 1998) have found that a good early literacy program may prevent the mislabeling of many children as being learning disabled.

Some researchers believe that educational research should look at instructional practices that keep students out of special education (Taylor et al., 1999) and build on these practices. Jackson (1990) argued that understanding what happens in elementary school classrooms is contingent on looking closely at routine events. The current study focuses on practices used to aid children's reading achievement (National Reading Panel, 2000; Snow et al., 1998).

CHAPTER III

METHOD

This study examined the reading programs of a select number of successful Texas elementary schools with an average passing rate for TAAS reading of 90% or above for Grades 3-5 and an Individualized Education Plan (IEP) TAAS exemption rate of 7.0% or less despite challenging student populations. These schools had high rates of economically disadvantaged families (all schools had more than 60%; median = 77% disadvantaged) and had a high enrollment of minority students (all had more than 50%; median = 87% minority). The study reported here sought to determine how teaching methods and collaboration (intervention or support teams) practices were used by these effective schools to foster reading success in all students. Specifically, this study examines and categorizes cohesive patterns (models) in the schools' use of collaboration and teaching methods and considers whether these models of similar patterns vary by school based on community demography (urban, suburban, or rural).

This research was a one-shot descriptive instrumentation study (Campbell and Stanley, 1963). Its data sources consisted of school campuses that have been successful at reading instruction (based on reading TAAS scores) despite high rates of economically disadvantaged families and a high proportion of minority students. The data used in this research study were part of a larger grant-funded study called SPED/Reading Interface (Parker, Hasbrouck, O'Neill, Hall, Cash, Gsanger, Byrns, & Evans, 2004). This dissertation study used a portion of those data to identify and describe instructional and intervention practices from these successful Texas schools.

The data were collected at schools (N=68) through on-site interviews with teachers and administrators at the local campuses.

Pilot Study

In the pilot study, data collectors traveled to 11 elementary school campuses and interviewed two or more teachers and one administrator from each. Detailed results and interpretations for the pilot study are not included in this study, but pilot study statistics are listed in Table 2. The data collection took approximately 3 months.

TABLE 2
Frequency Distribution of Pilot Study

Frequency for	*Count*
Schools initially selected	17
Schools in districts declining to participate	6
Schools participating in study	11
Districts initially selected	12
Districts declining to participate	3
Districts participating in study	9
Principals interviewed	11
Teachers interviewed	24

The data obtained from the questionnaire were mainly qualitative in nature. Coding of the qualitative data for quantitative analysis required identifying the themes contained in specific text passages or segments (Miles & Huberman, 1994). The themes included beliefs, experiences, and opinions the respondents communicated in response to the interviewer's questions. Different respondents expressed similar themes in different ways, so the qualitative data coding required an accurate interpretation of the various text passages. Passages that contained identical themes were coded the same way, while

passages containing different themes received different codes. A sample of the pilot study results are presented in Table 3.

TABLE 3

Pilot Study of 11 Texas Elementary Campus Reading Program Teacher Level Results

Research Area	*Frequency Distribution*
Formal assessment	All districts use the Texas Primary Reading Inventory (TPRI) for K-2 assessments. Six of the nine districts also use the Iowa Test of Basic Skills (ITBS)
Informal assessment	Teacher-respondents track reading progress on a daily basis, Teacher-respondents use informal assessment each 6 to 9 weeks, Instruments used are running records and miscue analysis, informal reading inventories (IRI), and district-constructed 6- or 9-week tests, Teacher-respondents use assessment results to plan instruction, set student goals, monitor student progress and mastery skills, and monitor students' yearly reading growth
Reading groups	Twenty-one of 23 teachers use small, flexible reading groups based on assessment results
Teaching strategies of teacher respondents	Multisensory approach to skills and vocabulary instruction, Choral reading Tape recording child reading, Taped books, Blending practice, Literacy centers, Word walls/Sight-word lists, Direct instruction in phonemic awareness and phonics skills, Support of tutors, mentors, and volunteers (high school students, parents, and PTO volunteers) provided opportunity for the students to practice their reading skills and led to high student achievement
Intervention strategies noted by teachers	Peer tutoring, Small group tutoring, Individual tutoring, Before and after school tutoring, Peer reading, Additional time on task
Teaching strategies noted by teachers	Multisensory approach to skills and vocabulary instruction, Direct instruction in phonemic awareness and phonics skills, Literacy centers Word walls/Sight-word lists, Choral reading and blending practice, Tape recording child reading and taped books
Parental involvement and volunteers	Fourteen of 23 teachers have volunteers read with students Nine of 23 teachers use consistent written communication Eight of 23 teachers have parents sign a nightly student reading log Six of 23 teachers require nightly reading

The pilot study, provided information used to develop a set of codes (variables) that corresponded to distinct themes that were present in the qualitative data and in the review of the literature. The list of codes was compiled into an Excel spreadsheet, and the spreadsheet underwent numerous revisions.

Following the administration of the questionnaire, the investigator asked the participants the following questions:

(1). Please tell me your reaction to the format and content of this questionnaire.

(2). Is there a better or clearer way to ask any of the questions?

(3). Would you add any questions to this questionnaire? Why?

(4). Would you delete any of the questions from this questionnaire? Why?

(5). Do you think the content of the questionnaire relates to all reading programs?

The pilot data were then used to determine changes in question format for better data recovery. Changes were also made to the questionnaire design based on the comments made by the participants in reply to the investigator's follow-up questions.

Context

In this dissertation study, only a portion of the data collected in the full grant-funded study (Parker et al., 2004) was used to identify and describe instructional and intervention practices from these 68 successful Texas schools. School campuses for this study were selected from all elementary school campuses in Texas for high performance on the state-mandated test. Each campus selected for the study had met or exceeded all the following minimum criteria:

(1) Campus average TAAS Reading scores must have been 90% or above for Grades 3-5 in 1999-2000.

(2) Campus TAAS exemption rate for special education must have been less than the state average of 7.1%, with no subgroup exceeding the state average for that group for the 1999-2000 school year. However, where ethnic subgroups were too small in schools with above average exemption rates for that subgroup, campuses with fewer than 15 total special education exemptions were left in.

(3) The number of economically disadvantaged students represented 60% or more of the student population.

Using these criteria, 133 schools were selected and letters were sent to district superintendents requesting permission to visit campuses for the purpose of collecting data from teachers and administrators. These letters yielded 79 participants. However, various logistics problems and decisions by some districts or schools to drop out of the study reduced this number to the final sample of 68 schools.

From the 68 schools, respondents were interviewed face-to-face using questionnaires, and all responses were recorded. These qualitative responses were converted into quantitative data by coding key words and phrases into themes that were specific to the text passages and the five questions used in this smaller study. The themes include beliefs, experiences, and opinions that the respondents were trying to communicate in response to the questions.

Answers from the 208 respondents were grouped into reliable categories, which were used to create dichotomous response variables (mentioned or not mentioned) for each open-ended question on the questionnaire. Because the unit of analysis was the school, scores of multiple respondents per school were combined leaving only the data from the 68 schools. For these dichotomous response variables, the value '0' indicated a characteristic was not mentioned by any respondent in that particular school. The value '1' indicated that the characteristic was mentioned by one or more respondents in that school. For example, one teacher reported:

> On Mondays we deal with our vocabulary. Tuesdays and Wednesdays will deal with skills and objectives, and Thursdays and Fridays are primarily comprehension. Sometimes language skills are built into the story also. They read the same story several times a week. The repetition actually helps the students in resource.

This passage suggests that in a typical lesson the teacher will focus on "building key reading skills," while the areas of vocabulary, time spent reading, and comprehension are also part of the regular program. These variables were then counted, and the summary of the data collected from all teachers interviewed was then recorded into a simple spreadsheet.

Using this list of quantitative data in the Excel spreadsheet, descriptive statistics were created using the SUM function to sum and average the columns and generate a summary of the data in response to each research question. The data were also imported into SPSS and Number Cruncher Statistical Software (NCSS; Hintze, 2001) to create comparative descriptive statistics to use with supplementary statistics analysis.

Frequency counts and percentages were also calculated using SPSS and NCSS statistical software. The different reports were used to check results.

During site visits by data collectors, teachers and administrators at each campus communicated information about reading programs, special education practices, and teaching practices. Teachers provided information about reading programs and teaching practices used in the classroom, while administrators provided general information about reading activities and procedures at their local campuses. This information and responses are discussed by research question in the pages to follow.

Instrumentation

Administrator Questionnaire

The administrator questionnaire was designed for the instructional leader of a school who was most knowledgeable about its reading programs. That leader could have been the principal, assistant principal, or the reading program coordinator. The questionnaire focused on a number of different areas including (1) reading program structure, (2) reading in-service and staff development programs, (3) coordination among the various reading program personnel (including parents), (4) involvement of parents and other volunteers in school reading programs, and (5) collaboration, intervention, and pre-special education referral process for struggling readers. The questionnaire contained a combination of open-ended inquiries and selected response formats. The questionnaire was administered in an interview format using laptop computers and File Maker Pro 5.0 software.

TABLE 4
Questions from Administrator Questionnaire

Q#	*Description*	*Type*
B25	Can you think of any particularly successful teaching techniques used by your kindergarten teachers that we have not covered in the above questions? How did you know these strategies are successful?	O
C1	Do your teachers use a basal reading series?	O
C4	Can you think of any particularly successful teaching techniques used by your Grade 1-5 teachers?	O
E6	Describe the in-services/staff developments follow-ups.	O
F1	Does your campus have a specialist whom the general/bilingual/ESL teachers consult when a student is having reading difficulties?	Y
F2	Does your campus have a prereferral team for general/bilingual/ESL teachers to consult when a student is having reading difficulties?	Y
F4	Who is on the prereferral team?	O
F5	In addition to standard, good prereferral practices, is your school doing anything unusual or experimental?	O
F9	What types of assistance does the team usually provide to the teacher?	O
G1	Aside from brief, informal contact, do general education teachers and other special reading service teachers collaborate in planned, structured meetings to discuss the academic needs and progress of their students?	Y
G2	Who attends these collaborative meetings?	O
G3	How often are these collaborative meetings held?	O
G4	Are student goals set and monitored at these meetings?	Y
G8	If your school does not have a HOSTS program, do you have a similar program for parents and other community members to help students with reading?	O
K5	What else can you tell us that helps account for your campus reading program's being so successful?	O

O = Open-ended responses and Y = Yes or No responses

For this study, only the areas of the surveys that focus on reading program structure and collaboration were used. Open-ended inquiries and selected response queries as outlined in Table 4 were used to answer the research questions.

Teacher Questionnaire

The teacher questionnaire was designed to be answered by teachers who are knowledgeable about reading instruction in their grade level. The teacher interviews focused on (1) teaching methods, (2) progress monitoring, (3) early intervention or pre-referral process, (4) time spent on reading-related instruction, and (5) collaboration among teachers in the various reading programs. The questionnaire contained a combination of open-ended inquiries and selected response queries. The questionnaire was administered in an interview format using laptop computers and File Maker Pro 5.0 software.

For this study only the areas of the surveys that focus on teaching methods, reading-related instruction, and collaboration were used. Open-ended inquiries and selected response queries as outlined in Table 5 were used to answer the research questions.

TABLE 5

Questions from Teacher Questionnaire

Q #	*Description*	*Type*
A1	Describe a typical reading/language arts lesson in your program.	O
A5	Does your reading program use a basal series?	Y
A7	Does your reading program use commercial supplemental instructional materials?	O
A8	What types of teaching methods do you use?	O
A9	What strategies do you use to emphasize/teach the following reading skills to students?	O
A10	Describe how YOU teach struggling readers to become successful.	O
A13	How often do these groups meet?	O
A13	Also, please explain how you use each group to improve reading performance.	O
A15	How do you establish your reading groups?	O
A16	Explain any system you have for students helping other students, e.g., peer tutoring.	O
A17	Do you integrate reading and writing lessons?	Y
A17a	Describe how you integrate reading and writing lessons.	O
A18	Do you integrate reading and writing into content areas such as science and social studies?	Y
A18a	Describe how you integrate reading and writing into content areas.	O
A24	Can you think of any particularly innovative or successful teaching techniques that we have not talked about that help struggling readers read better?	O
D2	What types of intervention strategies do you typically use to help a struggling reader?	O
D3	Where do you and other teachers get ideas for these strategies?	O
D4	Does your campus have a specialist whom the teachers consult when a student is having reading difficulties? If YES, describe the role of the specialist.	O
D5	Does your campus have a prereferral team?	Y
D10	What procedures that have not been addressed in the above questions are used on your campus to identify and help struggling readers?	O
E2	Do teachers have scheduled meetings to discuss struggling readers?	Y
E2a	How often do teachers schedule meetings to discuss program alignment of struggling readers?	O
E3	At a scheduled meeting for a struggling reader, who would generally attend?	O
E4	Describe how parents are included in their child's reading program.	O
F1	Do you have any additional information that hasn't been covered that might explain your school's success at teaching all students to read?	O

O = Open-ended responses and Y = Yes or No responses

Respondents

Schools

School campuses for the original research project were selected from all elementary school campuses in Texas for high performance on the state-mandated test. Each campus selected for the study had met or exceeded all the following minimum criteria:

1. Campus average TAAS reading scores must have been 90% or above for Grades 3-5 in 1999-2000.
2. Campus TAAS exemption rate for special education must have been less than the state average of 7.1%, with no subgroup exceeding the state average for that group for the 1999-2000 school year. However, where ethnic subgroups were too small in schools with above average exemption rates for that subgroup, campuses with fewer than 15 total special education exemptions were left in.
3. The number of economically disadvantaged students represented 60% or more of the student population.

Using the above criteria, 133 schools were selected and letters were sent requesting permission to visit campuses for the purpose of collecting data from teachers and administrators. From these 133 schools, 68 agreed to take part in this study.

Teachers

The data collectors interviewed three instructional-level respondents at each campus selected by the local administrator based on their ability to provide details on reading-related plans. In the schools, data collectors questioned public school certified teachers in both regular and special education. These teachers communicated information about

reading programs, special education practices, and their teaching practices in response to data collectors' questionnaires. Respondents provided information about activities and procedures at their local campus.

Administrators

Data collectors questioned only one administrator or instructional leader in reading at each campus. Data collectors questioned a total of 64 public school administrators. Administrators responded to questions from the questionnaire during data collector's site visits and communicated information about reading programs and teaching practices. If the principal was unable to answer the questions, then he/she had the option of referring the data collectors to another professional. Respondents provided information about reading-related activities and procedures at their local campus.

Validity

Since the full research study and this smaller study both focus on those aspects of reading programs that lead to quality in the program, content validity of the questionnaires was achieved by using literature on effective reading practices to develop each questionnaire. Each questionnaire was developed based on the literature to ensure it included the indicators of quality programs about which experts in the field and professional groups generally agree.(Duffy-Hester, 1999; Morrow et al., 1999; National Reading Panel, 2000; Snow et al., 1998; Taylor et al., 1999; Wharton-McDonald et al., 1998).

Questionnaires were evaluated for face validity by a focus group of four personnel including a district director of special education, a school administrator, and two

teachers in a school district selected by project personnel on the basis of past association. During district and school interviews, respondents were asked the following questions which address the face validity of each questionnaire:

(1) Please tell me your general reaction to the format and content of this questionnaire.

(2) Is there a better or clearer way to ask any of the questions?

(3) Would you add any questions? Why?

(4) Would you delete any of the questions? Why?

(5) Are there any questions on the questionnaire which might not relate to all districts or schools?

Both teacher and administrator questionnaires were modified based on feedback from focus group personnel and from interviewees in the target districts and schools.

Design

This study utilizes a one-shot descriptive study with data sources consisting of school campuses that have been successful at reading instruction (Campbell & Stanley, 1963). Using data from questionnaires that were mainly qualitative and categorical in nature and nominal or ordinal by level, the research team (Parker et al., 2004) quantified the data into a nominal scale platform for answering all the research questions (Miles & Huberman, 1994).

The data to answer the research questions were categorical, and nominal variables were derived from closed-and open-ended questions. The qualitative data from the open-ended questions were coded into quantitative data using themes contained in specific

text passages or segments (Miles & Huberman, 1994). The themes include beliefs, experiences, or opinions that the respondents tried to communicate in response to the interviewers' questions. A description of the different variables can be found under the question number subheading in the Analysis section of this dissertation.

Procedure

In the first months of the large study, (Parker et al., 2004) the research teams did a literature review of reading practices supportive of effective reading instruction. They then drafted a list of reading practices commonly supported in the literature as key to effective reading instruction. This list was created from the practices listed in Table 1 as described earlier. The list was then given to two university faculty members who had experience in the field of reading. These experts reviewed the document and made suggestions for revisions. The list was then returned to the research team for additional revision. From this final list of reading practices, drafts of two questionnaires were developed. The questionnaires were a combination of open-ended inquiries and selected response formats for personnel at the campus level: (1) a questionnaire for administrators and, (2) a questionnaire for teachers.

The questionnaires were field tested using two techniques. First, questionnaires were shown to practitioners and administrators who were known to be knowledgeable about good reading instruction so they could review individual questions on the questionnaire and respond to researchers. Next, a pilot study was conducted in which the questionnaires were administered in an interview format by university researchers using

laptop computers and File Maker Pro 5.0 ® software, within a small sample of the selected schools (N = 11).

Using the TEA website database, campus data were downloaded and separated using the following criteria:

Step 1: From the TEA data file of all Texas schools (N = 7,395) and their performance on TAAS in the academic school year 1999-2000, all elementary schools (N = 4,051) were selected.

Step 2: From the list of all elementary schools selected, those that had IEP exemption rates for taking TAAS of 7.0% or less (N = 2,036) were selected. For the school year 1999-2000, the Texas state average exemption rate was 7.1%, so schools selected had a rate lower than the state average.

Step 3: From the list of schools with IEP exemption rates of 7.0% or less, only those schools that had an average passing rate on the TAAS reading test of 90% or above for Grades 3-5 (N = 1,140) were selected. The school pass rate was determined by averaging the pass rates for Grades 3,4 and 5. (This was not an absolutely accurate method as the numbers of students from each grade were not available for weighting, so an even distribution was assumed.)

Step 4: From the list of schools with IEP exemption rates of 7.0% or less and average passing rates for TAAS reading of 90% or above for Grades 3-5, schools that had economically disadvantaged populations of 60% or more (N = 196) were selected.

Step 5: From the list of schools with IEP exemption rates of 7.0% or less, average passing rates for TAAS reading of 90% or above for Grades 3-5, and economically

disadvantaged populations of 60% or more, all charter schools were eliminated (N = 191).

Step 6: From this final list of public elementary schools (no charter schools) with IEP exemption rates of 7.0% or less, an average passing rates for TAAS reading of 90% or above for Grades 3-5, and with 60% of the populations from economically disadvantaged families.

Using the above criteria only 133 schools, which represent a small portion of all Texas districts, were selected as potential data resources. Letters were sent to the district superintendents of those schools requesting permission to visit campuses for the purpose of collecting data. Of the 133 original schools, 68 schools took part in the study.

Contact was made by telephone with the principal of each school to establish a date for the visit. During that conversation procedures were discussed for conducting the interviews, including time and room requirements. The team leader informed the principal of the team's wishes to interview three teachers who could adequately represent the campus reading program and left the selection of the teachers to the principal. After the telephone contact, the team leader sent one copy of the principal questionnaire and three copies of the teacher questionnaires in Microsoft Word format by mail or fax to the principal. This was done to allow the respondents to prepare for the interview and to reduce problems during on-site visits.

After final revisions suggested by pilot study review were made to the questionnaires, data collectors traveled to the 68 school sites and interviewed three teachers and one administrator (only 64 principals were interviewed) at each of the

campuses. Each interviewer had a Sony disk recorder and a Toshiba laptop computer for recording the principal or teacher interviews. Interviews were simultaneously recorded and answers were typed into FileMaker Pro ® 5.0.

Interviewers were selected on the basis of having interviewing experience and typing ability; so the data on the interview form were consistent high quality. In addition, each interview was recorded, allowing the data collectors to review the interview and ensure that everything was recorded correctly. This was particularly important for open-ended answers. It also allowed other persons to go over the interviews to check reliability.

The data collection took approximately 9 months to complete. The data from the questionnaire are mainly qualitative and categorical in nature, and nominal or ordinal by level. Linking qualitative data with quantitative analysis for this project was the first step. The data were exported from FileMaker Pro 5.0 ® using the EXPORT RECORD command and then opened and saved in Microsoft Excel 2000. Column headings transferred with the data. Quantifying this information as data that could be converted into a nominal scale served as the platform for answering all the research questions (Miles & Huberman, 1994). However, since the data collection instruments (questionnaires) yielded such a large number of variables, several hypotheses were available to direct the analyses. The Research team (Parker et al., 2004), also used exploratory analysis as descriptive and exploratory tools to find patterns in the sampled Texas schools. These patterns represented models of successful elementary schools retrieved from the sampled schools.

Researchers from the full study team worked together to code the full data set. Once collected, the data were downloaded from FileMaker Pro into Microsoft Excel 2000 workbooks and divided into worksheets based on individual sections of the questionnaires. Once the data were in Excel, a SORT command was performed and commonalities in terms and wording were recorded. Next, a FIND command was performed to count the number and extent to which selected terms were present. These terms were compiled into a list, and the terms and words were then grouped together to create themes. These themes were then coded as variables and the variables were assigned or coded with a letter or a number. The team used standard qualitative coding procedures noted by Bogdan, Roth, Biklen and Biklen, (2002). From this list of code variables and themes, I retrieved only the variables that related to the research questions for this study. The coding of the data by the research team required 8 months.

The data were then analyzed using Microsoft Excel software and NCSS (Hintze, 2001). NCSS was used to provide descriptive summaries of all relevant data and to display these results in table and graph forms. The CROSSTABS function was used to analyze the data and to identify relationships using Cramer's V, chi-square, and p -values to determine significance of relationships between variables. Additionally, K-means analysis and hierarchical cluster analysis (HCA) were used as exploratory and descriptive tools to find patterns or models in the sample schools. CROSSTABS and ANOVA were used to analyze the data and to identify relationships, while Cramer's V, chi-square, and p-values were used to determine significance of relationships.

Analysis

Coding the qualitative data for quantitative analysis entails identification of the themes contained in specific text passages or segments (Miles & Huberman, 1994). The themes include beliefs, experiences, or opinions that the respondents were trying to communicate in response to the interviewers' questions. Different respondents may express similar themes but state their ideas in different ways, or they may hold entirely different views.

The qualitative data coding required the accurate reading and comprehension of various text passages. The text passages containing identical themes were coded the same way, while passages containing different themes received different codes. This process developed a set of codes (variables) that corresponded to distinct themes present in the qualitative data. The list of codes was compiled into an Excel spreadsheet, and the spreadsheet underwent numerous revisions with help from the project research team. From the quantitative analysis of the survey, descriptive statistics were used to summarize the data from Questions 1-3 by campus.

This study used K-means analysis and HCA to find models that were significant, as well as descriptive and exploratory (noninferential), to develop patterns or models of similar schools for this Texas sample. HCA was used to find patterns that tend to occur together within any given school and to help identify relationships between these variables for each question. HCA produced a dendrogram, tree that was used to represent the results of a cluster analysis. Dendrogram trees are portrayed horizontally with each

row representing a case, and cases with high similarity are adjacent. Length of lines indicates the degree of similarity or dissimilarity between cases.

Additionally, K-means cluster analysis was used to identify homogeneous subgroups of cases in the schools sampled. Cluster analysis seeks to identify a set of groups that both minimize within-groups variation and maximize between-groups variation. K-means cluster analysis uses Euclidian distance to determine distance to the mean of clusters. The initial cluster center in K-means analysis is chosen in a first pass of the data and then each additional repetition of a process (calculation again and again) improves the accuracy of the results. The process continues until cluster means do not shift more than a given cutoff value or the limit of the repeating process is reached. Normally, with K-means analysis researchers require the results to be statistically significant. However, an analysis that is not significant can still be descriptively useful in the sense that the model produced does fit the data, even though it does not permit inferences to the full population (Stevens, 1996).

The process of cluster formation to determine how many clusters are created used the F - ratio created in K - means. The F - ratio is an analysis of variance, which measures the ratio of between-group's variance to within-group's variance. The results of F-ratio size determined which clusters were the tightest. Additionally, the use of means and variances measures how clusters differ from each other. Tables are used to show how means and variances of clusters differ from the original variables.

Research Question 1

What types of teaching methods are most often used for reading instruction within these successful elementary schools? This question implies an answer that is mainly descriptive.

Variables. The data to answer this question will be categorical and nominal, derived from closed-and open-ended questions. Data collected from the 68 public elementary schools by interviewing 272 public school staff from 39 districts came from the questions found on the teacher questionnaire (Appendix A) and the administrator questionnaire (Appendix B). These questions (Appendix C) were answered by regular education teachers, special education teachers, bilingual or ESL education teachers, and administrators who had knowledge of the reading practices and programs used on individual campuses. A variety of individual questions was used as a data source, using the data supplied by these public school teachers and administrators. Some of these sources were pre-identified (see Appendix D). Others were arranged after the fact from information relevant to this question.

Type of Analysis. Qualitative data were organized into variety of categories (e.g., balanced, phonics, whole language, direct instruction, cooperative learning, indirect or discovery learning, textbook based, teacher designed, commercially designed, and other teaching method variables). To answer this question the nominal data were summarized by frequency and percentage for each campus.

Research Question 2

What types of collaborative practices do teachers use to disseminate instructional practices and interventions to foster success in struggling readers within these same successful elementary schools?

Variables. Data collected from 68 public Texas elementary schools, came from numerous questions found on both teacher and administrator questionnaires. These questions (Appendix C) were answered by each interviewee based on personal knowledge of reading practices and programs used on individual campuses. Some of these sources were pre-identified (see Appendix E). Others were arranged after the fact from information relevant to this question.

Analysis. Qualitative data were organized into a variety of categories (e.g., team meetings, intervention teams, support teams, prereferral teams, teacher coach, consultant, professional staff development time, and other collaborative practice variables). To answer this question, the data were summarized by frequency and percentage for each campus.

Research Question 3

How do the variables identified in research Questions 1 and 2 cluster. That is, do patterns of these variables tend to co-occur in schools?

Variables. The same variables were analyzed as in research Questions 1 and 2.

Analysis. Using a number of exploratory data analysis procedures, including loglinear modeling, K-means analysis, HCA, and multidimensional scaling, patterns were

identified in the sample schools. Detailed results and interpretations for all these data analyses are presented in the Results section of this dissertation.

Research Question 4

Do the models, identified in research Question 3, vary in occurrence by community type: urban, suburban, or rural?

Variables. The categorical variables of urban, suburban, and rural along with the modeling data from research Question 3 were used to answer research Question 4.

Type of Analysis. To answer this question, cross-tabulation was used to identify relationships between two or more variables and the models identified in research Question 3. Additionally, chi-square identified significance of those relationships and Cramer's V noted strengths of relationships. Detailed results and interpretations for all these data analyses are presented in the Results section of this dissertation.

CHAPTER IV

RESULTS

The purpose of this study was to examine the relationships linking reading program characteristics and high student performance in a select number(out of the total of 4,051) of elementary schools in Texas that excelled at teaching reading to all children despite a challenging student population. Included in the study were schools that established success on the statewide TAAS reading test with all major minority groups, while exempting fewer than 7.1% of students from TAAS reading testing based on special education status. These multiple criteria yielded a target population of 133 high-performing schools across the state. Of these 133, a total of 68 schools, or 51%, participated in data collection phases.

The present study examined these 68 Texas elementary schools to determine whether and how teaching methods and team collaboration (intervention or support teams) were used by these schools to foster reading success in all students that maintained high performance level (>90% TAAS reading pass rate) for 2, 3, and 4 consecutive years. .The 68 Texas elementary schools were identified as successful by scores on TAAS assessment. Additionally, this study sought to identify cohesive patterns in schools' use of collaboration and teaching methods and to determine if these patterns (termed models) vary by school based on the school community demography. The data analysis for this study was completed in six phases.

(1) *Coding data from open-ended responses*: The initial phase consisted of quantifying the information from the questionnaires into data that could be converted into a nominal

scale. Most information was converted to dichotomous (0, 1) variables, indicating absence or presence of a particular characteristic at a school.

(2) *Summarizing response data by school*: Teacher-level response data were summarized for each school and then principal data were aggregated, where appropriate, into the summarized school data.

(3) *Variable selection by prevalence and predictive strength*: Response variables were omitted that had very low prevalence within the 68 schools, or that bore zero-order correlations with sustained high student achievement.

(4) *Conducting HCA and K-means analyses*: Utilizing only the variables remaining from Step 3, HCA and K-Means were conducted to identify models or cohesive sets of practices within schools, and then to identify clusters of schools that exemplified these models. Each cluster of schools received a unique nominal code to permit further analysis (ANOVA).

(5) *Differential high achievement in reading by school clusters*: Using ANOVA, differential performance of these clusters of schools on TAAS pass rate was identified.

(6) *Investigating school cluster differences by demography*: Cross-tabulations were conducted between school clusters on the one hand and demographic variables of community types (urban, suburban, and rural) on the other.

Data

School Response Data

Respondents were asked, using open-ended questions, to describe variables considered important to the reading programs in the 68 schools. Responses were audio-

recorded and later content-analyzed by two experienced raters. Answers by the respondents were grouped into reliable categories, from which were created multiple dichotomous response variables (presence or absence of a characteristic) for all open-ended questions. Three teachers and one administrator per school had scores combined, reducing them to school-level data for the 68 schools. In combining teacher-level data, the following coding scheme was used: 1 indicated that the characteristic was mentioned or selected by one or more respondents in a particular school; 0 indicated a characteristic was not mentioned or selected by any respondent in that school.

Demographics

The 68 schools represented various demographic settings from 12 different education service centers across Texas (see Table 6). The highest percentage of schools came from Region 4, which includes Houston, the fourth most populated city in the nation according to the 2000 census, and the largest in the southern U.S. and Texas (US Census Bureau, 2002). Houston is an area of high overall population density and it has a high number of culturally diverse students. Region 4 represented 38.2 % of all schools participating in the study. Region 1 showed the second highest percentage of schools with 19.1 %. This area is near the Texas-Mexico border, an area that is expanding faster than the rest of the nation in population and job growth. Region 1 services McAllen, Texas, where Hispanics make up 88.3% of the city's population (McAllen Economic Development Corporation, 2003).

TABLE 6
Participating Education Service Centers across Texas

	ESC	*Districts*	*Schools*	*Percent of Schools*
	1	7	13	19.1
	2	3	4	5.8
	4	5	26	38.2
	6	1	1	1.5
	8	2	2	2.9
	12	1	1	1.5
	14	1	1	1.5
	16	4	7	10.3
	17	1	1	1.5
	18	4	7	10.3
	19	1	1	1.5
	20	3	4	5.9
Total	**12**	**33**	**68**	**100**

The remaining regions contain 42.7 % of all schools surveyed. Generally the sample covered the state evenly with several districts represented in the north (ESC 17, 16, 8), the south (20, 2, 1), the west (19, 18), the east (8, 6, 5), and in west and central Texas (14, 12, 6).

Community types were based on the Texas Education Agency (TEA) definitions (see Appendix F for full descriptions), which include: **MU** - major urban; **OCC** - other central city; **MS** - major suburban; **OCCS** - other central city suburban; **IT**- independent town; **NMS** - non-metro (stable); **NMFG** - non-metro (fast growing); and **R** – rural. For this study community types were grouped into three categories: (1) urban, which combined TEA categories of MU and OCC, (2) suburban which combined MS, OCCS, and IT, and (3) rural, which combined the TEA categories NMFG, NMS, and rural. Of these, the urban category represented 59% of all schools (because of dense population), and the suburban category (a residential district located on the outskirts of a city)

contained 22% of all schools surveyed. The final category, rural, included only 19% to the total schools interviewed (Table 7).

TABLE 7
Demographic Setting of Participating Schools Across Texas

TEA Categories	*Frequency Schools*	*Percent of Schools*	*New Categories*	*Percent of Schools*
MU	23	33.8		
OCC	17	25.0	Urban	60
MS	7	10.3		
IT	6	8.8		
OCCS	2	2.9	Suburban	22
NMS	11	16.2		
R	2	2.9	Rural	19
NMF	0	0		
	68	**100**		**100**

Note: MU - Major Urban; **OCC** - Other Central City; **MS** - Major Suburban; **OCCS** - Other Central City Suburban; **IT** - Independent Town; **R** - Rural; **NMF** - Non-Metro Fast Growing; **NMS** - Non-Metro Stable

All Respondents

The data collectors interviewed 208 teachers and 64 principals from the selected schools. This included the administrator and usually three instructional-level respondents per school. Teachers were selected by the school administrator based on their ability to provide details on reading-related plans and activities. Data collectors questioned public school certified teachers in both regular and special education in kindergarten through Grade 5 at each school.

Teacher Respondents. Nearly half of teachers interviewed were from the primary grades (K-3) and taught only one grade level, while 13% taught at the intermediate level (Grades 4-5). Only a small number taught special education at multiple grade levels (K-5). The remaining were English as a second language (ESL) teachers, bilingual teachers,

or Title 1 teachers at multiple grade levels. Multiple grade-level teachers constituted 33% of all teachers interviewed (see Table 8).

TABLE 8
Percent of Teacher Assignments by Grade Level

Teaching Assignment	*Teacher Count*	*Percent of Teachers*
K	11	5
1	40	19
2	25	12
3	25	12
4	19	9
5	8	4
Special education	11	5
Multiple grade levels	69	33
Total	208	100

Principal Respondents. Data collectors questioned 64 public school administrators during site visits, using the principal interview protocol described earlier. Common content of the administrator interviews was combined with teacher interviews by school when overlapping content was available.

School Response Data

From the 68 schools, 208 teachers and 64 administrators were interviewed and each answered both selected-response and open-ended questions such as, “Describe a typical reading lesson, emphasizing those features that make it successful.” Follow-up open-ended questions permitted the interviewer to clarify any responses. The combined teacher and administrator responses were grouped by school and used to answer the research questions in this study. Although data were obtained from individual respondents, the unit of analysis was the school, so teacher and principal interview data

were combined across respondents for summative information on each school. Campus responses on all related questions could include one or more responses in each category. A reading program feature may have been noted by one respondent or more, but in either case the summary data were coded the same. Multiple respondents affirming the same feature yielded the same frequency code as that same information from a single respondent.

Research Question 1: Teaching Methods

What types of teaching methods are used for reading instruction as reported by teachers within successful elementary schools? To answer this question, teacher interview data were summarized from the 68 high-performing public elementary schools (no charter schools) with high poverty levels, high minority enrollment, and low special education exemption rates. The topic (teaching methods) was subdivided into (1) type of instruction, (2) instructional materials, (3) instructional focus, and (4) instructional accommodations. A discussion of each will follow.

Type of Instruction

Frequency data for the first part of research Question 1 are summarized in Tables 9-15. Campus responses for this subtopic include one or more responses in each category related to type of instruction. Table 9 provides a summary of responses to the question about philosophical approach to reading instruction. Of the 68 schools reporting, most respondents surveyed reported their program's philosophical approach was a balanced approach. A smaller portion of respondents reported using a skills-based philosophical approach where phonics skills are taught explicitly. In this approach, students learn to

master the sounds and letter blends that make up words through drills and controlled text before shifting their focus to comprehension and a wide range of literature. Additionally, less than one third of schools used a whole-language approach or method that immerses children in a variety of literary activities, including reading books, writing stories, and learning to recognize and sound out words while reading meaningful text (Table 9).

TABLE 9
Campus Responses to the Question, What is Your School's Reading Program's Philosophical Approach to Reading?

Program's Reading Philosophy	*Frequency*	*Percent of Schools*
Balanced	67	99
Skills	30	44
Whole language	22	32
Total responses	120	NA

Most schools reported using a blend of phonics, skills based, and whole-language approaches. In this balanced approach, students learn word - recognition and sounding-out strategies through the context of reading. Time is regularly reserved for explicit instruction of letter sounds and blends, skill drills, and the use of basal reader materials that correspond to letter-sound instruction.

For the question, How are reading and writing lessons integrated? responses included six variables ranging from 0% to 96% (Table 10).

TABLE 10
Campus Responses to the Question, How Are Reading and Writing Lessons Integrated?

Ways Lessons Are Integrated	*Frequency*	*Percent of Schools*
Summarize, rewrite, expand, comment on, answer questions about a story, articles, events	65	96
Write sentences, stories using vocabulary, spelling words, words from story	29	43
Specific reading program, curriculum	24	35
Write own stories, books, poetry, articles	20	29
Thematic units	14	21
Writer's workshop	5	7

Of the schools participating in the study, the majority (85%) reported having students participate in writing activities that included activities such as summarizing, rewriting, expanding on questions, or writing about the assigned reading as a way of integrating reading and writing lessons. A smaller percentage of the schools reported using writing activities based on vocabulary or spelling words. Others used specific reading programs as a way of integrating reading and writing lessons.

The responses from the question, What strategies are used to teach comprehension skills? included 18 variables, which ranged in prevalence from 1% to 85% (see Table 11).

TABLE 11
Campus Responses to the Question, What Strategies Are Used to Teach Comprehension Skills?

Strategies	*Frequency*	*Percent of Schools*
Class discussions, question-answer activities, think aloud	58	85
Writing activities	37	54
Specific reading program materials	34	50
Basal materials, literature books, other reading text	29	43
Read aloud, shared reading, teacher modeling	29	43
Reading strategies	28	41
Comprehension assessments (written-oral)	24	35
Grouping arrangement for instruction	22	32
Multisensory activities	22	32
Summarizing	21	31
Prereading activities	17	25
Technology	14	21
Context clues	13	19
Homework, parental involvement	11	16
Games	9	13
Guided reading	8	12
Direct instruction	4	6

More than three fourths of the schools participating in the study reported using class discussions, question and answer activities, and thinking-aloud strategies to teach comprehension skills. Fewer schools reported the use of activities from specific reading program materials (such as basal materials, literature, or other reading materials) or comprehension assessments to teach comprehension skills. In addition, the uses of multisensory, summarizing, and prereading activities were reported by a smaller fraction of schools as a good strategy for teaching comprehension skills.

From the question, What strategies are used to teach phonemic and phonological awareness skills? responses included 14 variables with frequencies ranging from 4% to 87% (see Table 12).

TABLE 12
Campus Responses to the Question, What Strategies Are Used to Teach Phonemic, Phonological Awareness Skills?

Strategies	*Frequency*	*Percent of Schools*
Blending exercises, rhyming, segmenting, chunking, sound-symbol association, clapping, songs, poetry	59	87
Alphabetizing, letter recognition, word lists, word wall, word families, sight-word lists, visuals	56	82
Specific reading, phonics program materials	46	68
Manipulatives, tactile, writing, worksheets, workbooks	42	62
Parts of the basal series, stories	26	38
Games	23	34
Technology	17	25
Oral language, practice	14	21
Direct instruction, teacher reading	9	13
Grouping arrangement for instruction	8	12
Read phonics books	6	9
Guided reading	4	6
Teacher-made materials	3	4

Most of the schools (87%) participating in the study reported using blending, rhyming, segmenting, and chunking exercises to teach phonemic and phonological awareness skills. A smaller percentage (82%) reported focusing on alphabetizing skills and sight-word lists (visuals) to teach phonemic and phonological awareness skills. The use of specific reading program writing materials, worksheets, and workbooks were reported by 42 schools as strategies used to teach phonemic and phonological awareness skills. Only about one third of the schools reported using the parts of the basal series or games to teach these skills.

Table 13 displays the responses to the question, What strategies are used to teach word identification skills? and the 12 response variables with a range of 4% to 97%. Most schools (97%) reported using visual word activities such as word lists, word walls, word families, and sight-word lists to foster word identification skills. Fewer schools

focused on vocal activities such as blending, rhyming, segmenting, chunking exercises, and the use of songs and poetry to foster word identification skills. Even fewer schools used specific reading program materials such as basal readers or other materials to teach these skills.

TABLE 13
Campus Responses to the Question, What Strategies Are Used to Teach Word Identification Skills?

Strategies	*Frequency*	*Percent of Schools*
Alphabetizing, letter recognition, word lists, word wall, word families, sight-word lists, visuals	66	97
Blending exercises, rhyming, segmenting, chunking, sound-symbol association, clapping, songs, poetry	37	54
Specific reading program materials	28	41
Context clues	26	38
Basal, other reading materials	24	35
Manipulatives, tactile	22	32
Games	18	26
Grouping for instruction, buddy reading	7	10
Technology	7	10
Teacher-made materials	5	7
Direct instruction, teacher-directed reading	3	4

Table 14 shows the responses to the question, What strategies are used to teach fluency skills? Responses included 18 variables with frequencies that ranged from 7% to 90%. The vast majority of schools (90%) participating in the study reported using oral reading activities (such as choral reading, round-robin reading, echo reading) and repeated reading (multiple exposures to same book) as the primary methods of teaching fluency. Approximately half (57%) of the schools reported focusing on fluency assessment activities to teach reading fluency. The use of specific reading programs,

reading materials such as basal or other materials, and technology each represented a smaller fraction of the strategies schools reported using to teach reading fluency.

TABLE 14
Campus Responses to the Question, What Strategies Are Used to Teach Fluency Skills?

Strategies	*Frequency*	*Percent of Schools*
Reading out loud individually or in group (e.g., choral reading, round-robin readings, echo reading, multiple exposures to same book)	61	90
Timed readings, fluency tests, assessments	39	57
Buddy, pair reading, peer tutoring	36	53
Teacher reading, modeling, teaching, re-teaching	33	49
Specific reading program	27	40
Basal, other reading materials	22	32
Technology	22	32
Charts, sight words, vocabulary, word lists, walls, visuals	20	29
Parent, home involvement, homework	16	24
Independent reading	15	22
Guided reading	14	21
Grouping arrangement for instruction	8	12
Use of volunteers (e.g., student read to volunteers)	7	10

What strategies are used to teach vocabulary skills? This question generated 16 response variables with the percent of responses ranging from 4% to 99% (see Table 15). Campus' responses could include one or more responses in each category related to teaching strategies. Almost all of the schools (99%) participating in the study reported using dictionary activities to teach vocabulary skills. Just over half of the schools (54%) reported focusing on oral readings, discussions, and writing activities using text-based vocabulary words to teach vocabulary skills. Game-related vocabulary activities were reported by only a smaller fraction of the schools as a strategy for teaching vocabulary skills.

TABLE 15
Campus Responses to the Question, What Strategies Are Used to Teach Vocabulary Skills?

Strategies	*Frequency*	*Percent of Schools*
Definition, use of dictionary, spelling, word wall, antonyms, synonyms, build prior knowledge, flashcards, etc.	67	99
Read orally; discuss reading material, oral reading	37	54
Writing using vocabulary	35	51
Context, context clues	34	50
Basal materials, literature, books, other reading materials	33	49
Multisensory activities	33	49
Games, vocabulary activities	26	38
Specific reading program materials	15	22
Grouping arrangement for instruction, centers	9	13
Parental involvement, homework	9	13
Blending exercises, rhyming, segmenting, chunking, sound-symbol association, clapping, songs, poetry	8	12
Vocabulary assessments	7	10
Direct instruction	5	7
Teacher-made materials	5	7
Guided reading	4	6

Type of Instructional Materials

Frequency data for the second part of Question 1 are summarized in Table 16. Campus responses could include one or more responses in each category related to commercial supplemental instructional materials. Sixty-five of the 68 schools reported using commercial supplemental instructional materials as a part of their reading program. When these respondents were prompted to provide additional information on types of commercial materials used, the 65 schools reported a wide variety of materials. These responses included 110 variables with a range of responses from <1% to 68%.

TABLE 16
Campus Responses to the Question, What Commercial Materials Do You Use?

Commercial Supplemental Materials Used	*Frequency*	*Percent of Schools*
AR	46	68
Novel sets, trade books, leveled books, TAKS prep	17	25
Neuhaus	14	21
Basals, out-of-adoption basal	12	18
Scholastic	11	16
Rigby leveled books	10	15
Saxon phonics	10	15
Computers (CEI, Compass, Failure Free, etc.)	8	12
Gourmet curriculum for reading	7	10
Guided reading books	7	10
SRA	7	10
Lexia	6	9
Reading academy, workshop materials	6	9
STAR	6	9
Success for All (SFA)	6	9
Kamico	5	7
Sing, Spell, Read, and Write	5	7
The Wright Group	5	7
Estrellitas	4	6
Light Span, Lindamood	4	6
Open Court	4	6
Reading Renaissance	4	6
Teacher-created material	4	6

Of the 65 schools that reported using commercial supplemental instructional materials as a part of their reading program, the majority reported using Accelerated Reader ® (AR), novel sets, trade books, leveled books, and TAKS preparation materials. More than 110 different programs were reported by the 68 schools with some programs referenced by only one or two schools.

Type of Instructional Focus

Frequency data for the fourth part of Question 1 are summarized in Tables 17 and 18. Campus responses for this question included one or more responses in each category related to a typical reading lesson. Respondents were asked, What is included in a

typical reading lesson? Table 17 displays the school responses which include 20 variables that ranged from 0% to 87%.

TABLE 17
School Responses to Survey Question A1, What Is Included in a Typical Reading Lesson?

Describe a Typical Reading Lesson	*Frequency*	*Percent of Schools*
Word wall, vocabulary, letter, spelling, work	59	87
Writing	55	81
Teacher-directed reading, modeling,	55	81
Phonics, phonomenic awareness, phonological skills	51	75
Comprehension checks	50	74
Reading, buddy, independent, etc.	47	69
Supplemental materials, manipulatives, multisensory activities	44	65
Skills	41	60
Specific reading program (e.g., Success for All, Accelerated Reader, etc)	40	59
Prereading activities, introduce story, story maps, picture walk	38	56
Grouping arrangements	35	51
Teacher observation, assessment, progress monitoring, fluency	35	51
Guided reading, centers	30	44
ESL, bilingual	18	26
Technology, CCC, STAR	9	13
Direct teaching, instruction	8	12
Tutoring, ARI	8	12
Classroom management	3	4

Respondents reported a typical effective reading lesson contained instruction focused on reading, writing, and learning words. Most schools (87%) used activities that included the use of word walls, vocabulary words, letter and letter-sound knowledge, spelling activities, writing, teacher-directed reading, and modeling in a typical reading lesson. Also, the use of prereading activities, progress monitoring, observation and assessment, and fluency checks were considered parts of a typical lesson. Supplemental materials, manipulatives, multisensory activities, and specific reading programs were

reported by a smaller percentage of the schools as a key part of a typical lesson. Even fewer schools used reading activities such as reading with a buddy and independent reading to allow students to practice reading. Finally, guided reading activities, the use of reading centers, and use of technology were reported by only a small fraction of the schools.

When respondents were asked, How are reading objectives determined for your reading program's lessons? the question generated 11 variables with frequencies ranging from 0% to 38% (see Table 18). Campus responses for this question included one or more responses in each category related to reading objectives.

TABLE 18
Campus Responses to the Question, How Are Reading Objectives Determined for Your Reading Program's Lessons?

How Are Reading Objectives Determined?	*Frequency*	*Percent of Schools*
District curriculum, scope and sequence, benchmarks	26	38
TEKS, state curriculum	25	37
Students IEP (Special Ed, 504, etc.)	16	23
Student needs	14	21
Specific reading program (such as basal readers, Success for All, Corrective Reading, Neuhaus, etc.)	11	16
State-required assessments TAAS, TAKS, TPRI	10	15
Teacher observation, Running Records	7	10
Other assessments (CLASS, ITBS, STAR, CCC, etc.)	6	8

The largest percentage of schools (38%) reported using mandated district curriculum or benchmarks to set reading lesson objectives, whereas a smaller number of schools (37%) reported the use of state curriculum (Texas Essential Texas Essential Knowledge and Skills - TEKS) to set reading lesson objectives. Also, some schools used state-required assessments (Texas Assessment of Academic Skills -TAAS, Texas Assessment

of Knowledge and Skills - TAKS, and Texas Primary Reading Inventory - TPRI) to establish reading objectives.

Type of Instructional Accommodation

Frequency data for the final part of Question 1 are summarized in Tables 19 through 21. Campus responses included one or more responses in each category related to typical instructional accommodation. Respondents from the 68 schools were asked, "What system is used for students helping students?" The majority of schools (87%) participating in the study reported using peers as tutors (Table 19).

TABLE 19
Campus Responses to the Question, What System Is Used for Students Helping Students?

Systems of Students Helping Students	*Frequency*	*Percent of Schools*
Same-grade peer tutoring, higher kids help lower	59	87
Same-level buddy reading, paired reading, students monitoring and assessing each other	48	71
Small groups, cooperative learning groups	33	49
Older, higher grade, level kids read with lower	26	38
Accelerated Reader	10	15

A smaller percentage of all the schools (71%) reported using higher performing peers for buddy reading, paired reading, shared reading, or monitoring and assessing lower performing peers. Additionally, some schools (49%) used small groups and cooperative learning groups to help students.

Table 20 contains 13 responses to the question, What intervention strategies are used to help struggling readers? The table includes the response frequencies that ranged from 10% to 78%. The majority of schools (78%) reported using accommodations (instructions and assignments) or modifications (curriculum) to help struggling readers.

In addition, some schools reported using group tutoring or additional instructional personnel to helping struggling readers. Fewer reported intervention strategies such as parent involvement, special reading programs, classroom manipulatives, teachers consulting teachers, multisensory activities, or language-based technology to help struggling readers.

TABLE 20
Campus Responses to the Question, What Intervention Strategies Are Used to Help a Struggling Reader?

Strategies	*Frequency*	*Percent of Schools*
Instructional, assignment modifications, strategies	53	78
Individualized instruction	53	78
Grouping, peer tutoring	52	76
Tutoring, ARI	48	71
Additional instructional personnel	36	53
Parent involvement	29	43
Special reading program	28	41
Classroom materials, manipulatives	20	29
Classroom teacher consults with others	18	26
Multisensory activities	16	24
Technology	14	21
Language-based interventions, HOSTS	7	10

The question, What particularly innovative or successful teaching techniques are used to help struggling readers? provided 17 variables with frequencies ranging from 3% to 75% (Table 21). Most of the schools (75%) reported high expectations of students complemented by increased reading and writing as the primary method for helping struggling readers find success in reading. Some schools reported using a special reading program or collaboration among teachers and administrators as the primary method for helping struggling readers. Fewer schools reported the number of experienced teachers and the dedication of teaching staff to students' success as the key to helping struggling

readers. Schools also cited extra tutoring, mentoring, assistance (parents, reading specialists, or other specialists) as vital to helping struggling readers.

TABLE 21

Campus Responses to The Question, What Particularly Innovative or Successful Teaching Techniques Are Used to Help a Struggling Reader?

Techniques	*Frequency*	*Percent of Schools*
Lots of reading and writing by students, high expectations, variety of methods	51	75
Guided reading, special reading program	37	54
Teachers and administrators working together	16	24
Experience of teacher	15	22
Dedication to students by teacher and staff	14	21
Tutoring, mentoring	11	16
Reading specialist or other specialist	10	15
Creating a love of reading	10	15
Parent, home involvement	10	15
Technology	9	13
Tracking student progress, progress monitoring	9	13
Staff development, training	8	12
Extended day, year activities	6	9
Assessment	4	6
Behavior management	3	4
Team teaching	2	3

Question 1 Summary

In answer to the question, What types of teaching methods are used for reading instruction within successful elementary schools? The sampled successful elementary schools revealed an instructional philosophy that takes a balanced approach in which students learn word recognition and sounding-out strategies through the context of reading, but in which time is regularly reserved for explicit instruction of letters and letter sounds. These schools use blending, rhyming, segmenting, and chunking exercises to teach phonemic and phonological awareness skills. Most use word lists, word walls, word families, and sight-word lists to teach word identification skills.

In these schools a typical reading lesson focuses on reading, writing, and vocabulary instruction with reading objectives that are determined by state-mandated curriculum (TEKS), district curriculum, or benchmarks. These schools spend time integrating reading and writing lessons. They use class discussions and think-aloud activities to teach comprehension skills. They regularly use dictionaries, spelling words, word walls, and prior knowledge to teach vocabulary skills. Additionally, these successful elementary schools use timed readings, fluency assessments, and paired reading to teach reading fluency.

These sampled successful elementary schools use a wide variety of commercial supplemental instructional materials as a part of their reading programs. More than 110 different programs were reported by the 68 schools, but some of these programs were referenced by only one or two schools. Most schools reported making instructional accommodations or using same-grade peer and higher performing students to assist lower performing students. As the primary innovation to help struggling readers, the sampled schools noted high expectations by teachers and increased reading and writing by students.

Research Question 2: Collaborative Practices

The second question asked was, What types of collaborative practices are used to disseminate instructional practices and interventions to foster success in struggling readers within these same successful elementary schools? Data were collected through teacher questionnaires (Appendix A) and administrator questionnaires (Appendix B) and

then combined by school. Data came from pre-identified sources (see Appendix C), while others came from the open-ended comment sections of the survey.

The second question in this study was composed of three subtopics: (1) With whom do educators collaborate, (2) How do they collaborate, and (3) How often do teachers have collaborative meetings. Campus responses on all related questions could include one or more responses in each category. A discussion of each topic will follow.

Collaborate with Whom

Respondents from the schools that reported having a specialist for consultation about struggling readers were asked to further describe the role of this specialist. The school responses are shown in Table 22 and represent six categories with a frequency range of 1% to 60%. Campus responses on all collaboration-related questions could include one or more responses in each category.

TABLE 22
Campus Responses to the Question, What Is the Role of This Specialist Whom the Teachers Consult When Student Is Having Reading Difficulties?

Role of a Specialist	*Frequency*	*Percent of Responses*
Resource to teachers involving curriculum, materials, training, strategies	41	43
Provides instruction to, works with struggling readers	27	28
Assesses student reading instructional level	12	13
Works with the prereferral team	7	7
Observes students	7	7
Develops the student's individual educational plan	1	1
Total	96	100

Forty-one schools reported this specialist was a resource for teachers, one whom they could consult on matters involving curriculum, materials, training, and strategies. A smaller number (27) described the specialist's role as providing additional instruction to

and working with struggling readers or assessing student reading instructional level. An even smaller number of schools noted the specialists worked as a support staff by serving on the prereferral team, observing students, or developing students' individual educational plans.

From the question, Who generally attends meetings to discuss struggling readers? responses included 11 variables with a range of responses from 1% to 87% (see Table 23). Campus responses on all related questions could include one or more responses in each category.

TABLE 23

Campus Responses to the Question, Who Attends Meetings to Discuss Struggling Readers?

Who Attends These Meetings	*Frequency*	*Percent of Schools*
Grade-level teacher(s)	59	87
Special education teacher (resource & CM)	46	68
Parents	33	49
Title 1	20	29
Other people as needed attend these meetings	9	13
MRT	7	10
ESL, bilingual teacher	3	4
Reading specialist or other specialist	3	4
Principal or school administrator	2	3
Counselor	1	1
Prereferral team	1	1

The majority of schools (87%) reported having grade-level teachers attend regular meetings where struggling readers were discussed. Some reported having special educators, parents, or Title 1 teachers included in these meetings. A few schools reported specialists, including Master Reading Teachers, (MRT) English as a Second Language (ESL) teachers, bilingual teachers, and reading specialists attend these meetings. Schools

reported that school administrators, counselors, and the prereferral team members attended these meetings.

How Do They Collaborate?

Table 24 shows the responses to How often do teachers meet to discuss struggling readers? The responses include 11 variables with a frequency range from 4% to 59%. Fifty-nine percent of schools reported having meetings whenever there was a need. A smaller segment reported meetings every week during grade-level or vertical team meetings. A smaller fraction of the schools reported meeting individually, informally, or around school calendars (6 or 9 week grading periods, monthly, or annually).

TABLE 24
Campus Responses to the Question, How Often Do Teachers Meet to Discuss Struggling Readers?

How Often	*Frequency*	*Percent of Responses*
As needed	40	59
Every week	27	40
Grade-level, vertical meetings	26	38
Meet individually, informally	20	29
At grading periods (6 weeks, 9 weeks)	17	25
Every 4 weeks (month)	13	19
Annually	12	18
Every 2 weeks (include weekly flex schedule)	10	15
Every 3 weeks	3	4
Each semester	3	4

Why Do Teachers Have Collaborative Meetings?

Frequency data for the third part of research Question 2 are summarized in Table 25. The frequency results for the question, "Where do you and other teachers get ideas for strategies to help struggling readers?" are presented in Table 25 and represent 16 variables with a frequency range from 1% to 93%. Almost all the schools reported that

ideas come from colleagues or professional development activities. A smaller percentage (56%) reported strategies to help struggling readers that come from personal research (books or journals) or district staff (reading specialist, MRT, or other local specialists). An even smaller percentage of teachers reported getting ideas to help struggling readers from college classes, special population teachers, school administrators, or child support or prereferral teams.

TABLE 25
Campus Responses to the Question, Where Do You and Other Teachers Get Ideas for These Strategies?

Strategies From	*Frequency*	*Percent of Responses*
Other teachers	63	93
Workshops, professional development, in-services, conventions	62	91
Books, journals, personal research	38	56
District staff, reading specialist, other specialist, MRT	33	49
Technology	19	28
Experience	17	25
Special reading programs, e.g., Neuhaus, Lindamood	16	24
TEA reading academies	16	24
Grade level, vertical team meetings	14	21
College classes	11	16
Special population teachers (ESL, Special Ed, Gifted & Talented, etc)	10	15
Principal or other school administrator	10	15
School child support teams	6	9
Student's IEP	2	3
School nurse	1	1

Question 2 Summary

In answer to the question, What types of collaborative practices are used to disseminate instructional practices and interventions to foster success in struggling readers? the majority of the sampled successful elementary schools had a specialist who could discuss matters involving curriculum, materials, training, and strategies with

teachers. Most schools utilized scheduled meetings (weekly or grade-level) for discussing struggling readers. Frequently these schools reported other teachers, workshops, professional development activities, conventions, or local in-service trainings as a key source of strategies to help struggling readers.

Research Question 3: Variable Clusters

The third research question posed by this study was whether effective reading-related practices clustered together within schools. That is, do the variables identified in research Questions 1 and 2 tend to co-occur in patterns within schools? In order to fulfill the third purpose of this study, the large numbers of to teaching methods and collaboration, variables were reduced. After the variables were reduced both K-means analysis and hierarchical cluster analysis (HCA) were used to analyze the remaining variables. K-means analysis and HCA are used in a complementary manner to arrive at a single solution.

Variable Reduction

Reducing the number of variables permitted further cluster analysis. Clustering of all variables would not yield a stable solution, given the moderate number of schools (N = 68). Reduction of non-predicting variables also ensured that cluster analyses would not result in theoretically meaningless solutions, controlled by random variance. Individual examination and elimination of variables did risk dropping some variables that could be valuable predictors of school success only in combination with other variables (as in a multiple correlation). The risk also exists that some variables were eliminated that were very important, but to only a few schools. However, these two risks were considered

worth taking for the sake of analyses and results that promised more general applicability.

To reduce the number of variables, the campus responses were screened and responses with (1) low frequency of occurrence (≤20% prevalence) or (2) high frequency of occurrence (≥80% prevalence) among the 68 schools were eliminated. Reduction of low frequency variables ensured that cluster analyses would not result meaningless solutions based clusters developed around a few variables. In addition the reduction of high frequency variables ensured that cluster analyses would not result in a few meaningless clusters solutions developed around variables with little or no variability.

Additionally, variables were eliminated that individually had low prediction of TAAS/TAKS reading scores. Dropping these variables did risk dropping variables that might be valuable predictors of school success in combination with other variables but the reduction was essential to permit further analysis. In this study these variables were of little interest as that had no direct correlation to TAAS/TAKS reading scores.

To permit correlation with TAAS/TAKS success, a new dependent variable had to be created, using TAAS/TAKS pass scores from the 1999-2000 school year and the next 3 years. TAAS Reading Pass Rates were scored 1-4, indicating the number of years in which the pass rate was 90% or above. This new dependent variable was correlated with each of the remaining medium-frequency variables. Those variables with a low correlation (equal to or less than .15) with school TAAS/TAKS reading pass rates at or above 90% over 4 consecutive years were eliminated. However, variables that were

stronger positive or negative (inverse relations) predictors were used in the cluster analysis. Reduction of the campus response variables by these three criteria (too high or too low prevalence and low predictive strength) reduced the number of variables from 332 to 26 (Table 26).

TABLE 26
The 26 Campus Response Variables with Medium Prevalence and a High TAAS Correlation

Variable	*TAAS Corr*	*Frequency*	*Percent of Responses*
The use of sentences and story writing based on vocabulary and spelling words as a way to integrate reading and writing lessons	-.150	29	43
The use of specific reading programs or curriculum as a way to integrate reading and writing lessons	.159	24	35
The use of others subject area teachers to integrate reading and writing into other content areas	-.162	22	32
The use of reading aloud, shared reading, or teacher modeled reading to teach comprehension skills	-.170	29	43
The use of oral language practice to teach comprehension skills	-.159	14	21
The use of specific reading program materials to teach word identification skills	.177	28	41
The use of timed readings and fluency tests to teach fluency skills	.184	39	57
The use of teaching, remediation, modeling, and extra reading to teach reading fluency skills	-.282	33	49
The use of technology to teach fluency skills	-.254	22	32
The use of visuals words activities to teach fluency skills	-.161	20	29
The use of homework and parent involvement to teach fluency skills	.231	16	24
The use of independent reading to teach fluency skills	-.167	15	22
The use of context and context clues to teach vocabulary skills	-.193	34	50
The use of additional reading as part of a typical reading lesson	-.167	47	69
The use of specific reading program as part of a typical reading lesson	.157	40	59
The use of objectives determined by student needs	-.303	14	21

TABLE 26 *(Continued)*

Variable	*TAAS Corr*	*Frequency*	*Percent of Responses*
The use of instructional or assignment modification to help struggling readers	-.186	53	78
The use of tutoring and Accelerated Reading Instruction (ARI) to help struggling readers	-.180	48	71
The use of parent involvement to help struggling readers	-.219	29	43
The use of a variety of instructional methods supported by additional reading and writing practice along with high expectations by teacher to help struggling readers	.166	51	75
Teachers and administrators working together key to helping struggling readers	-.223	16	24
Teachers use campus specialist as a resource on matters involving curriculum, materials, training, and new strategies	-.154	41	60
Teachers include parents in child's reading program as reading (parent) volunteers	.163	15	22
Teachers get ideas to help struggling readers from grade-level and vertical team meetings for strategies	-.177	14	21
Teacher meet as needed to discuss ways to help struggling readers	.211	40	59
Teachers meet every week to help struggling readers	.155	27	40

Table 26 shows the 26 variables that remain after eliminating those with low frequency and with low correlations with the TAAS/TAKS pass rates. The remaining variables fall into three categories: (1) teaching strategies (N=10), (2) general teaching practices (N=11), and (3) collaboration activities (N=5). Prevalence (frequency) rates ranged from .14 to .51, with a median of .29. Correlations ranged from -.30 to .23, with a positive median of .178.and a negative median of -.195.

Seventeen of the 26 variables with a high correlation (equal to or greater than .16) with school TAAS/TAKS reading pass rates of 90% or above 4 consecutive years) were negatively correlated variables. These negatively correlated variables were found in all three variable categories. Only nine of the variables correlated positively, and they also represented all three variable categories.

Variable Clustering

From the original 332 variables, only 26 campus response variables with medium prevalence and high TAAS/TAKS correlation were selected for cluster analysis. K-means analysis and HCA were both applied to the 26 response variables. From an HCA dendrogram, horizontal wand joining distances were used to help identify an optimal number of clusters for a solution.

From the dendrogram, the clusters were visually evaluated for length of horizontal wands (or "link lines"), which corresponds roughly to a scree plot in factor analysis. According to this dendrogram scrutiny, reasonable solutions were for two through six clusters, although none of these were strong solutions. In a three-cluster solution, 14 of the 26 variables (or only 54%) contributed well to the solution, which was an overall weak contribution. In a four-cluster solution 17 of the 26 variables contributed well (at $p<.10$). In the five-cluster analysis, 20 of the 26 variables (77%) significantly contributed, which was superior to the six-cluster solution (only 17 of 26 variables significantly contributed).

Cluster Selection

The best cluster match was the five-cluster solution, with over three fourths of the response variables contributing well. The two-cluster, three-cluster, four-cluster, and six-cluster solutions were rejected.

Table 27 shows the contribution of each variable to the five-cluster solution. Variables with large F values and small p values contribute most to the solution. That is, they most strongly differentiate among the five clusters. Response variables with small F

values and large p values do not play a strong role in differentiating among the five clusters. The five-cluster solution also produced a reasonably well-balanced solution in the number of schools per cluster (Cluster A = 20, Cluster B = 13, Cluster C = 13, Cluster D = 9, Cluster E = 13)

TABLE 27
Prevalence Scores and F ratio of Variables in the Five-Cluster Solution

			Five Cluster		
Variable	*F Ratio*	*P Level*	*Variable*	*f-ratio*	*p-level*
TchStrat1	0.89	0.47	GenPract4	2.99	0.03
TchStrat2	2.27	0.07	GenPract5	3.82	0.01
TchStrat3	5.27	0.00	GenPract6	7.00	0.00
TchStrat4	6.26	0.00	GenPract7	11.48	0.00
TchStrat5	6.21	0.00	GenPract8	4.85	0.00
TchStrat6	0.68	0.61	GenPract9	3.19	0.02
TchStrat7	3.80	0.01	GenPract10	1.65	0.17
TchStrat8	3.47	0.01	GenPract11	2.68	0.04
TchStrat9	36.80	0.00	Collab1	2.87	0.03
TchStrat10	6.79	0.00	Collab2	2.78	0.03
GenPract1	2.14	0.09	Collab3	1.57	0.19
GenPract2	5.03	0.00	Collab4	1.95	0.11
GenPract3	3.40	0.01	Collab5	1.03	0.40
Total with f-ratio > 2 count = 20					
Total with p < .1 count = 20					

Five-Cluster School Description

Table 28 shows the prevalence (percent of occurrence) for each variable for each of the five clusters (Clusters A-E). Table 28 shows rates of occurrence for each variable within each of the five clusters. In addition, the ‘All’ column provides the overall prevalence level for all 68 schools together.

Cluster A schools are more likely to require additional independent reading from students in a typical reading lesson and base reading objectives on student needs. They

focus on using instructional or assignment adaptation, tutoring or accelerated reading instruction, and a variety of instructional methods to help readers that are struggling.

TABLE 28
Cluster Loading for the Five-Cluster Solution and the 26 Variables

	Clusters					
Variable	*A N=20*	*B N=13*	*C N=13*	*D N=9*	*E N=13*	*All N=68*
GenPract1: Using story writing (using vocabulary and spelling words) to integrate reading and writing lessons	.40	.15	.38	.67	.62	.43
GenPract2: Using specific reading programs to integrate reading and writing lessons	.50	.23	.15	0	.69	.35
GenPract3: Using other subject area teachers to help integrate reading and writing lessons	.15	.31	.54	.67	.15	.32
GenPract4: Using additional independent reading in a typical reading lesson	.95	.54	.54	.78	.54	.69
GenPract5: Using specific reading program in a typical reading lesson	.75	.62	.46	.11	.77	.59
GenPract6: Determined reading objectives based on student needs	.80	.38	.77	.44	.08	21
GenPract7: Using instructional or assignment modifications to help struggling readers	.95	.92	.85	.89	.23	.78
GenPract8: Using tutoring and Accelerated Reading Instruction to help struggling readers	.95	.31	.77	.67	.69	.71

TABLE 28 *(Continued)*

	Clusters					
Variable	*A N=20*	*B N=13*	*C N=13*	*D N=9*	*E N=13*	*All N=68*
GenPract9: Parent involvement is used to help struggling readers	.20	.46	.31	.78	.62	.43
GenPract10: Using a variety of instructional methods a long with additional reading and writing practice to help struggling readers	.85	.77	.85	.44	.69	.75
GenPract11: Teachers and administrators working jointly to helping struggling readers	.40	0	.38	.11	.15	.24
TchStrat1: The use of reading activities or teacher modeling to teach comprehension skills	.30	.46	.62	.33	.46	.43
TchStrat2: The use of oral language practice as a strategy to teach comprehension skills	.05	.08	.38	.33	.31	.21
TchStrat3: The use of specific reading program materials as a strategy to teach word identification skills	.40	.77	0	.33	.54	.41
TchStrat4: The use of timed readings and fluency tests or assessments as a strategy to teach fluency skills	.65	.69	.31	.11	.92	.57
TchStrat5: The use of teaching activities and extra reading to teach fluency skills	.55	.08	.54	1	.38	.49
TchStrat6: The use of technology to teach fluency skills	.30	.15	.38	.44	.38	.32
TchStrat7: The use of visuals words activities to teach fluency skills	.50	.08	.23	.56	.08	.29
TchStrat8: The use of homework and parent involvement to teach fluency skills	.05	.31	.46	0	.38	.24
TchStrat9: The use of independent reading to teach fluency skills	0	0	.92	.11	.15	.22
TchStrat10: The use of context and context clues to teach vocabulary skills	.60	0	.69	.33	.77	.50

TABLE 28 *(Continued)*

	Clusters					
Variable	*A N=20*	*B N=13*	*C N=13*	*D N=9*	*E N=13*	*All N=68*
Collab1: The use of campuses specialist as a resource (on matter involving curriculum, materials, training, and new strategies) to teachers	.50	.31	.85	.67	.77	.60
Collab2: Including parents in child's reading program as volunteer readers	.20	.08	.15	.11	.54	.22
Collab3: Using grade level and vertical team meetings to get ideas to help struggling readers	.10	.08	.23	.33	.38	.21
Collab4: Teacher meet as needed to discuss struggling readers	.55	.77	.62	.22	.69	.59
Collab5: Teachers meet weekly to discuss struggling readers	.30	.46	.38	.67	.31	.40

Cluster A schools are less likely to use grade-level and vertical team meetings to share ideas for helping struggling readers. They do not use oral reading to teach comprehension skills or independent reading to teach fluency skills. They are also less likely to incorporate homework and parents into the teaching of reading fluency.

To help struggling readers, Cluster B schools use instructional accommodations along with a variety of instructional methods or additional reading and writing practices. But if these fail, teachers in these schools often meet as needed to discuss other ways to help struggling readers. Additionally, Cluster B schools use specific reading program materials when needed to teach word identification skills.

Cluster B schools are less likely to use extra reading and visual word activities as part of their fluency program. They are less likely to use parents as reading volunteers and to use grade-level meetings to share ideas that could help struggling readers.

Additionally, Cluster B schools never reported using oral reading to teach comprehension skills, or context and context clues to teach vocabulary. These schools did not report teachers' and administrators' collaboration as a key strategy for helping struggling readers.

Cluster C schools used independent reading to teach fluency skills and additional reading and writing practice along with a variety of instructional approaches to assist struggling readers. These Cluster C schools used instructional accommodations and campus specialists as resources for teachers in helping struggling readers.

In contrast, Cluster C schools were less likely to use sight-word activities to teach fluency and specific reading programs to help integrate reading and writing lessons. Also, Cluster C schools were not likely using grade-level meetings to get ideas to help struggling readers or to include parents as volunteer readers in the child's reading program.

All Cluster D schools reported using extra reading as part of their reading fluency program. They also used instructional accommodations to assist struggling readers. Cluster D schools were more likely to use additional independent reading and parent involvement in a reading lesson designed to help struggling readers.

Cluster D schools were less likely to use independent reading, parental involvement, or timed reading activities to teach reading fluency. Cluster D schools were also less likely to use specific reading programs in a typical reading lesson or to integrate reading and writing activities. They were also less likely to use parents as volunteer readers or to

report collaboration between teachers and administrators as a key to helping struggling readers.

Cluster E schools used timed readings as a part of their reading fluency program and reported the use of specific reading programs as part of a typical reading lesson. Cluster E schools used context clues to teach vocabulary skills and used the campus specialist as a resource to discuss curriculum, materials, training, or new strategies.

Cluster E schools were less likely to use other subject area teachers to help integrate reading and writing lessons or to report collaboration between teachers and administrators as a strategy that helps struggling readers. Additionally, these Cluster E schools were less likely to use independent reading or sight-word activities to teach fluency skills. They were also less likely to determine student reading objectives based on student needs.

One-Way ANOVA

After schools were clustered, they were labeled with a cluster identifier nominal code, and a one-way ANOVA was then conducted to see whether the different school clusters performed differently on the state's TAAS/TAKS reading test over 4 years. A one-way ANOVA was conducted with the five clusters of schools serving as the independent grouping variable and TAAS/TAKS pass rate (scaled 1 to 4) as the dependent measure. Table 29 shows the mean values for each of the clusters. The clusters included two high- performing clusters, two medium-performing clusters, and one low-performing cluster based on TAAS/TAKS pass rate. All school clusters

achieved an average 90% TAAS pass rate for more than 2 (M = 2.78) of the 4 years tracked.

TABLE 29
Means TAAS/TAKS Passing Score Rate Over 4 Years for Five-Cluster Schools

Term	*Frequency*	*Mean*	*Standard Error*	*Effect*	*TAAS-TAKS ranking*
A	20	2.55	.190	2.35	Low
B	13	**3.46**	.236	3.26	**Highest**
C	13	2.54	.236	2.34	Low
D	9	**2.00**	.284	1.80	**Lowest**
E	13	3.23	.236	3.03	High
All Cluster	68	2.78		0.20	

However, schools in Cluster D received a 90% TAAS/TAKS pass average score of closer to 2 years (M = 2.00) and Cluster B received a 90% TAAS/TAKS pass average score of between 3 and 4 years (M = 3.46).

A post hoc analysis shows that the greatest TAAS/TAKS performance difference (significant at $p < .01$) was between Cluster B and Cluster D schools. The post hoc Bonferroni test also showed significant ($p = .05$) differences in TAAS/TAKS success between (a) Cluster A and Cluster B, (b) Cluster B and Clusters A and C, (c) Cluster C and Cluster B, (d) Cluster D and Clusters E and B, and (e) Cluster E and Cluster D.

Cluster Relationships

Tables assist in describing differences between high-performing and low-performing clusters on seven of the variables. These nine response variables showed large differences (>20%) between high and low schools and came from all three categories: (1) teaching strategies (N=5), (2) general teaching practices (N=1), and (3) collaboration activities (N=1). The following tables are arranged to accentuate differences between the

highest (B) and lowest (D) performing clusters. Variables that Cluster B possessed more than Cluster D are presented first while variables that Cluster B possessed less than Cluster D. Finally the variables in Clusters B and D differed very little.

Table 30 contains seven variables that Cluster B schools possessed much more (>20% difference) than Cluster D schools, all of which had an overall positive relationship with sustained high TAAS/TAKS pass rates.

TABLE 30
High and Low Cluster Loading Difference for Seven Variables with Higher Prevalence in Cluster B Schools

	Cluster		
Variable	*B (High)*	*D (Low)*	*All*
TchStrat4: The use of timed readings and fluency tests to teach fluency skills	.69	.11	.57
Collab4: Teachers meet as needed to discuss struggling readers	.77	.22	.59
GenPract5: Using specific reading program in a typical reading lesson	.62	.11	.59
TchStrat3: The use of specific reading program materials as a strategy to teach word identification skills	.77	.33	.41
GenPract10: Using a variety of instructional methods a long with additional reading and writing practice to help struggling readers	.77	.44	.75
TchStrat8: The use of homework and parent involvement to teach fluency skills	.31	0	.24
GenPract2: Using specific reading programs to integrate reading and writing lessons	.23	0	.35

The highest performing cluster (high-cluster or Cluster B) schools were more likely than the lowest performing (low-cluster or Cluster D) schools to score high on TAAS/TAKS tests. The largest differences between the high- and low-performing clusters were that high-cluster schools were more likely to hold meetings to discuss struggling readers as often as needed and to include grade-level teachers in those

meetings. These high-cluster schools used timed readings to improve oral reading fluency and made homework and parent involvement a part of their fluency instruction.

Differences between the high- and low-performing clusters included the use of a variety of instructional methods and specific reading programs as part of their reading lessons to teach word identification skills and to integrate reading and writing lessons. The high-cluster schools were also more likely to require additional reading and writing practice by students in partnership with high expectations from teachers to help struggling readers. High-cluster schools acknowledged the use of specific reading program materials when needed.

Table 31 contains one variable that high-cluster schools possessed much less than Cluster D schools. The teachers in high-cluster schools were less likely to meet every week to discuss how to help struggling readers. Both high- and low-performing clusters reported including parents in a child's reading program as reading volunteers.

TABLE 31
High and Low Cluster Loading Difference for one Low Prevalence and One Same Prevalence Variable within Cluster B Schools

	Cluster		
Variable	*B (High)*	*D (Low)*	*All*
Teachers meet weekly to discuss struggling readers	.46	.67	.40
Including parents in child's reading program as volunteer readers	.08	.11	.22

The following tables contain 12 of the 17 variables that were correlated (equal to or greater than .16) negatively to school TAAS/TAKS reading pass rates. These 12 response variables showed large differences (>20%) between high and low schools in all

three categories: (1) teaching strategies (N=5), (2) general teaching practices (N=5), and (3) collaboration activities (N=2).

Table 32 contains five teaching strategy variables that Cluster B schools reported using less (>20% difference) than Cluster D schools. All five variables were negatively correlated with sustained high TAAS/TAKS pass rate (range = -.159 to -.282).

TABLE 32
Negatively Correlated Teaching Strategies Variable Load Table for Lower Prevalence in Cluster B Schools

	Cluster		
Variable	*B (High)*	*D (Low)*	*All*
TchStrat5: The use of teaching activities and extra reading to teach fluency skills	.08	1.00	.49
TchStrat7: The use of visuals words activities to teach fluency skills	.08	.56	.29
TchStrat10: The use of context and context clues to teach vocabulary skills	0	.33	.50
TchStrat6: The use of technology to teach fluency skills	.15	.44	.32
TchStrat2: The use of oral language practice as a strategy to teach comprehension skills	.08	.33	.21

The five variables in Table 32 are ordered (highest to lowest) by percentages of prevalence among the schools in the clusters. When comparing clusters B and D, remember that these are high and low performers relative to each other; all are strong performers compared to all other Texas schools and the results is not typical of all Texas schools, so generalizing beyond these results is difficult. This sample of high-performing TAAS/TAKS schools were more likely to report not using reteaching, modeling, extra reading, visual word activities, or technology as a teaching strategy to teach fluency skills. Additionally, these schools were more likely to report not using

context and context clues to teach vocabulary skills or oral reading to teach comprehension skills.

Table 33 contains five general teaching practices variables that Cluster B schools reported using less likely than Cluster D schools. All five variables were negatively correlated (range = -.150 to -.219) with sustained high TAAS/TAKS pass rate.

TABLE 33
Negatively Correlated General Teaching Practices and Variable Load Table for Lower Prevalence in Cluster B Schools

	Cluster		
Variable	*B (High)*	*D (Low)*	*All*
Using story writing (using vocabulary and spelling words) to integrate reading and writing lessons	.15	.67	.43
Using other subject area teachers to help integrate reading and writing lessons	.31	.67	.32
Using tutoring and Accelerated Reading instruction to help struggling readers	.31	.67	.71
Parent involvement is used to help struggling readers	.46	.78	.43
Using additional independent reading in a typical reading lesson	.54	.78	.69
The use of campuses specialist as a resource (on matter involving curriculum, materials, training, and new strategies) to teachers	.31	.67	.60
Using grade level and vertical team meetings to get ideas to help struggling readers	.08	.33	.21

These high-performing Cluster B schools were less likely to report using writing based on vocabulary or spelling words and other content-area teachers as a way of integrating reading and writing lessons. Additionally, these schools were more likely to report not using tutoring, accelerated reading instruction, and parent involvement as ways to help struggling readers. These five variables had an overall negative relationship (range =-.36 to -.26) with sustained high TAAS/TAKS pass rate correlation (range = -.154 to -.177). The high-performing TAAS/TAKS schools were more likely to report

not using campus specialists or grade-level meetings as a resource for teachers to help struggling readers.

High Clusters Summary

The high-cluster schools used timed readings, homework, and parent involvement to foster success related to reading fluency. They held meetings as often as needed to discuss struggling readers and supported the use of a variety of instructional methods to engage students and integrate reading and writing lessons.

However these same high-cluster schools were less likely to report some of their practices. The high-cluster schools were less likely to report using weekly teacher meetings to discuss the needs of struggling readers or the use of extra reading, visual word activities, or technology to teach fluency skills. High-cluster schools reported not using context or context clues to teach vocabulary skills or oral reading to teach comprehension skills. The high-cluster schools were less likely to report using vocabulary or spelling words as a prompt for writing activities. High-cluster schools also did not report using other subject-area teachers as partners to help integrate reading and writing lessons or using campus specialists or grade-level meetings as a resource to help struggling readers.

Research Question 4: Differences by Demography

This question was an extension of research Question 3: Can these school clusters, or models identified in research Question 3 be predicted by community type (urban, suburban, or rural)?

In order to answer this question cross-tabulation was used to analyze the variables of three different school or community types and the school clusters. For the individual cell comparisons, a chi-square test on cells with the expected frequencies greater than or equal to 5 is adequate but with this small sample chi-square would not be effective. This sample of schools has some expected cell frequencies of less than 5 and a Fisher's exact test was used instead of chi-square. The cross-tabulated data are presented as frequencies and percentages in Table 34. Differences in demographic patterns are visible in contrasting high-cluster and low-cluster schools. Low-cluster schools were mainly rural and urban; none were in suburban centers. In contrast, high-cluster schools were evenly distributed across all three community types.

TABLE 34
Frequency and Percent of Community Type by Cluster

Clusters	*Rural Count , %*	*Suburban Count , %*	*Urban count , %*	*Total count , %*	*TAAS/TAKS ranking*
	5	4	11	20	
A	25%	20%	55%	100%	Low
	4	5	4	13	
B	30.7%	38.6%	30.7%	100%	**Highest**
	0	3	10	13	
C	0%	23.1%	76.9%	100%	Low
	2	0	7	9	
D	22.2%	0%	77.8%	100%	**Lowest**
	1	5	7	13	
E	07.6%	38.6%	53.8%	100%	High
	12	17	39	68	
Totals	17.6%	25%	57.4%	100%	

In visually comparing high-cluster and low-cluster schools on urban and suburban community types, some differences are apparent between individual cells. Reducing the clusters variables to include only the high-cluster and low-cluster schools and

comparing urban, suburban, and rural schools, the cross-tabulated data reported a chi-square of 5.954 and with an effect size of .271 and a probability level of .051 Although the cross-tabulated data did not reach significance at the .05 level, they were significant at the .10 level.

Further internal cell comparisons analysis was conducted by comparing two proportions (Fisher exact test) using NCSS (Hintze, 2001). The comparison focused on extreme results in rural and suburban community types in the high- and low-performing clusters. The first analysis compared high-cluster and low-cluster schools on rural and suburban community types. Results showed no significant relationship ($p = .15$) and a medium effect level of .656 between the two samples.

Differences in demographic patterns urban and suburban community types are visible when contrasting high-cluster and low- cluster schools. The high performing clusters show a nearly equal distribution of schools but comparing proportions between high and low schools in the community types rural and urban schools showed no significant relationships ($p = .232$) but has a medium effect size of .539. However, the largest numbers of schools in the high performing cluster were in the community type suburban compared to the low-performing cluster schools which had no schools represented in the suburban community type. In the high-performing schools the suburban category made up 38.6 % of the schools in this cluster but only 25% of the sample population. Cross tabulation of the proportions between high and low schools in the community type suburban and urban schools showed a significant relationship ($p = .017$) and a high effect size (ES = .771).

This internal cell comparison suggests that schools in the highest performing cluster were most likely to be found in suburban and rural areas, and the lowest performing cluster of schools were more likely to be found in urban areas. Overall community type shows some effect on cluster composition but additional research is needed to confirm these findings.

Question 4 Summary

Visual differences in demographic patterns were within the full cross-tabulation table, and limited comparisons between high-cluster and low-cluster schools did show differences in community type An internal cell comparisons analysis on these cells resulted in a high effect size (ES = .771) suggesting that suburban and rural schools from the sampled schools demonstrate the characteristics associated with high-performing clusters, while urban schools from the sampled schools are more likely to reflect the characteristics of the low performing clusters.

CHAPTER V

DISCUSSION AND CONCLUSIONS

This dissertation used data collected for a federally funded research project called the Special Education Reading Interface (SPEDREAD) project (Parker, 2004). The purpose of the SPEDREAD project was to identify factors common in reading programs that have demonstrated success in teaching reading to students in special education and to other struggling readers in Texas. The dissertation study examined reading programs in 68 Texas elementary schools to determine what instructional and collaborative practices foster success in all students. The schools selected were identified as successful based on their scores on TAAS assessment results in the 1999-2000 school year. These schools were successful despite having student populations with a high percentage of culturally diverse students and students of low SES. The purpose of this dissertation was to study the following areas:

(1) Determine if and how teaching methods and teacher collaboration were used by these effective schools to foster reading success in all students.

(2) Identify cohesive patterns of characteristics, or models, in schools based on their teaching methods and teacher collaboration.

(3) Examine whether these models or similar patterns vary by school based on the community demography (urban, suburban, or rural).

Conduct of the Study

Schools selected for this study were those that appeared to be successful at teaching all students to read. Schools were selected based on having a high percentage of

economically disadvantaged students, a lower than the state average exemption rate for special education students from taking the reading TAAS/TAKS, and high performance on the reading TAAS/TAKS. This researcher and the SPEDREAD Project team were aware that in 2003 the TAAS was replaced by the TAKS. Despite this problem, the TAAS (and now TAKS) results are used by the TEA to determine whether Texas schools are teaching and students are learning the state curriculum. It is the only statewide test of reading for which the TEA maintains school results available to the public. The TAAS 1999-2000 results were used to select schools for participation in the project in the belief that good TAAS results are indicative of a good reading program. Both TAAS and TAKS scores were used during the data analysis phase of this dissertation study.

Interview instruments were written based on the literature describing effective schools and effective reading programs. Interview instruments were revised based on comments from a focus group. Sixty-four principals and 208 teachers were interviewed during face-to-face visits to participating schools.

Research Results and Discussion

The dissertation study was successful in providing answers to four research questions. The major findings are discussed by research question.

1. What types of teaching methods are used for reading instruction within successful elementary schools?

2. What types of collaborative practices do teachers use to disseminate instructional practices and interventions to foster success in struggling readers within these same successful elementary schools?
3. How do the variables identified in Questions 1 and 2 cluster? That is, do patterns of these variables tend to co-occur in schools?
4. Do the models identified in Question 3 vary in occurrence by school or community type: urban, suburban, or rural?

Research Question 1

Question 1 addressed the types of teaching methods used for reading instruction as reported by teachers within these successful elementary schools. The results of the frequency analysis indicated that the type of instructional philosophy most often reported by campuses was the use of a balanced (comprehensive) approach to reading instruction. The balanced literacy utilizes the fundamentals of letter-sound correspondence, word studies, decoding, and a mixture of holistic experiences in reading, writing, speaking, and listening to create an integrated model of literacy.

The types of instructional materials most often used included the use of commercial supplemental instructional materials not as the primary reading program, but rather as a supplemental component of the reading program. The majority reported using the Accelerated Reader (AR) program, novel sets, trade books, leveled books, and TAAS/TAKS preparation materials. Typical reading lessons focused on reading, writing, and vocabulary instruction using reading objectives aligned with the mandated state or district curriculum. These schools spent time integrating reading and writing lessons and

used class discussion time to develop comprehension skills. The schools regularly used dictionaries, spelling words, word walls, and prior knowledge to teach vocabulary skills, and they used timed readings and fluency assessments as part of their reading fluency programs.

Additionally these successful elementary schools used a wide variety of commercial supplemental instructional materials as a part of their reading programs and reported making instructional accommodations to assist lower performing students. They focused on teachers' high expectations for students along with increased reading and writing as a key to improving reading skills among all students. Apparently, these schools identified areas where additional instruction was needed and directly taught the needed skills. These successful schools were not driven by a single philosophy for teaching reading. Rather, they balanced the needs of their students with instruction utilizing phonemic awareness, phonics, fluency, vocabulary, and reading comprehension skills along with a mixture of holistic experiences in reading, writing, speaking, and listening. These schools spent time integrating reading and writing lessons across other subject areas.

Although this study is limited by the number of schools sampled, the results suggest that focused instruction can produce success in all students. This researcher assumes that while these results are based on student success on the TAAS/TAKS, which are specific only to Texas schools, the results provide evidence that instruction focused on key literacy skills produces reading success. The results contribute to current findings in the field (Duffy-Hester 1999; National Reading Panel, 2000; Taylor et al. 1999), which indicate that phonemic awareness, phonics skills, fluency, vocabulary, and reading

comprehension skills should be taught. Additionally the results underscore the importance of direct instruction of key literacy skills (Allington, 2002; Blachman, 1994; Fielding-Barnsley, 1997; Spear-Swerling & Sternberg, 1996; Torgesen et al., 1999) in positively affecting reading success. This research indicates that the use of reading objectives based on a state-mandated curriculum (aligned with a standards-based curriculum) allows teachers to focus instruction (Anderson, Brown, & Lopez-Ferrao, 2003) on needed key literacy skills.

The results of this study provide little evidence to support a specific strategy, approach, or program as the predictor of high student performance. Rather, the results suggest that to be good readers, children must be provided instruction that:

(1) balances both phonics and whole-language instruction (Duffy-Hester, 1999; Reading Summit, 1998),

(2) integrates reading and writing activities into reading and other subjects or content areas (Wharton-McDonald et al., 1998), and

(3) provides explicit instruction in the areas of phonological awareness, phonics skills, word identification, comprehension, fluency, and vocabulary (Chard & Dickson, 1999; National Reading Panel, 2000; Vaughn et al., 1998).

This study suggests that the key to success may not be the instructional approach alone but, more accurately, the match of the approach to the teachers, the school context, and the rigor and integrity of the approach's implementation.

Research Question 2

Research Question 2 had to do with the types of collaborative practices used by educators to disseminate instructional practices and interventions that foster success in struggling readers. The results of the frequency analysis indicated that the majority of the elementary schools chosen had a specialist who was available to discuss curriculum, materials, training, and strategies with teachers. In addition, teachers utilized scheduled weekly and grade-level meetings to discuss ways to help struggling readers. These schools also reported using other teachers, workshops, professional development activities, conventions, or local in-service trainings as a key source of classroom strategies to help struggling readers.

The results of this research question support the hypothesis that collaboration is critical to student success (Donaldson, 2001; Little, 2000; Odell, 1997). This study suggests that by collaborating to identify problems, systematically develop interventions, gather data, and judge the interventions' effectiveness teachers and peers can help maximize student learning (Snell & Janney, 2000) Collaborative strategies appear to provide a context for teachers to explore, question, and consult with other professionals about their instructional practices. They provide a social, emotional, and intellectual engagement with colleagues as well. These collaborative activities may improve teaching and, indirectly, improve student performance (Corcoran, 1995; Sykes, 1996).

These successful schools appear to understand that new information can continually help the teacher better address student needs. By regularly attending workshops, classes, or other staff development opportunities, teachers are able to share what they have

learned with their colleagues. The results suggest that in Texas elementary schools with high percentage of culturally diverse students from low SES families, teacher collaboration has a positive impact on student performance in reading

Research Question 3

Research Question 3 concerned identifying any cohesive patterns or models in the teaching methods and collaboration practices that tend to co-occur in these 68 successful schools. The interviews were analyzed to determine which responses were most strongly correlated to effective school practices used by teachers and principals and which contributed to maintaining a 90% pass rate on the TAAS/TAKS over the 4-year period of the SPEDREAD project (2004). These effective-practice response variables were tested using K-means analysis and HCA to determine the patterns in the teaching methods and collaboration practices that tend to co-occur in these successful schools

The analysis revealed five clusters or models from the refined data that were correlated to repeated TAAS/TAKS success. The high-performing cluster schools were more likely than the low-performing cluster schools to score high on TAAS/TAKS tests. The largest differences between the high-and low-performing clusters were that high cluster schools were more likely to hold meetings to discuss struggling readers as often as needed and to include grade-level teachers in those meetings. Differences between the high-and low-performing clusters included the use of a variety of instructional methods and specific reading programs as part of their reading lessons to teach word identification skills and to integrate reading and writing lessons.

These high-cluster schools were more likely than the low-performing cluster schools to require additional reading and writing practice by students in partnership with high expectations from teachers to help struggling readers.

It is possible that schools can make instructional choices based on current research and that these choices can create cohesive patterns of variables in schools. The challenge of this dissertation study was to determine if a more identifiable pattern influences overall campus performance on TAAS/TAKS reading assessments. This study found that instruction focused on key literacy skills positively affected student performance. Schools that repeatedly performed well on the TAAS/TAKS taught these literacy skills. The results of Question 3 suggest that in Texas, school models based on effective instruction practices may exist and might be duplicated in other schools to foster high performance in reading by all students. Of course, additional research will be needed.

Research Question 4

The fourth research question was concerned with using school or community type in research Question 3 as a predictor of cluster identity. The K-means analysis produced a strong five-cluster pattern in which all of the clusters appear basically to have the same distribution of urban, suburban, and rural schools and communities. Cross-tabulation did not reach significance at the .05 level; it did, however, attain significance at the .10 level, with an effect size of .271.

Some differences in demographic patterns between high-cluster and low-cluster schools were noted through visual analysis of contingency tables. Visual comparison of high-cluster and low-cluster schools of urban and suburban community types appears to

indicate a sizable difference in some cells. Low-cluster schools were found in mainly rural and urban settings, whereas high-cluster schools had an even number of schools in all three community types, despite a skewed sample population. However, those differences were based on a relatively small numbers of schools.

Reading success in schools may reflect teachers' making choices based on external influences that benefit a particular school (Fullan, 2001). In this study, community type was apparently not a strong predictor of cluster composition. In the relatively small sample of successful schools in this study, people made choices and worked together to foster success in the area of reading. These choices may be controlled by a school's community context. For example, an urban school with considerable resources can make certain decisions that a small rural school cannot, thereby influencing campus practices. In this study, a school's demographic context showed only a slight influence on its success. The school community type may have led to certain choices by schools based on their environments, which in turn could have led to higher reading TAAS/TAKS scores.

Research Summary

This dissertation study explored teaching methods and collaborative practices used by teachers in successful elementary schools. Additionally, the study identified simple patterns in the previously studied variables and identified clusters that occurred in the sample schools. The study was successful in each of these tasks.

Study Limitations

Data Reduction

The first study limitation concerns the unit of analysis for the dissertation study, which was the campus. The quantity of data generated by the teacher and administrator interviews was condensed to campus-level data as described in Chapter IV, which resulted in a loss of some of the wealth of data provided by the open-ended responses. Additionally, the coding of the open-ended responses provided shorter and fewer answer categories, which resulted in further loss of data provided by the campus teachers and administrators. Finally, reduction of nonpredictive variables ensured that cluster analysis would not result in theoretically meaningless solutions controlled by random variance. Individual examination and elimination of variables did risk dropping some variables that could be valuable predictors of school success but only in combination with other variables (as in a multiple correlation). The risk also existed that variables that were eliminated were very important, but the risk was believed appropriate in order to provide meaningful results from the study and in order to perform quantitative analysis of the data.

Comparison Group

One drawback with the study was the lack of a comparison group for the successful elementary schools. The underlying basis for the study was that the schools in the dissertation study were teaching all students to read in a demographic situation that would not seem conducive to good results. Soliciting other schools to participate in the study because of poor reading results or selecting schools that did not meet the other

criteria was not considered a reasonable alternative. The criteria included an established record of success on the statewide TAAS reading test with all major minority groups and with a high percentage of economically disadvantaged students, while exempting 7% or fewer students from TAAS reading testing based on their special education status. However, Stringfield and Herman (1996) noted that the lack of a comparison group does not constitute a major issue. They found that a study using only positive outlier schools provides an acceptable method of conducting effective school research. The current study used only high-performing schools selected on the basis of their high accomplishment in reading; these are therefore considered positive outliers among all the elementary schools in Texas.

Generalization Difficulties

The underlying problems are the use of a small slanted sample of schools and a lack of a low performing comparison group. These two problems prevent the results of this study from being generalized beyond Texas schools similar to the sample group. This is especially true for the cluster schools in which the findings of high TAAS/TAKS success may not be typical of all Texas schools. An additional concern with the generalization is the comparing of cluster groups and the demographic-differences in the small subset of schools involved in the study. Overall this study lacks the ability to generalize the results to other elementary schools or even to a wide range of elementary schools in Texas.

Random Selection of Teachers

When the SPEDREAD project team members contacted schools to arrange site visits, they told principals the data collectors needed to interview three teachers. The

principals scheduled individual teachers to talk with the data collectors. Principals almost certainly selected their most effective teachers for the interviews, which meant the data collectors did not see a cross-section of all teachers. All interviewees were supplied with a copy of the interview instruments in advance of the interviews in order to facilitate the interview process, which contributed to the lack of a random selection of teachers.

TAAS Changing to TAKS

In 2003, the Texas criterion-referenced assessment changed from TAAS to TAKS. This change was not just a change in names. Rather the TAKS assessments are more challenging than the earlier, TAAS assessments. The new TAKS assessments are based on the more rigorous state-mandated TEKS curriculum. Because of the change from TAAS to TAKS, there was some concern about grouping the 3 years of TAAS performance (2000-2002) and the 1 year of TAKS (2003). However, the SPEDREAD project team and I took the view that both assessments are used by Texas educational authorities to determine performance of students and schools. Texas authorities took the action they considered necessary to achieve the same results with TAKS as with TAAS. Therefore, the team believed combining the two types of assessment results to determine which schools achieved a 90% pass rate over the 4-year period was valid.

Implications for Future Research

Comparing TAAS and TAKS Performance

First, a longitudinal look at schools with established high TAAS performance and the performance of the same schools on TAKS offers a chance to expand on the knowledge

base of what makes a good school successful on the Texas criterion-referenced assessment. The change from TAAS to TAKS in 2003 produced an assessment that is more challenging than the previous assessment. The new TAKS assessment is based on a more rigorous state-mandated TEKS curriculum. Texas authorities took the passing standards for the 2003 TAKS test and set them 2 standard errors of measurement (SEM) below the recommended level but raised them to the recommended level in subsequent years. An additional study could examine campus performance over 3 or more years of success each on the TAAS and TAKS to expand what makes a school successful on criterion-referenced assessment.

Grade-Level Comparison

Second, future research should consider campus responses by grade level to better understand the nature of instruction at individual grade levels. Important research topics include the attempt to measure more systematically the extent to which instruction differs by grade level and the impact instruction has on student growth and campus success on the state criterion-referenced assessment.

Case Studies

Third, the opportunity for a project based on a series of case studies involving a number of schools could address fundamental issues about what makes a school successful. Even though all the schools in the study were high-performing schools, during the school visits researchers noted some schools that seemed to be extraordinary in comparison to the other schools. These schools seemed to have a special collaboration and dedication to students and the task of teaching. A case study of the practices used by

teachers and administrators in those schools would offer a chance to expand on the knowledge base of what makes a good school.

Implementing Key Variables in Struggling Schools

Fourth, the opportunity for a study that would investigate the significance of individual variables on reading performance of individual campuses would be revealing. Future research opportunities could focus on schools with poor performance in reading as measured by TAKS scores and measure performance change over time after implementing key instruction or collaboration variables. Such a study could assess the effectiveness of different instructional and collaborative variables and their effect on school performance.

Conclusion

This dissertation study confirmed that certain characteristics of effective reading programs for teaching all readers exist in some schools. The results of the data analysis for this study indicated that schools that are consistently successful at teaching reading to all students use direct systematic instruction built on a balanced literacy philosophy. Their typical reading lesson is focused on reading, writing, and vocabulary instruction using reading objectives from state-mandated curriculum (TEKS), district curriculum, or benchmarks. These schools use commercial supplemental instructional materials as a part of their regular reading programs and integrate reading and writing lessons across different subjects. They also foster high teacher expectations of student performance and require increased reading and writing for all students.

Additionally, none of these elementary schools used a specialist to collaborate with teachers on matters involving curriculum, materials, training, and teaching strategies. These schools did not utilize scheduled meetings to allow teachers to discuss ways to help struggling readers.

Some school characteristics tended to exist cohesively in patterns, but community type was not a significant predictor of clusters in this study. The patterns for the five clusters of schools appeared essentially the same. Some small visible differences were noted in demographic patterns in the clusters, but they are not considered strong predictors with such a small sample of schools.

Finally, none of the findings from the study directly contradicted the considerable database on effective reading practices. The findings from this sample of 68 successful elementary schools in Texas support past research by reaffirming that to be good readers, children must be provided instruction that (1) uses a balance of both phonics and whole- language instruction (Duffy-Hester, 1999; Reading Summit, 1998), (2) integrates reading and writing activities into the reading and other subjects or content areas (Wharton-McDonald et al., 1998), and (3) provides explicit instruction in the areas of phonological awareness, phonics skills, word identification, comprehension, fluency, and vocabulary (Chard & Dickson, 1999; National Reading Panel, 2000; Vaughn, et al., 1998). Yet is important to remember that these results cannot be generalize to all schools in Texas or beyond because of a lack of a comparison group and the small slanted sample of school.

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APPENDIX A

TEACHER INTERVIEW FORM: VERSION JUNE 27, 2001

SPEDREAD Project
Teacher Interview Form: Version June 27, 2001

District:_____ Campus Code: _____Teacher Code:_____ Date: _____

Outline

Part A: Method of Instruction
Part B: Progress Monitoring (Assessment)
Part C: Early/SPED Intervention
Part D: Collaboration
Part E: Conclusion
Part F: Questionnaire Validity

Introduction

We are conducting a study of effective reading programs for children in grades K-5, with a special focus on struggling readers and students in special education. We have identified schools in your district which are in the top 5% of Texas schools in reading achievement, considering performance levels and growth, student demographics, and special education exemption rates.

We want to know what various district and school practices might explain this success. We are not looking for the "one best model", but rather multiple successful models that might be feasible for districts of diverse size, geography, and student populations. Once these successful models are identified and described, our project, in coordination with TEA and its ESCs, will help disseminate the information to school districts throughout Texas in the form of procedural guidelines, training workshops and conference papers.

To identify the factors that make up successful reading programs we are talking with teachers who have had success teaching reading to all types of children. Because of your knowledge of the expert teaching practices and program design on your campus, you were selected by the district/school administration to represent yourself and your colleagues in the interview for this research project. Thanks for sharing your time and expertise with us.

Part A: Method of Instruction

Let's begin by looking at the methods of instruction for reading that are used by your teachers.

A-1 Tell me a reading success story about a low or poor performing reader.		A-1 OPEN ENDED ANSWER
A-2 Do you think the techniques used with this child would work with other students?	Yes No If yes,	A-2 OPEN ENDED ANSWER
A-3 Describe how your program teaches reading or describe a typical reading/language arts lesson in your program. Include any information that you think makes your reading program successful.		A-3 OPEN ENDED ANSWER
A-3-a How much total time during the week do teachers spend on the Reading/Language Arts program?		A-3-a 4-5 hours / 6-7 hours / 8-9hour / 10-11hours / 12-13 hours / 14 –15 hours
A-3-b What is your reading program's philosophical orientation?		A-3-b Phonics/skills approach / Balanced approach / Whole language approach
A-3-c How are reading objectives determined for your reading program's lessons?		A-3-c TEKS/Other_____
A-4 Describe how your teachers help a struggling reader to become a successful reader. Include instructional materials used and any informal assessment processes used by your classroom teachers. Also include any information that you believe makes your school's students successful readers.		A-4 OPEN-ENDED ANSWER
A-4-a Does your reading program use a basal reading series?	Yes No If yes,	4-a-1 Which series do you use? 4-a-2 How do you use the series, or what part(s) do you use?
A-4-b Does your reading program use supplemental instructional materials?	Yes No If yes,	4-b-1 What are your supplemental instructional materials? Teacher-made / commercial 4-b-2 If commercial, please name: 4-b-3 How do you use these materials?

Part A: Method of Instruction (Continued)

A-4-c What types of teaching methods do your teachers use?	A-4-c-1 Explicit, Systematic / Independent,Discovery / Cooperative learning / Balanced	
A-4-d What reading skills are emphasized by your reading program and your teachers?	A-4-d-1 Phonemic, phonological awareness skills / Word identification skills / Fluency skills / Vocabulary skills / Comprehension skills	
A-5 Describe how teachers group their students and why.	A-5 OPEN ENDED ANSWER	
A-5-a What types of groups are used?	A-5-a Small group / whole group / one-on-one / pairs /	
A-5-b How do teachers establish their groups?	A-5-b Describe:	
A-5-c How often do groups meet?	A-5-c Daily / 4 times a week / 3 times a week / 2 times a week / once a week /	
A-6 Explain any system your teachers have for students helping students.	A-6 OPEN ENDED ANSWER	
A-6-a What type of tutoring arrangement might teachers use, if any.	A-6-a SPED student tutors younger student/ Older student tutors younger SPED student/ Peer tutors SPED peer/cross-grade level tutoring	
A-7. Do teachers integrate reading and writing lessons?	Yes No If yes,	A-7 OPEN-ENDED ANSWER
A-8. Do teachers integrate reading and writing skills into content areas, such as Science and Social Studies?	Yes No If yes	A-8 OPEN-ENDED ANSWER
A-9. The purpose of this study is to find the very best teaching methods of the very best teachers. Can you think of any particularly innovative and successful teaching technique used by teachers at your grade level(s) that helps struggling readers or challenging students read better that we have not talked about?		A-9 OPEN ENDED ANSWER

Part B: Progress Monitoring (Assessment)

Now, let's look at how teachers are monitoring student progress.

B-1 Describe how teachers use progress monitoring to "catch" student's' problems before they start.		B-1 OPEN ENDED ANSWER
B-1-a Do teachers use *informal* methods to assess progress?	Yes No If yes	B-1-a Describe
B-1-b How often do teachers *informally* assess progress?		B-1-b beginning of the year / daily / weekly / as needed
B-2 Describe how teachers *formally* assess their students' reading progress and how they use the assessment results.		B-2 OPEN ENDED ANSWER
B-2-a Describe how teachers *formally* assess their students' reading progress and how they use the assessment results.		B-2-a What types of formal tests?
B-2-b How often do teachers *formally* assess their students?		B-2-b Weekly / Bimonthly / monthly / each grading period / each semester / end-of-unit / yearly /
B-3 Do teachers assess high performing, on-track, and low performing students differently?		B-3 OPEN ENDED ANSWER

Part C: Early/SPED Intervention

Now let's look at the pre-referral intervention process for a struggling reading on your campus.

C- Describe how teachers identify a student in their class this year (or last year) as a struggling reader. Describe the intervention process for their student (before formal referral process to Special Education, Title 1, Dyslexia, or other special services).		C-1 OPEN ENDED ANSWER
C-1-a What types of assessment (formal or informal) do teachers use?		C-1-a OPEN ENDED ANSWER
C-1-b What types of intervention strategies do teachers use, if any?		C-1-b OPEN ENDED ANSWER
C-1-c Where do teachers get ideas for these strategies?	C-1-c other teachers / school in-service / MRT program / university course work / regional education service center training / other_____	
C-1-d Does your campus have a team or specialist to consult with?	Yes No If yes	C-1-d How does this team work together?
C-1-e What formal methods do teachers use to assess progress using published, standardized tests? What types of formal tests?	Yes No If yes	C-1-e Title I / Reading Recovery / Dyslexia / Other
C-1-f What type of documentation on the struggling reader would a teacher collect if they seek support from the campus team or specialists?		C-1-f OPEN ENDED ANSWER

Part D: Collaboration

Now let's look at collaboration between teachers and between teachers and parents.

D-1 Describe how the general education classroom is coordinated with other reading services such as Title 1 and SPED to align the reading goals of struggling readers.	D-1 OPEN ENDED ANSWER	
D-1-a How do teachers align programs to coordinate the reading goals of the struggling reader?	D-1-a Spontaneous meetings with other services teachers / planned meetings / notes or written communication / other _____	
D-1-b If teachers have planned meetings, how often do they meet?	D-1-b Weekly / bi-weekly / monthly / each grading period / each semester	
D-1-c At a "typical" meeting for a struggling reader, who would attend?	1-c General education teacher / Title I teacher / SPED teacher / ESL teacher / Bilingual teacher / Reading specialist / Dyslexia specialist/ MRT/ assistant principal / principal / parents / other	D-1-c-1 Explain (if needed)
D-1-d Are parents involved in the informal process of program coordination at informal meetings concerning their child?	Yes No If yes	D-1-d Explain how parents are involved?
D-1-e Are students' goals set and monitored at these meetings?	D-1-e Yes No	
D-1-f Are decisions documented?	Yes No If yes	D-1-f What type of documentation is required?

Let's "change gears" at this point and look at home/school collaboration.

D-2 Describe how parents are included in their child's reading program.	D-2 OPEN ENDED ANSWER

Thank you so much for taking the time to talk with us and share your knowledge about reading. We are almost done. This is the last question pertaining to your reading programs

D-3. Knowing the purpose of this study, what questions should we have asked you about your campus reading program that makes it so successful?	D-3 OPEN ENDED ANSWER

Part E: Validity Questions

Also, we are checking the validity of our instruments. Please help by answering the following questions.

E1. Please tell me your reaction to the format and content of this questionnaire.	E-1 OPEN ENDED ANSWER
E-2. Is there a better or clearer way to ask any of the questions?	E-2 OPEN ENDED ANSWER
E-3. Would you add any questions to the questionnaire?	E-3 OPEN ENDED ANSWER
E-4. Would you delete any questions from the questionnaire?	E-4 OPEN ENDED ANSWER
E-5. Do you think the content of the questionnaire relates to all reading programs?	E-5 OPEN ENDED ANSWER

APPENDIX B

ADMINISTRATOR INTERVIEW VERSION JUNE 27, 2001

SPEDREAD Project
Administrator or Program Leader Interview Form:
Version June 7, 2001

District Code: _____ Administrator/Program Leader Code: _____ School Code: _____ Date _____

Part A: Preliminary Information
Part B: Program Structure, HeadStart, Pre-Kindergarten and Kindergarten
Part C: Program Structure, Grades 1-5
Part D: In-Service/Staff Development for Teachers
Part E: Early Intervention/Pre-referral Process
Part F: Coordination of Programs
Part G: Validity Questionnaire

Introduction

This study is on effective reading programs for grades K-5, with a special focus on struggling readers and students in special education. We have identified schools in your district which are in the top 5% of Texas schools in reading achievement, considering performance levels and growth, student demographics, and special education exemption rates.

We want to know what various district and school practices might explain your success. We are not looking for the "one best model," but rather multiple successful models that might be feasible for districts of diverse size, geography, and student populations. Once these successful models are identified and described, our project, in coordination with TEA and its ESCs, will help disseminate information about them to all districts in Texas. There will also be national dissemination. Dissemination in Texas will include useful procedural guidelines and training workshops.

To identify the factors that make up successful reading programs we are talking with administrators and coordinators at district and school levels, as well as teachers and specialists in reading. You have been chosen for this interview because of your school's exceptional academic achievement in the area of reading. Thanks for sharing your time and information with us.

Part A: Preliminary Information

Please tell me a little bit about yourself and your work experience.

A-1 How long have you been principal at this campus?	Number of years _____
A-2 How many years have you been a principal?	Total years experience_____

Part B: Program Structure

HeadStart, Pre-Kindergarten and Kindergarten, Transitional Kindergarten

Let's look at your reading program structure starting with HeadStart.

B-1-a Do you have HeadStart on your campus? (If no, go to Question 3) B-1-b If yes, what ages do you serve under the HeadStart program? B-1-c If you serve 3 year olds, do these children attend HeadStart for a B-1-d If you serve 4 year olds, do these children attend HeadStart for a	Yes No 3 year olds / 4 year olds full day / half day full day / half day
B-1-e How many continuous years have you offered HeadStart services?	Years 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 10+
B-1-f If HeadStart services are not provided at your school, do children receive HeadStart services elsewhere?	Yes No If yes

Pre-Kinder

B-2-a Do you have Pre-Kindergarten services on your campus? B-2-b Do the Pre-K students attend school for a	Yes No full day / half day
B-2-c How many continuous year have you offered Pre-K services?	Years 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 10+
B-2-d If Pre-K services are not provided at your school, do children receive these services elsewhere? B-2-e If yes, where do children receive their Pre-K services?	Yes No church affiliated pre-school / privately-owned pre-school / HeadStart / Other __
B-2-f How many children in your school area do not attend Pre-K?	All or most / some / few or none / don't know
B-3-a Do you have Kindergarten services on your campus? B-3-b Do the Kindergarten students attend	Yes No full day / half day
B-3-c How many continuous years have you offered Kindergarten services?	Years 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 10+
B-3-d If Kindergarten services are not provided at your school do children receive these services elsewhere? B-3-e If yes, where do children receive their Kindergarten services?	Yes No church affiliated pre-school / privately-owned pre-school / HeadStart / Other _____
B-3-f How many of children participating in Kindergarten this year did not attend Pre-K or HeadStart last year?	All or most / some / few or none / Don't know

Transitional Kindergarten

B-4-a Do you offer Transitional Kindergarten (K-1st) or Transitional 1st grade (1st –2nd)? (If No, go to next section)	Transitional Kindergarten Transitional 1st
B-5-b Describe how children are identified for transitional Kindergarten/1st grade services.	**OPEN-ENDED ANSWER** Teacher Recommendation Yes No Reading readiness assessment (e.g., TPRI) Yes No If yes, Name of Reading Readiness Assessment_____ Developmental assessment (e.g., Gesselle) Yes No If yes, Name of Developmental Assessment_____ Other assessments (formal or informal) Yes No Other _____
B-6 Describe your Transitional Kindergarten program.	**OPEN-ENDED ANSWER**
B-6-a What is the purpose of your T-Kindergarten?	allow for developmental readiness Yes No allow for academic readiness Yes No allow for social/emotional readiness Yes No other_____ Yes No
B-7 Describe reading curriculum/materials used in Transitional Kindergarten.	**OPEN-ENDED ANSWER**
B 7-a Is the transitional curriculum/materials different from the general education curriculum?	Yes No
B-8 Describe a reading lesson.	**OPEN-ENDED ANSWER**
B-8-a What do you consider the best way to teach phonics?	
B-8-b How do you teach phonics skills?	
B-8-c How do you teach sight words?	
B-8-d How do you teach comprehension skills?	

Program Structure

Grades 1 - 5

Now let's look at your campus reading services structure for 1st through 5th grades. For each of the services I will ask you a series of questions.

C-1 In addition to the general education classroom reading services, do you have additional/supplemental reading services?		
C-2 What is the name of the service?	Name	
C-3 What children participate in this service?	Dyslexia students / SPED students / Struggling readers / ESL students / Bilingual students / Emotional Disturbed students / Mild MR / Moderate MR / Severe MR / Disabilities / Speech Disorders / Language Disorders / Combinations of the above students (e.g., ESL/SPED)	
C-4 How is this service funded?	*Title 1 funds / SPED funds / Dyslexia funds / Bilingual funds / Compensatory funds / Capacity Building Funds / 404 funds / Eisenhower grant / TEA grants / Combination of the above / Other_____*	
B-4-a Where from?	State Federal District Private *If private, What organization?*	
C-b How much total money do you receive from external money or grants?	$0 -$ 1,000 / $ 1,001 -$ 5,000 / $ 5,001 -$ 15,000 / $15,000 - $ 50,000 / above $50,000	
C-5 Describe how students are identified for the program. Describe the eligibility requirements for the program.		OPEN-ENDED ANSWER
C-5-a Teacher recommendation? C-5-b By SES status/Free or reduced lunch? C-5-c By assessment? C-5-d By grades in reading? C-5-e By parental request? C-5-f By 504 status?	*Yes / No If yes,* *Yes / No If yes,* *Yes / No If yes,* *Yes / No If yes,* *Yes / No If yes,* Yes / No If yes,	*Describe procedure* *Describe requirements* *Which assessment(s)? TAAS / In-district Assessment / TPRI / LPAC / Pre-TAAS / other* *Describe requirements* *Description if needed* Description if needed
C-6-a How many students currently receive services?	*Total number of students in service: 0 10 20 30 40 50 60 70 80 90*	

Program Structure Grades 1 – 5 (Continued)		
C-6-a Who teaches reading?	general education teacher reading specialist / Master Reading Teacher / Instructional aide / volunteers	*Who are the volunteers?* *Parents / High school students / Local business employees / Peers, cross-grade level*
C-7-a How many continuous years have you had this service?	*Continuous years of service Years 1 3 5 10 15*	
C-10 Describe, if the student participates by grade level, how many times a week the service is offered, how long the classes are and how many students are in a class. Basically, how do you make this program work at your school?		
C-10a In (use program name as described by the administrator), are students served by grade level?	*Yes No*	*If yes, which grade levels does this program serve? Kinder / 1st / 2nd / 3rd / 4th / 5th* *If no, describe how they are grouped.*
C-10-b How many times a week is the program offered?		*/ 1 / 2 / 3/ 4 / 5/*
C-10-c How long is a class period?		*Minutes / 20 / 30 / 40 / 50 / 60 / 75 / 90 /*
C-10-d How many students are in a class?		*Number of students 1/ 3 / 5 / 10 / 15 / 20 / 25*
C-10-e Does class size change throughout the year because of student needs?	*Yes No If yes,*	*Explain.*
C-10-f How is a student's exit from the program determined?		by assessment / by teacher / recommendation
C-10-g Where is reading instruction provided for these students?	*Circle all that apply: General education classroom / Self-contained classroom (whole day) / inclusion / pull-out program / another campus / other location _____*	
C-10-h Which additional services can a student receive if he/she is participating in this service?	*Circle all that apply: General Education / Title 1 / Bilingual Education / ESL / Dyslexia / Special Ed. Reading / Reading Labs / Other_____ / Other _____ / Other_____*	
C -11 Please describe the reading/instructional curricula used with the program.		OPEN-ENDED ANSWER

Program Structure Grades 1 – 5 (Continued)		
C-11-a Do you use a basal reading series?	*Yes No If yes, what series for which grade level?*	(a) Harcourt Brace / K / 1st / 2nd / 3rd / 4th / 5th / (b) Houghton Mifflin / K / 1st / 2nd / 3rd / 4th / 5th / (c) *Spanish Edition* Houghton Mifflin / K / 1st / 2nd / 3rd / 4th / 5th / (d) Macmillian/McGraw-Hill / K / 1st / 2nd / 3rd / 4th / 5th / (e) *Spanish Edition* McMillian/McGraw-Hill / K / 1st / 2nd / 3rd / 4th / 5th / (f) Open Court / K / 1st / 2nd / 3rd / 4th / 5th / (g) Scholastic / K / 1st / 2nd / 3rd / 4th / 5th (h) *Spanish Edition* Scholastic Court / K / 1st / 2nd / 3rd / 4th / 5th / (i) Scott Foresman / K / 1st / 2nd / 3rd / 4th / 5th (j) *Spanish Edition* Scott Foresman / K / 1st / 2nd / 3rd / 4th / 5th / *Other (specify) _____ / K / 1st / 2nd / 3rd / 4th / 5th /*

C-11-b What other reading/instructional curricula do you use with this program?	Accelerated Readers / America Reads / Las Estrellitas / Neuhaus / Phonographix / Reading Mastery / Distar / Read Naturally / Reading Recovery / Saxon Phonics / Scottish Rite / Slingerland / Successful for All / Lexia / Earobics / Edmark	*How long have you used this program?* *Years: / 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 /*
C-12 Describe how the service is funded including external money or grants.		OPEN-ENDED ANSWER
C-12-a. Do you receive external money or grants for this program?	*Yes No*	Where from? State / Federal / Private *If private, What organization?* _____
C-12-b How much total money do you receive from external money or grants?	$0 -$ 1,000 / $ 1,001 -$ 5,000 / $ 5,001 -$ 15,000 / $15,000 - $ 50,000 / above $50,000	

In-Service for Teachers

Let's move on to in-service.

D-1-a How do you determine your reading in-service/staff development needs?		
D-1 Describe how in-service/staff development in the area of reading has been provided for on your campus in the last two years.		
D-1-a What information did the in-services cover?	Description of in-service.	
D-1-b Who sponsored the in-services?	ESC / TEA / Publishers / within district expert / other	
D-1-c Who participated in the in-services?	___classroom teachers ___Dyslexia teachers ___SPED teachers ___Title 1 teachers ___Instructional aides ___Reading volunteers ___Other	Was attendance at the in-services optional or mandatory ___optional / mandatory ___optional / mandatory ___optional / mandatory ___optional / mandatory ___optional / mandatory ___optional / mandatory ___optional / mandatory
D-2 Describe the expectations of participants after the in-service.		OPEN-ENDED ANSWER
D-2-a Was there a follow-up meeting or training sessions after the initial in-service? D-2-b Was individual consultation provided to participants after the in-service?	Yes No If yes, Yes No If yes,	Describe follow-up. Describe consultation.

Early Intervention/Pre-referral Process

Now let's look at your informal intervention/pre-referral process.

E-1Describe the commonly used informal process taken to help a struggling reader in your school.		**OPEN-ENDED ANSWER**
E-1-a Is there a recommended procedure to follow for helping struggling readers for teachers?	Yes No If yes,	What is the procedure?
E-1-b Does your campus have a pre-referral team or specialist that the general education teacher consults when a student is having reading difficulties?		Yes No
E-2 Describe the pre-referral team.	OPEN-ENDED ANSWER	
E-2-a Is a member of the team bilingual?	Yes No	
E-3 Describe how your team operates.	OPEN-ENDED ANSWER	
E-3-a Does the team meet on a regularly scheduled basis?	Yes No	
E-3-b How often does the team meet?	As needed / Once a week / Once a month /	
E-3-c How do teachers or teams find the time to meet?		
E-3-d How many reading referrals does the team get on a monthly basis?	1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 11 / 12 / 13 / 14 / >15	
E-4 Describe a typical outcome at a team meeting.	OPEN-ENDED ANSWER	
E-4-a What recommendations or reading interventions are commonly suggested?	Describe	
E-4-b Does the team set goals for student?	Yes No	
E-4-c Does the team require monitoring of a student's progress?	Yes No If yes,	Describe student monitoring procedure.
E-4-d Does the team require documentation of a student's progress?	Yes No If yes,	What types of documentation are required by the team? formal assessment / informal assessment / daily work samples / Other _____

Coordination of Programs

Now, let's look at how you coordinate all these programs on this campus.

F-1 How are reading services (e.g., Title 1, SPED, dyslexia) aligned with the student's general education classroom program.			**OPEN-ENDED ANSWER**
F-1-b Do the general education teacher and the additional reading services teachers meet on a regular basis to discuss the academic goals of the students?			Yes No
F-1-c Is time designated for these meetings?	Yes No If yes,	**If yes,** How often do you have meetings across services? Weekly / Bi-monthly / Monthly / Each grading period / Each semester / Yearly	
F-1-d Who attends these meetings?	General education / Teacher / Title I teacher / SPED teacher / ESL teacher / Bilingual teacher / Reading specialist / Assistant principal / Principal / Parents / Other ___		Describe if needed.
F-1-e Are student goals set and monitored at these meetings?			Yes No
F-1-f Are decisions documented?			Yes No
F-2 Describe formal and informal parent involvement roles with their child's reading program.			OPEN-ENDED ANSWER

Thank you so much for taking the time to talk with us and share your knowledge about reading.

F-3 What should we have asked you that describes what makes your program so successful?	OPEN-ENDED ANSWER

Questionnaire Validity

We are also checking the validity of our instruments. Please help by answering the following questions.

G-2. Please tell me your reaction to the format and content of this questionnaire.	OPEN ENDED ANSWER
G-3. Is there a better or clearer way to ask any of the questions?	OPEN ENDED ANSWER
G-4. Would you add any questions to this questionnaire?	OPEN ENDED ANSWER
G-5. Would you delete any questions from this questionnaire?	OPEN ENDED ANSWER
G-6. Do you think the content of the questionnaire relates to all reading programs?	OPEN ENDED ANSWER

APPENDIX C

RESEARCH INQUIRIES FROM SURVEY

Inquiries to answer research question "What types of teaching methods are most often used for reading instruction within these successful elementary schools?"

Question from the teacher questionnaire:

A1. Describe a typical reading/language arts lesson in your program. Include any information that you think makes your school's reading program successful. (Specify)

A5. Does your reading program use a basal series? If yes, which one?

(Categorical: Harcourt Brace/Houghton Mifflin/Open Court/Scott Foresman/Scholastic/McGraw-Hill/Other Specify, Level: nominal)

A6. What parts of the basal series do you use? (Categorical: Basal reader/Selection assessments/Student profile books/Phonics & phonemic awareness practice booklet/Home books/Comprehensive assessments/Listening library audio cassettes/Stanford-9 test practice booklets/Terra Nova test practice booklets/ITBS test practice booklets/Spelling practice books/Grammar practice booklet/Extension worksheets/Reteach worksheets/Practice worksheets/Language support materials/Daily language activities/Graphic organizers/Teaching charts/Word building manipulative cards/Writing process transparencies/Other, Level: nominal) (Specify)

A7. Does your reading program use commercial supplemental instructional materials? (Specify)

A7a. Which commercial supplemental materials do you use? (Examples could be Accelerated Reader, Hermann, Lexia, Lindamood, Read Naturally, Saxon Phonics, Success for All, etc.) (Specify)

A8. What types of teaching methods do you use? (Categorical: Explicit, systematic (Direct)/ Independent, discovery (Indirect)/Cooperative (Percent of time using this method weekly); Level: nominal)

A9. What strategies do you use to emphasize/teach the following reading skills to students? Please include activities and materials used. We will be looking at each area individually regarding the teaching strategies/activities used for that area. (Categorical: Phonemic/phonological awareness skills/Word identification skills/Fluency skills/Vocabulary skills/Comprehension skills, Level: nominal)

A10. Describe how YOU teach struggling readers to become successful readers. (Specify)

A17. Do you integrate reading and writing lessons? (Categorical: Yes/No; Level: nominal)

A17a. Describe how you integrate reading and writing lessons. (Specify)

A18. Do you integrate reading and writing into content areas such as Science and Social Studies? (Categorical: Yes/No; Level: nominal)

A18a. Describe how you integrate reading and writing into content areas. (Specify)

A24. The purpose of this study is to find the very best teaching methods of the very best teachers. Can you think of any particularly innovative or successful teaching

techniques at your grade level(s) that we have not talked about that help struggling readers read better? (Specify)

B2. How often do teachers formally assess their students? (Categorical: Each grading period/Each semester/Yearly/Other Level: nominal) (Specify)

B3. How do teachers informally assess their students' reading progress? Examples would be teacher- or district-developed tests, informal reading inventories (IRIs), etc. List assessments and describe how assessment results are used (Categorical: Daily/Weekly/Other Level: nominal) (specify)

D1. What types of assessment do you use to identify a struggling reader? (Specify)

D2. What types of intervention strategies do you typically use to help a struggling reader? (Specify)

D9. Please describe any proactive approach to identifying struggling readers. (By proactive we mean how you identify those students who many times "slip through the cracks." What is your strategy for identifying them before they fall really far behind? (Specify)

D10. What procedures that have not been addressed in the above questions are used on your campus to identify and help struggling LEP readers? (Specify)

E2. Do teachers have scheduled meetings to discuss struggling readers? (Categorical: Yes/No; Level: nominal)

E4. Describe how parents are included in their child's reading program. (Specify)

F1. Do you have any additional information that hasn't been covered that might explain your school's success at teaching all students to read? (Specify)

Question from the administrator questionnaire

B25 The purpose of this study is to identify the best teaching methods to teach children to read. Can you think of any particularly successful teaching techniques used by your Kindergarten teachers that we have not covered in the above questions? How did you know these strategies are successful? (Specify)

C1. Do your teachers use a basal reading series? (Categorical: Yes/No; Level: nominal)

C2. If yes, which series is used for which grade level? (Categorical: Harcourt Brace/Houghton Mifflin/Macmillan/McGraw-Hill/Open Court/Scholastic/Scott Foresman/Other, Level: nominal)

C3. What other supplemental reading/instructional curricula do your teachers use with this program? Accelerated Reader, Distar, Read Naturally, Success for All, America Reads, Reading Mastery, Saxon Phonics, Other (Specify)

C4. The purpose of this study is to identify the best teaching methods to teach children to read. Can you think of any particularly successful teaching techniques used by your grade 1-5 teachers? How did you know they were successful? (Specify)

D1. What methods do most teachers generally use to determine students' instructional reading level? Published tests and IRIs? (Specify test names) or Informal methods such as: Direct observation of student learning Evaluation of student work samples, Within-curriculum assessments, other (Specify)

E2. What types of information did the in-services/staff developments cover? (Specify)

F5. In addition to standard, good pre-referral practices, is your school doing anything unusual or experimental? (Specify)

F9. What types of assistance does the team usually/generally provide to the teacher? (Specify)

G7. Describe formal and informal methods used at the school level to foster parental involvement with their own children's reading program. Methods might include newsletters, ARD committee meetings, conferences, volunteer in school, etc. (Specify)

G8. If your school does not have a HOSTS program, do you have a similar program for parents and other community members to help students with reading? (Specify)

K5. What else can you tell us that helps account for your campus reading program's being so successful? (Specify)

Inquiries to answer research question "How and to what extent do teachers collaborate with other professionals about instructional practices and interventions to foster success in struggling reading within successful elementary schools?"

Question from the teacher questionnaire:

A3. How are reading objectives determined for your reading program's lessons? (Specify)

A10. Describe how YOU teach struggling readers to become successful readers. (Specify)

A11. IF A GENERAL ED TEACHER: If an LEP (limited English proficient) student continues to struggle with reading after transitioning into your general ed

classroom, what support system does your school provide for this struggling reader? (Specify)

A24. The purpose of this study is to find the very best teaching methods of the very best teachers. Can you think of any particularly innovative or successful teaching techniques at your grade level(s) that we have not talked about that help struggling readers read better? (Specify)

C1. How is a student's instructional reading level identified? (Specify)

D2. What types of intervention strategies do you typically use to help a struggling reader? (Specify)

D3. Where do you and other teachers get ideas for these strategies? (Specify)

D4. Does your campus have a specialist whom the general ed/bilingual/ESL teachers consult when a student is having reading difficulties? (Describe the role of the specialist) (Categorical: Yes/No; Level: nominal)

D5. Does your campus have a pre-referral team? (Categorical: Yes/No; Level: nominal)

D6. Who is on the pre-referral team? (Specify)

D7. How often does the team meet? (Categorical: Once a week/as needed/ Once a month/Other, Level: nominal)

D9. Please describe any proactive approach to identifying struggling readers. (By proactive we mean how you identify those students who many times "slip through the cracks." What is your strategy for identifying them before they fall really far behind? (Specify)

D10. What procedures that have not been addressed in the above questions are used on your campus to identify and help struggling readers? (Specify)

E2. Do teachers have scheduled meetings to discuss struggling readers? (Categorical: Yes/No, Level: nominal)

E2a. How often do teachers schedule meetings to discuss program alignment of struggling readers? (Specify)

E3. At a "scheduled" meeting for a struggling reader, who would generally attend (Explain as needed)? (Grade level teacher/Title I teacher/Special Ed teacher/MRT/Parents/Other (specify)

E4. Describe how parents are included in their child's reading program. (Specify)

F1. Do you have any additional information that hasn't been covered that might explain your school's success at teaching all students to read? (Specify)

Question from the administrator questionnaire:

B25. The purpose of this study is to identify the best teaching methods to teach children to read. Can you think of any particularly successful teaching techniques used by your Kindergarten teachers that we have not covered in the above questions? How did you know these strategies are successful? (Specify)

E1. Considering the last four or five in-services/staff developments in the area of reading that have been provided for your campus, what method was most consistently used for determining the need for the in-services/staff developments, for example needs assessment, questionnaire, disaggregation of test data, district priority, etc. (Specify)

E5. Were there follow-up meetings and/or training sessions after the in-services/staff developments? (Categorical: Yes/No, Level: nominal) E6. Describe the follow-ups. (Specify)

F1. Does your campus have a specialist whom the general/bilingual/ESL teachers consult when a student is having reading difficulties? (Categorical: Yes/No, Level: nominal)

F2. Does your campus have a pre-referral team for general/bilingual/ESL teachers to consult when a student is having reading difficulties? (Categorical: Yes/No, Level: nominal)

F4. Who is on the pre-referral team? (Specify)

F5. In addition to standard, good pre-referral practices, is your school doing anything unusual or experimental? (Specify)

F9. What types of assistance does the team usually/generally provide to the teacher? (Specify)

F13. Please describe any other proactive approaches by your or anyone else in your school to identifying struggling readers. (By proactive we mean how you identify those students who many times “slip through the cracks.” What is your strategy for identifying them before they fall really far behind?) Do not include the pre-referral team. (Specify)

G1. Aside from brief, informal contacts, do general education teachers and other special reading service teachers collaborate in planned, structured meetings to discuss

the academic needs and progress of their students? (Categorical: Yes/No, Level: nominal)

G2. Who attends these collaborative meetings? (Specify)

G3. How often are these collaborative meetings held? (Specify)

G4. Are student goals set and monitored at these meetings? (Categorical: Yes/No, Level: nominal)

G5. Are decisions documented, such as through minutes, memoranda, etc.? (Categorical: Yes/No, Level: nominal)

G6. Is there anything else we should know about how your special reading services (e.g., Title I, SPED, dyslexia) are aligned with the student's general education classroom program? (Specify)

G7. Describe formal and informal methods used at the school level to foster parental involvement with their own children's reading program. Methods might include newsletters, ARD committee meetings, conferences, volunteer in school, etc. (Specify)

K5. What else can you tell us that helps account for your campus reading program's being so successful? (Specify)

APPENDIX D

PRE-IDENTIFIED THEMES-METHODS OF INSTRUCTION

A1 - Type of instruction

- Balanced approach
- Whole language approach
- Explicit systematic direct instruction
- Independent discovery
- Cooperative learning
- Direct instruction
- Individualized Instruction
- Data driven instruction-Disaggregate assessment data
- Parents as readers
- Volunteer readers
- Computer aided instruction

B1 - Instructional materials

- Specific reading program materials
- Parts of the basil series
- Manipulative
- Games
- Literature/books
- Teacher made materials
- Computer programs/lab
- Word lists
- Word wall
- Sight word list
- Basal materials
- Saxon Phonics
- Reading logs
- Special reading programs (e.g., *Success for All*,)
- Home reading time (Logged)
- Special campus activities/programs (Reading night back to school night, school open house, etc.)
- Provide books for home reading

C1 - Instructional arrangement

- Team teaching
- Inclusion (of all special groups)
- Extended day activities
- Extended year activities
- Variety of grouping arrangement for instruction
- Whole class discussions/reading
- One - on - One
- Ability grouping
- Group with different age peer

- Small group Instruction
- Cooperative learning groups

D1 - Instructional focus

- Fluency skills
- Vocabulary Word Families
- Phonics
- Phonemic awareness
- Phonological skills
- Spelling
- Grammar
- Word identification skills
- Oral reading individually or in groups
- Choral reading
- Round - Robin Reading
- Echo reading
- Students read to volunteers
- Timed readings
- Tutoring
- Comprehension Skills
- Summarizing
- Pre reading activities
- Regular assessment of learned skills
- Writing activities
- Identifying student needs
- Practice and repetition
- Integrate reading and writing lessons
- Journaling
- Sentence writing (use vocabulary words, copy, create, or correct sentences)
- Summarize story
- Integrating reading and writing into content areas
- Guided reading
- Modeling reading for students
- Monitor student progress

E1 - Instructional modifications

- Use of extended time
- Assignment modifications
- Individualized instruction
- Use of computer/technology programs
- Use of multiple modalities for learning
- Special pull out services
- Incentive programs (book it, Gift certificates, etc.)
- Continual monitoring of student progress
- Build on Strengths
- Test Taking Strategies

APPENDIX E

PRE-IDENTIFIED THEMES—COLLABORATION

A1 - Collaborate with whom

- Principal or other campus administrator
- Child support teams
- Special ed Teacher
- Parents
- ESL bilingual teacher
- Reading Specialist
- Master Reading Teacher
- Other specialist
- Counselor
- Reading Program Representative
- Title 1 teacher
- Mentor teacher
- Other teachers
- Regional ESC

B1 - Where do they collaborate

- During teacher training
- Workshops
- Professional development
- In - services
- Campus book studies
- Grade level meetings
- Personal research group
- Teacher education courses
- Grade level meetings
- Family level teacher meeting
- Subject level meetings
- Professional conferences
- Team meetings
- Staff development meetings

C1 - How often do teachers meet

- Meetings at grading periods
- Meet as needed
- Regular Meetings
- Weekly meetings
- Monthly Meetings
- Other Meeting Schedule

APPENDIX F

DISTRICT CLASSIFICATION SCALE

Districts are classified on a scale ranging from major urban to rural. Factors such as size, growth rates, student economic status, and proximity to urban areas are used to determine the appropriate group. The community types reported by TEA (2001c) are:

- Major Urban--The largest school districts in the state that serve the six metropolitan areas of Houston, Dallas, San Antonio, Fort Worth, Austin, and El Paso. Major urban districts are the districts with the greatest membership in counties with populations of 650,000 or more
- Major Suburban - Other school districts in and around the major urban areas. Generally speaking, major suburban districts are contiguous to major urban districts. If the suburban district is not contiguous, it must have a student population that is at least 15 percent of the size of the district designated as major urban.
- Other Central City - The major school districts in other large, but not major, Texas cities. Other central city districts are the largest districts in counties with populations between 100,000 and 650,000 and are not contiguous to any major urban districts.
- Other Central City Suburban - Other school districts in and around the other large, but not major, Texas cities. Generally speaking, other central city suburban districts are contiguous to other central city districts. If the suburban district is not

contiguous, it must have a student population that is at least 15 percent of the size of the district designated as central city.

- Independent Town - The largest school districts in counties with populations of 25,000 to 100,000, in some cases,
- Non-Metro: Fast Growing - School districts that are not in any of the above categories and that exhibit a five-year growth rate of at least 20 percent. These districts must have at least 300 students in membership.
- Non-Metro: Stable - School districts that are not in any of the above categories, yet have a number of students in membership that exceeds the state median.
- Rural - School districts that do not meet the criteria for placement into any of the above categories. These districts either have a growth rate less than 20 percent and the number of students in membership is between 300 and the state median, or the number of students in membership is less than 300

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Education

• Ph.D., Texas A&M University, 2005
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• B.S., Angelo State University, December, 1996.

Certifications

• **Provisional:** Generic Special Education K-12, Elementary Self contained, Math, and Science 1-8
• **Professional:** Texas Mid-Management
• **Standard:** Master Reading Teacher EC-12

Professional Experience

Fall 2003-Present Instructor
School of Education, University of Texas of the Permian Basin

2000-2003 Researcher Associate/Instructor
The Department of Educational Psychology, Texas A&M University

2001-2003 Instructor
Blinn College (Bryan Campus)

2000-2003 Research Assistant and Training Grant Manager
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2000 -2001 Special Education Teacher
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