

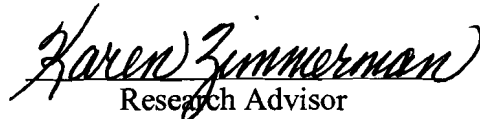
A DESCRIPTIVE STUDY OF READING STRATEGIES FOR SECONDARY
EDUCATION IN MINNESOTA PUBLIC SCHOOLS

by

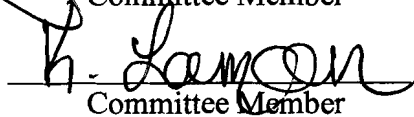
Amy Barr

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Research Advisor


Committee Member


Committee Member

The Graduate School

University of Wisconsin-Stout

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University of Wisconsin-Stout
Menomonie, WI**

Author: Barr, Amy D.

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ABSTRACT

Literacy is a growing concern for students in secondary education. With the demands placed on educators to meet the standards of No Child Left Behind (NCLB), it is important to have adequate researched-based interventions for students from elementary school and beyond.

The researcher designed a survey to evaluate literacy programs/interventions used in Minnesota public schools. The survey was sent out to 300 educators in Minnesota: reading and special education teachers, school psychologists and counselors. Fifty surveys were returned and 49 were used for data analysis, which resulted in a 16 percent return rate. The respondents were asked a variety of questions related to reading interventions/programs available for at-risk readers in their districts.

The results suggested that the majority of students in Minnesota struggle in the area of reading comprehension. Educators in Minnesota are predominately using state-wide/

district assessments to monitor the student's progress during the intervention process. Tutoring and other interventions are being used by Minnesota educators. Districts appear to support the need for effective reading interventions.

The study provides a snapshot of what is happening in Minnesota schools. Therefore, further research can be done on the effectiveness of individual interventions to meet the needs of these at-risk readers at the secondary level.

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The Graduate School
University of Wisconsin Stout

Menomonie, WI

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CHAPTER ONE

INTRODUCTION

Literacy demonstrates the ability to use skills needed to read and write, and affects an individual's life from childhood through adulthood. While the nation continues to focus primarily on early childhood literacy from kindergarten through third grade, a vast number of individuals are being left behind. "Literacy problems get worse as students advance through school and are exposed to progressively more complex concepts and courses" (US Department of Education, 2006a, p. vii). These individuals are students in our nation's middle schools and high schools. Students are entering our high schools performing significantly below average in reading, which in turn leads to students dropping out of high school and causes societal problems (US Department of Education, 2006a). Students with reading difficulties continue to struggle from elementary to secondary as material becomes more complex (US Department of Education, 2006a). It is important to recognize that illiteracy among youth and adults is a problem and programs need to be developed and implemented to assist youth in reading.

Society often believes that students learn the basics of reading in elementary school and build on those skills throughout middle school and high school. However, a vast amount of evidence supports problems with literacy in many aspects of our high schools. More than 5 million students do not read well enough to comprehend materials at the appropriate grade level (Hock & Deshler, 2003). Twenty-six percent of students with accommodations demonstrated below basic reading proficiency in grade 12 (National Center for Education Statistics, 2002). Students often pass under the radar for reading difficulty by faking their way through assignments (Alliance for Excellent

Education, 2004a). Many of these students drop-out or leave school without the necessary skills to obtain meaningful employment or manage daily finances (Fuchs & Fuchs, 2004).

Therefore, literacy issues continue to affect poor readers into adulthood.

According to Fuchs and Fuchs (2004), twenty-five percent of adults in the United States are illiterate. Adams (as cited in Fuchs and Fuchs, 2001) described illiterate individuals as representing 75% of the unemployed population, 33% of mothers receiving aid to families of dependent children, and 60% of incarcerated adults. Illiterate adults do not have the necessary skills to do such things as reading a note sent home from school or reading the directions on a medicine bottle (Riley, 1996). As illustrated, poor reading skills often cause difficulty into adulthood.

English Language Learners (ELL) also struggle in the area of reading. They come from a variety of different cultural and ethnic backgrounds. A majority of these students come from Latino backgrounds (Garcia & Godina, 2004) and from a variety of economic and educational backgrounds (Garcia & Godina, 2004). ELL students face many more challenges than their same-grade classmates. Not only are they learning to become proficient in English, but they are also being asked to meet achievement levels in reading, writing, and mathematics (Garcia & Godina, 2004). Between the ages of 16 and 24, the high school drop-out rate for Hispanic students in 2004 was 40 percent (Child Trends, 2003). By 2010, the rate of ELL students in our schools will have increased from 5 million to approximately 13.3 million ("Read 180", n.d.). Therefore, the need for effective interventions is evident for these students as well as for others.

Although evidence clearly illustrates the prevalence and problems associated with illiteracy, the United States legislation has not recognized the need for literacy programs

for middle school and high school students until recently. Legislation currently recognizes the need for early intervention for reading. The Reading First Initiative focuses on creating programs for children from kindergarten through third grade. This initiative was developed to provide assistance through federal funding to select effective reading programs and to provide various measures to assess for progress with the designated reading programs (International Reading Association, 2004). The Reading First initiative also requires that all state and local governments create programs to ensure every child is reading by the third grade (U.S. Department of Education, 2004). No Child Left Behind (NCLB) (2002) also states that all state and local governments will set high standards of achievement and be accountable for K-12 education.

Although not enough literacy funding is currently available for sixth grade students and beyond, several initiatives have recently been proposed that would include funding for middle and secondary education. Recently, Congress has introduced a bill called Pathways for All Students to Succeed (PASS). PASS focuses on three initiatives: Reading to Succeed, Pathways to Success, and Supporting Successful High Schools (Alliance for Excellence Education, 2004a). Reading to Succeed is a 1 billion dollar grant program that will use research to implement interventions for grades 6 to 12. The initiative uses a literacy coach who would be hired by school districts to assist teachers in developing literacy programs within the curriculum, assess for student progress, and assist with various testing procedures (Alliance for Excellent Education, 2004a).

The Graduation for All Act, H.R. 3085, is another bill that would provide 1 billion dollars in federal funding to place literacy coaches into schools to implement graduation plans for students at-risk for dropping out of high school (Alliance for Excellent

Education, 2004a). The literacy coaches will be placed in secondary education settings in which there are low graduation rates. Although programs are being implemented by United States legislation, schools should use programs/interventions that are currently available to assist those students having difficulty with reading.

Researchers and members of the education community have suggested peer tutoring as a method to assist students struggling with reading. Peer tutoring uses collaboration with peers and the teachers to facilitate reading in the classroom. Not only does peer tutoring decrease one on one time that a teacher often needs to spend with struggling students, but it allows students to learn from each other (Bender, 2002). Some tasks that a peer tutor can accomplish with students are the following: checking over assignments, listening to oral reading and giving corrective feedback, assisting with using references such as the dictionary, and monitoring group projects (Bender, 2002).

Two methods that have been researched and recommended by the United States Department of Education are Class Wide Peer Tutoring (CWPT) and Peer-Assisted Learning Strategies (PALS). CWPT and PALS allow students to take on two roles; they act as a tutor and tutee. Therefore, CWPT and PALS make it very difficult for students to be put down because of their dual roles and responsibilities as tutor and tutee (Fuchs, Fuchs, Mathes, & Martinez, 2002). According to Bender (2002), research reports positive results for the tutee as well as the tutor.

During CWPT, students are paired with partners and each pair is assigned to competing teams. Each student acts as a tutee and tutor; tutees earn points by responding correctly to activities given by the tutor. The team with the most points wins. Class Wide Peer Tutoring procedures have been used in a variety of settings such as “resource rooms,

self-contained LD, educable mentally retarded (EMR), and behaviorally disordered (BDI)” (Delquadri, Greenwood, Whorton, Carta, & Hall, 1986, p. 538).

Peer Assisted Learning Strategies (PALS) is a second form of peer tutoring. PALS is a modified version of CWPT; however, PALS may use an informal assessment measure such as curriculum based measurement (CBM) to measure a student’s progress (Fuchs & Fuchs, 2004). PALS involves three strategies: partner reading, paragraph shrinking, and prediction relay. Students are paired with classmates with one higher reader and one lower reader. Each pair completes 10-15 minute activities in the classroom (Fuchs & Fuchs, 2004). An example of a PALS activity is called paragraph shrinking. The tutor assists the tutee in determining the main idea of the passage. The tutee then restates the main idea (Archer, Gleason, & Vachon, 2003). The activity builds on fluency and reading comprehension. According to Bender (2002), “research on the effectiveness of PALS provides convincing support for its superiority compared to conventional general education instruction in reading and math” (p. 114).

CBM’s are criterion referenced assessments that have been researched and used over the past 30 years (Deno, 2003). They were developed in the 1970s and early 80s at the University of Minnesota Institute for Research on Learning Disabilities (Madelaine & Wheldall, 2004). They are informal assessment measures used to monitor a student’s progress in the areas of reading, mathematics, spelling, and writing. CBM’s are assessments that have been used for screening and pre-referral interventions (Deno, 2003). They also have been used to predict student performance on high stakes testing and help measure student progress at the secondary level (Deno, 2003). CBM’s can be

used along side of PALS to determine whether students are progressing at their desired reading level (Fuchs & Fuchs, 2004).

Purpose of the Study

The purpose of this study is to evaluate literacy programs/interventions used in Minnesota public schools for at-risk readers. This study asked a random sample of reading teachers, special education teachers, school psychologists, and school counselors several questions in a survey format regarding available reading interventions for middle school and high school students. These individuals were asked about types of reading interventions/programs available for at-risk readers in their districts. They were asked to discuss the length of the reading programs/interventions, the selection process for choosing students for literacy programs, progress monitoring, district support for materials, areas in reading in which students at the secondary level struggle the most, and the perceived importance for more effective reading interventions. The study gives educators information regarding the importance and the frequency of interventions at the secondary level. It also provides a picture of what is happening in Minnesota schools. Therefore, further research can focus on the effectiveness of interventions used to meet the needs of these at-risk readers in our middle schools and high schools.

Research Questions

The research questions for this study were the following:

1. What types of reading interventions are being used by educators in Minnesota schools at the secondary level?
2. What type of support and materials are being provided for educators in Minnesota at the school district level?

3. What types of progress monitoring is being used in Minnesota schools?
4. What is the percentage of students referred on to special education after a reading intervention?
5. What area of reading is most difficult for at-risk readers?
6. What percent of at-risk readers drop-out before graduating from high school?

Definition of Terms

Literacy: "an individual's ability to read, write, speak in English, compute and solve problems at levels of proficiency necessary to function on the job, in the family of the individual and in society" ("Relationship between literacy," 2004, ¶ 2).

No Child Left Behind (NCLB) (2002): act passed in 2002 that redefines what the federal governments role is for K-12 education.

Reading Fluency: the ability to read quickly, accurately, and with appropriate expression (Alliance for Excellent Education, 2004b).

Reading Comprehension: understanding the context in written text (Alliance for Excellent Education, 2004b).

Vocabulary: understanding the definition of words (Alliance for Excellent Education, 2004b).

Public School: provides most students with appropriate education with funds provided predominately by the public (Hoffman, 2003).

Free and/or Reduced Lunch Eligibility: identifies schools in which students are eligible to receive funds/reduced meals under the National School Lunch Act (Hoffman, 2003).

English Language Learners (ELL): students in the education system who receive language assistance/programming (Hoffman, 2003).

National Assessment of Educational Progress (NAEP) reading achievement levels (2005):

(a) Basic: indicates some mastery of skills at grade level

(b) Proficient: indicates competency and the skills needed to gain knowledge in varying subject matter

(c) Advanced: indicates performance that excels above others

Assumptions

The assumptions of this study are that the survey instrument is a reliable and valid instrument. Each participant interpreted each question as the researcher had designed them. Each participant answered each question to the best of his or her ability and knowledge about his/her school district.

Limitations

Because the researcher designed the survey instrument, the survey has questionable technical adequacy because the validity and reliability were not tested. However, it is assumed that the instrument is valid and reliable. Also, due to researcher error, some questions may have been misinterpreted by the participants. Each participant may have not answered each question as the researcher had designed. For example, question 4 on the survey asked if students were reading At Grade level twice. Some respondents may have interpreted the question as Below Grade level, At Grade Level, and some may not have responded at all to the question due to error in the question design by the researcher.

CHAPTER TWO

REVIEW OF THE LITERATURE

Introduction

This chapter will discuss the importance of continued literacy development for secondary education. The discussion will include information on the current legislation for reading with the No Child Left Behind Act (2002), the research on the effectiveness of continued reading instruction, criteria needed for an effective adolescent literacy program, peer tutoring models such as Peer Assisted Learning Strategies (PALS), Read 180, Reading Mastery, and other interventions used by school districts in Minnesota. The students included in the discussion were students who were considered at-risk readers.

No Child Left Behind Act (NCLB)

The No Child Left Behind Act (NCLB), a reauthorization of the Elementary and Secondary Education Act (ESEA) of 1965 was signed into law by President George W. Bush in 2002 (No Child Left Behind, 2002). The program was designed to accomplish four ideas for the future of education. First, states must be accountable for the yearly progress of reading and mathematics for students. States will be accountable through reading and math assessments that will be conducted annually for grades 3 through 12. Second, the NCLB will allow for increased flexibility for state and local elementary and secondary education programs such as Innovative Programs and Improving Teacher Quality State Grants (No Child Left Behind, 2002).

Third, NCLB allows for the use of research based-educational practices. Reading First and Early Reading First are two reading programs currently implemented in NCLB; they are designed to eliminate reading deficits. Reading First was designed to improve

reading instruction for kindergarten through 3rd grade (NCLB, 2002). Early Reading First was designed to create early childhood centers for children birth through pre-kindergarten to focus on language development and reading skills (NCLB, 2002). Recent legislation has begun to see the need for programs in secondary education. Another program that would benefit students in secondary education has been proposed; it is entitled Striving Readers. Striving Readers is a proposed program that would offer \$100 million in grants to develop, implement, and evaluate reading interventions for middle and high school students who are performing at “below basic” (“Focus on No Child Left Behind,” 2004, ¶ 5) proficiency levels. It is designed for schools eligible for Title 1 services who are not meeting Annual Yearly Progress (AYP) goals as well as for schools with a high proportionate number of students reading below grade level (U.S Department of Education, 2006b). The students reading below grade level are at-risk for dropping out of school (NCLB, 2002). Finally, parents will be allowed more choices with their child’s education. For example, if the child is not meeting the state standards, the parent has the choice to move the child from a public state school to a private school.

Although Striving Readers has been proposed for NCLB to increase the assistance for middle and high schools, a problem arises: there is a lack of information of proven programs for secondary education. The program would be funded under the Elementary and Secondary Act (ESEA) Section 1502 where intervention would be assessed to determine effectiveness and implement programs into the school (NCLB, 2002). In the meantime, research needs to be conducted and evaluated to assist educators to have successful intervention programs for students in secondary education.

Backgrounds of Struggling Adolescent Readers

It is important to understand that struggling readers come from all types of backgrounds. They come from high socioeconomic status to low socioeconomic status homes. They may be new immigrants to the United States or have little background in the English language. However, it is important to recognize the vast range of reading difficulties between these students.

In a report studying the 2005 national reading assessments scores for 8th graders, Black and Hispanic students, as well as students qualifying for free/reduced lunch, performed significantly below their White peers. Perie, Grigg, and Donahue (2005) reported that 52% of Black 8th grade students and 56% of Hispanic 8th grade students were reading “At” or “Above Basic” proficiency level compared to 82% of White students who were reading at the same level. Perie et al. (2005) also reported that 57% of 8th grade students who were eligible for free/reduced priced lunch were reading “At” or “Above Basic” reading levels compared to 87% of 8th grade students who are not eligible (2005).

Results were similar for 12th grade students. However, the gap was smaller. Grigg, Daane, Jin, and Campbell (2003) reported that 54% of 12th grade Black students and 61% of Hispanic students were reading “At” or “Above Basic” proficiency compared to 79% of White 12th grade students. According to a report from the National Association of State Boards of Education (NASBE) (2005), 9th grade students who attend school in urban and low socioeconomic settings often read approximately three years below grade level.

Importance of Reading for Educational Achievement

According to the Reading First of the NCLB (2002), reading can be defined as the following:

a complex system of deriving meaning from print that requires all of the following: (a) the skills and knowledge to understand how phonemes, or speech sounds, are connected to print; (b) the ability to decode unfamiliar words; (c) the ability to read fluently; (d) sufficient background information and vocabulary to foster reading comprehension; (e) the development of appropriate active strategies to construct meaning from print; and (f) the development and maintenance of a motivation to read (“Relationship between Literacy,” 2004, ¶ 1).

According to Stanovich and Cunningham (2003), children who read more have greater vocabulary and better cognitive skills. “Even students with limited reading and comprehension skills will build vocabulary and thinking skills through reading” (Stanovich & Cunningham, 2003, p. 2). However, it may not be that easy for struggling readers to have the motivation to begin to read more and read for enjoyment.

The problem confounds as Stanovich and Cunningham (1986) described the phenomena of the “rich-get-richer,” or “Mathew Effect” (p. 381). If a child reads more, the more vocabulary and meaning of words are gained; therefore, the child can read more accurately and comprehend the material (Stanovich & Cunningham, 1986). However, struggling readers have the opposite effect. Struggling readers read less frequently and without enjoyment; therefore, the student develops weaker vocabulary and reading ability is hindered (Stanovich & Cunningham, 1986). This achievement gap increases. Not only do struggling readers lack motivation and ability for reading, they often lack the

environments conducive to becoming better readers. Often these students come from lower socioeconomic backgrounds and are “often exposed to inferior ability composition in the schools that they attend” (Stanovich & Cunningham, 1986, p. 383).

To further illustrate the relationship between reading and academic achievement, the skills necessary to comprehend materials within secondary text will be discussed. For struggling secondary readers, decoding, fluency, and vocabulary continue to be a problem. Because of inefficiency or a lack of these skills, many struggling readers are reading between 2nd and 5th grade levels (Archer et al., 2003).

First, struggling secondary readers often lack efficient decoding skills. They are able to decode one-syllable words; however, multi-syllable words become increasingly more difficult. (Archer et al., 2003). Most of these students lack adequate decoding skills and the confidence to read the unrecognizable word. With inefficient decoding skills, they also have difficulty gaining knowledge of the word through surrounding contextual clues, which could assist in understanding necessary vocabulary (Saenz & Fuchs, 2002).

Understanding complex words is crucial for understanding the material, and if the words can not be read, the material becomes unlearned (Archer et al., 2003). Phonemic awareness assists students with the decoding of words and increases reading comprehension. Decoding a word accurately allows for “effective word reading” (National Reading Panel, 2000, p. 2-5).

Another aspect that affects reading comprehension is fluency. Fluency requires efficient word recognition so the reader can gain meaning from the text with little conscious effort. Reading is an automatic cognitive process (National Reading Panel, 2000). Fluency affects reading comprehension because the student does not have to

consciously interpret every word. Students who lack reading fluency fail to extract meaning from previously read materials (National Reading Panel, 2000).

Vocabulary is third component that affects reading comprehension for secondary students. According to the National Reading Panel (2000), as a student reads, the words become part of the reading vocabulary. The reader begins to decode the unfamiliar words that were read into speech. After decoding, the word is entered into the reader's oral vocabulary. However, when the word is not in the student's oral vocabulary, the student will not understand the words that are presented in the text. "Reading vocabulary is crucial to the comprehension process of a skilled reader" (National Reading Panel, 2000, p.4-3).

Due to the lack of reading comprehension, Archer et al. (2003), describe some of the consequences of struggling readers:

1. They often struggle with coursework.
2. They have an increased chance of dropping out of high school.
3. There are a decreased number of job opportunities that would provide support for themselves and their families.
4. There is an increased chance of having social/emotional problems into adulthood.
5. There is a decreased chance of continuing with post-secondary education.

Without adequate and efficient reading skills, struggling secondary readers face many consequences that will affect their lives into adulthood. Programs need to be implemented while they are in high school to enable these struggling students to improve their skills and improve their chances for future success.

Vast Range of Reading Differences in Students

An important thing to consider when discussing the need for interventions for middle and high school students is the range of differences in reading skills (Biancarosa & Snow, 2004). Some students are able to read fluently but are unable to comprehend what they read. Others are able to read accurately and fluently to allow for comprehension; however, they may lack reading comprehension strategies (2004). Other middle and high school students lack English language skills and have learning disabilities. These all compound into the vast range of differences which elicit more difficulty with finding appropriate interventions for these students.

Criteria for Successful Literacy Program

Because a proportionate number of students in middle and secondary education continue to struggle with basic reading skills such as decoding, fluency, comprehension, and vocabulary, schools must develop literacy programs that continue to teach these skills. Some strategies to assist with the basic skills will be addressed. Motivation for reading will also be discussed within this section.

In order to get students to read and enjoy reading, motivation is the first component for a successful literacy program. Motivation becomes a key factor for students in middle school and high school (Alliance for Excellent Education, 2004b). The focus for motivation should be that the students want to read instead of being forced to read. Teachers and educators should focus on the idea that reading is a useful way to gain knowledge for things that may interest the student. Another factor that may increase motivation is a cooperative learning environment. Such an environment promotes an atmosphere for discussion and socialization with classmates (2004b).

Other components that have shown to be effective are guided reading and repeated reading strategies. Repeated reading and guided reading are two tasks that may facilitate increased fluency for students. Repeated reading is an activity in which a student reads and rereads increasingly difficult passages (Alliance for Excellent Education, 2004b). Because many students who struggle with reading feel embarrassed in front of classmates, repeated reading allows for the student to practice and gain skills so they are more confident to read in front of their peers (Bender, 2002). Research also suggests that students with learning disabilities improve oral reading fluency with repeated reading activities (Bender, 2002). During guided reading, students are given feedback for errors (Alliance for Excellent Education, 2004b).

A third component for an effective program is addressing vocabulary expansion. Strategies should be designed that assist the student in identifying new words and using surrounding context to understand unfamiliar words (Alliance for Excellent Education, 2004b). Some helpful strategies designed to increase the use of vocabulary are the following: repetition of unknown words and computer technology and/or assistive software programs. Reading assistive software has become available for students to use. Kurzweil Educational System is one software program that involves scanning text material and inputting it into a computer. The computer then assists struggling readers by speaking the material to the student at their desired speed (Kurzweil Education Systems, Inc., 2006). It assists the student in reading the material; which in turn assists the student with understanding the material. Students can also look up unfamiliar vocabulary words while using this particular program.

Along with vocabulary, reading comprehension strategies should be addressed within the school's literacy program. Classroom activities should be designed to provide an atmosphere so students can develop questions and formulate answers about what they have read in class. Not only does this allow for class facilitation, but it also allows students to become engaged in what they have read (Alliance for Excellent Education, 2004b). Also, teacher modeling assists the reader in the needed strategies for reading comprehension (National Reading Panel, 2000). Mnemonics, prior knowledge, and multiple strategies are some other activities useful for assisting students with problems in reading comprehension (2000).

Finally, phonemic awareness should be addressed in literacy programs. Direct instruction is a strategy often used to establish phonemic awareness (Alliance for Excellent Education, 2004b). Some other components that should be included are instruction on sounds and their spelling such as "ph," "ing," and "ion" (p. 3) as well as practice words and their meanings in context (2004b). Because research has shown that these skills are difficult for adolescent readers, it is important to address these components within the development of literacy programs in schools.

Models of Peer-Tutoring

Peer tutoring is a measure that allows for collaboration and socialization between students. It allows for teachers to have more classroom time and students can learn from teaching other students (Bender, 2002). Peer tutoring programs are designed for students to tutor one another through a tutor /teacher relationship. Often the roles are reversed in a strategy called reverse-role tutoring. Although little research had been found with reverse-role tutoring, students have illustrated benefits: the student's abilities rather than

disabilities are highlighted (Tournaki & Criscitiello, 2003). Peer tutoring allows for immediate corrective feedback allowing for an increase in understanding from the text (Juel, 1996).

Peer tutoring strategies also focus on self-esteem. Tournaki and Criscitiello (2003) suggest that peer tutoring strategies allow students with disabilities to take on a more positive role, in which they are seen as mentors to other struggling students. In a study by Juel (1996), the tutors stated that they felt an increase in motivation and self-esteem compared to their non-tutoring classmates.

Several models of peer tutoring exist within educational settings such as Cooperative Integrated Reading and Composition (CIRC), Reciprocal Teaching, Class Wide Peer Tutoring (CWPT), and Peer-Assisted Learning Strategies (PALS). CIRC is a reading program developed for 2nd through 6th grade students (“Educational Programs that Work,” 1995). It has similar components to other peer tutoring models such as reading strategies involving group reading by ability level, direct instruction, and the integration of reading materials from curriculum used in the classroom (1995). To implement CIRC, training and purchasing of materials are required annually (1995). Several studies have indicated that this program is successful in the elementary grades (1995).

Reciprocal teaching is another peer tutoring strategy that uses rehearsal strategies. Students and teachers use rehearsal to increase comprehension using the following components: questioning, clarifying, predicting, and summarizing (Slater & Horstman, 2002). Reciprocal teaching begins by having the teachers model the strategies to their students in which the students then use these strategies and are coached by their teachers

for subsequent material (Fuchs & Fuchs, 2001). However, CIRC and Reciprocal teaching have several drawbacks that make it very impractical for the classroom teacher (Fuchs & Fuchs, 2001). First, CIRC requires teachers to invest a lot of extra time into the program, and it requires schools to make and use their own materials (2001). With all of the demands placed on teachers, the strategies should be easy for teachers to use. Secondly, reciprocal teaching is also difficult for teachers to master (2001).

Because of the drawbacks discussed previously as well as the need for efficient interventions, Class Wide Peer Tutoring (CWPT) and Peer Assisted Learning Strategies (PALS) have been viewed as more teacher friendly. CWPT and PALS have been developed as peer tutoring strategies that require less work from the teachers, more facilitation among students, and are easier to understand and teach than CIRC and reciprocal teaching. CWPT was developed at the Juniper Gardens Children's project as a "result of efforts to improve instruction for minority, disadvantaged, and/or learning disabled children" (Delquadri et al., 1986, p. 535). This program was designed to improve the following procedures and principles in the classroom: opportunity to respond, academic skills, and behavioral procedures (Delquadri et al., 1986). The procedure takes approximately 40 minutes and occurs three times per week (Fuchs & Fuchs, 2001). Because CWPT allows for the tutee and tutor to switch roles, each student is allotted 10 minutes for reading. Each student asks comprehension questions about the text (2001). The rest of the time is used for posting points and feedback.

Teams are chosen based on random assignment and teams are reassigned weekly so each student gets an opportunity to be on the "winning" team at some point (Delquadri et al, 1986). However, it is important to make sure that the pairs are socially compatible

(Fulk & King, 2001). Points are awarded by the following criteria: two points for the tutee for reading the sentence without errors and one point for the tutor when correcting the error. Because the tutoring system evolves around a team atmosphere, CWPT allows for students to learn from each other; it also strengthens social interaction among peers (2001).

Academic skills to determine a student's progress is another contributing component to CWPT. Some skills that CWPT have been used with are the following: textual oral reading, responding to comprehension questions, using workbooks for reading practice, practicing spelling with spelling lists, and practicing vocabulary (Delquadri et al., 1986). CWPT is most effective when using materials from the school district and skills involved with the school's curriculum, which is cost effective for school districts (Delquadri et al, 1986).

In a study by Dequadri et al., (1986) a 4th grade student was given very little opportunity to respond within the allocated class time. Because he was only reading at first grade level, he was subsequently placed in a classroom for students with Learning Disabilities (LD). Within a short period of time in the LD classroom (2 weeks), he went from reading 15.2 words per minute to reading 47.5 words per minute. He was soon reading at the 5th grade level (1986). CWPT allows adequate time for each student because he or she is reading with peers and an allocated amount of time is set aside for reading. CWPT has been shown to increase a student's academic success from 20% to 70% (Delquadri et al., 1986). CWPT also results in increased on-task behaviors, and students work with problems consistently and rapidly (Bender, 2002).

Research has indicated positive results for CWPT. Students using CWPT in middle school and high school have had continued success on achievement tests such as the California Test of Basic Skills in reading, math, and language (Greenwood & Delquadri, 1995). The strategy keeps students “actively on task” (Fulk & King, 2001, p. 51). CWPT also has been shown to be beneficial to low achieving students because it improves self-esteem and social skills (2001).

A second model of peer tutoring is Peer-Assisted Learning Strategies (PALS). PALS was developed by faculty at Peabody College at Vanderbilt University in cooperation with personnel from the Nashville-Davidson Metropolitan School District in 1991 (“Peer-Assisted Learning,” n.d.). It was initially designed for Title I students, students with Specific Learning Disabilities (SLD), and students performing at various grade levels for grades 2-6 (“Peer-Assisted Learning,” n.d.). PALS has since extended its use for kindergarten and high school students. PALS is a modification of CWPT, and includes phonological awareness, decoding, and comprehension strategies (Fuchs, Fuchs, & Burish, 2000).

PALS use activities similar to CWPT such as tutor/tutee roles and reversal, corrective feedback, and interaction with peers (Fuchs et al., 2000). There are also some differences between the two strategies in relation to materials used. Teachers are often trained through workshops to teach their students how to use activities in PALS as well as maintain the activity during the sessions (Fuchs, Fuchs, Mathes, & Simmons, 1997). Teachers also use a manual for the specified grade that contains scripted materials to implement the PALS program into their reading curriculum. The sessions are approximately 35 minutes in length (Fuchs et al, 2000). Because PALS are designed to

act as a curriculum substitute rather than as an extension for other reading activities, teachers do not need to set aside extra time to implement PALS into the classroom (Fuchs et al., 2000).

The procedures for PALS are similar to CWPT in which students are divided into pairs; however, the activities of reading and comprehension are expanded into the following areas: partner reading, paragraph shrinking, and prediction relay. Each student is paired by selecting a higher achieving student with a lower achieving student in reading (Fuchs et al., 2000). The higher performing student always begins as a tutor in order to serve as a mentor for the lower performing student (2000). As with CWPT, the pairs are divided into two teams. Students gain points for their team by performing the activities correctly and demonstrating adequate behavior during tutoring (2000). At the end of the week, team performances are summed and the team with the most points is given the title of “winner” for that week. For grades 2-6, teams and pairs are reselected every 4 weeks; however, due to motivation differences, high school PALS’s teams are reselected more frequently and will be discussed further (Fuchs et al., 2000).

The activities of PALS are partner reading, paragraph shrinking, and prediction relay. Partner reading is the first activity for PALS. The tutor, the higher performing student, begins oral reading for the first 5 minutes; the roles are then reversed with the tutor providing corrective feedback (Fulk & King, 2001). Paragraph shrinking focuses on improving reading comprehension. Students state who, what, and where for the reading and describe the main idea in 10 words or less (2001). The final activity for PALS is prediction relay. Prediction relay allows for the students to look at what is happening next in the reading and then predict (Fulk & King, 2001).

The PALS extensions for high school have similar activities and procedures as the 2-6 grade PALS; however, they differ in three ways. As mentioned earlier, teams and pairs are reselected more frequently (i.e., every day, rather than every 4 weeks for grade 2-6 PALS) (Fuchs & Fuchs, 2001). Also, high school scheduling may influence student selection. According to Fuchs and Fuchs (2001), high school students tend to enjoy interaction with various peers rather than interaction with the same peers. The second difference is that motivational systems appear to be different for older students. Therefore, the motivations became more tangible. The student's rewards often lead to gaining such things as compact discs and fast food coupons (2001). Finally, high school PALS differ from 2-6 grade PALS in the reading materials used. The reading materials are more directed towards such things as life skills, social relationships, and employment opportunities (Fuchs & Fuchs, 2001). "PALS have been awarded best practice status by the U.S. Department of Education Program Effectiveness Panel" (p. 5).

Other Reading Intervention Programs

Besides peer tutoring strategies, there are other reading intervention strategies that schools use to assist students at the secondary level to become more efficient readers. Reading Mastery and Read 180 (reading assistive software) have also been used in schools for students reading below their grade level. Read 180 is a computer based program designed to assist struggling readers in grades 4 to 12 (Alvermann & Rush, 2004). It was created through research at Vanderbilt University by Ted Hasselbring, and through collaboration with the Orange County Literacy Project in Florida, and Scholastic (Alvermann & Rush, 2004).

Papalewis (2004) found the following:

Read 180 utilizes an intensive reading intervention approach to

(a) deliver individualized, adjusted reading instruction to improve students' reading skills; (b) provide practice and application of skills in multiple contexts to increase reading achievement, and (c) support and motivate students as they progress toward becoming lifelong readers and learning. (p.26-27)

Reading Mastery is a reading program that uses content and instructional materials (Schieffer, Marchand-Martella, Simonsen, Waldron-Soler, 2002). It is based on a four components of reading: comprehension, decoding, phonemic awareness, and fluency (Schieffer et al., 2002). It also has a component associated with study skills (2002). It uses a level system for different types of readers using basal reading materials. The higher levels focus on vocabulary and reading comprehension. It also focuses on expressive language skills during the pre-teaching stages of reading (2002). Research supports that students do better with the use of direct instruction programs and Reading Mastery in general education, special education, as well as with remedial readers (2002).

Several other programs used in Minnesota by educators are the following: remedial reading classes, after school tutoring programs, self-questioning strategies, goal setting, individual teacher reading strategies, and Title 1 services. Self-Questioning strategies use motivation techniques, in which students make predictions and make up questions to better comprehend the story ("Self Questioning Strategy," 2004). Title I services are provided through state funding for interventions in reading and mathematics based on low socioeconomic status of students (U.S. Department of Education, 2006). Therefore, funding depends on the number of students qualifying for free and reduced lunch, and some schools may not qualify for available funding.

Monitoring Techniques

In order to evaluate if a program is increasing reading skills, school districts have used various assessment tools. As previously mentioned, curriculum based measurement (CBM) has been used by school districts to assess for reading progress. CBM's are composed of 1-3 minute fluency tests that measure the following: the number of words read, the number of accurately completed math computations, and the number of correctly spelled and written words (Shinn & Hubbard, 1992). According to Shinn and Hubbard (1992), CBM's use the following three strategies to determine if students are making progress in reading: goals without local norms, dynamic aim, and instructional placements. The goals without norms focus on the student's perceived expectation of how the student will perform for the entire year. The dynamic aim focuses on the student's rate of progress in which there is a goal line and the rate is adjusted depending on the student's progress. The instructional placements focus on annual goal levels for curriculum (Shinn & Hubbard, 1992).

The current study indicated the following assessments were used in the state of Minnesota: Measures of Academic Progress (MAP) testing, collection of records, observations from teachers, and Title 1 support. Measures of Academic Progress (MAP) testing are state-wide achievement tests that measure a student's progress over time (Northwest Evaluation Association (NWEA), 2006).

Summary

This chapter described several important factors regarding reading in today's schools. No Child Left Behind was implemented in 2001 and identifies the importance for all students to achieve. However, the majority of legislation has focused on

curriculum and learning in the elementary schools. Besides having little support and funding from legislation, students also have a vast range of differences in their socioeconomic, ethnic, and cultural backgrounds. These factors often impede student achievement.

Research has suggested that motivation is a key factor in improving a student's performance in reading. Several programs that have been effective with secondary level students include guided reading and paired reading, specifically PALS and CWPT. Assistive software, tutoring programs, and remedial reading programs have also been used. However, the effectiveness of these interventions in our schools is questionable. Therefore, educators in Minnesota were asked about the effectiveness and support for reading interventions in their school districts.

CHAPTER THREE: METHODOLOGY

Introduction

This chapter discussed the methodology for the study. It included a description of the subjects, sample selection of the subjects, development of the survey instrument, and procedures for data collection and data analysis.

Description of Subjects

The subjects chosen for this study were educators at the secondary level in Minnesota during May and June of 2006. The educators included reading/English teachers, special education teachers, school counselors, and school psychologists in the Minnesota public school system. Three hundred surveys were sent statewide to educators in Minnesota. Fifty surveys were returned to the examiner; 49 surveys were used for data analysis. This resulted in a return rate of 16 percent.

Sample Selection

Each of the 300 subjects was sent a survey through the mail. Each subject was also given a letter describing the purpose of the study. The introduction letter is included in Appendix A. The participants were also given a consent form to participate. The consent was anonymous and voluntary. The consent form is included in Appendix B. Each subject was also given the option to email and/or mail their name and address to the researcher to be entered into a raffle drawing for a \$65.00 gift card for completing the survey.

The names of the subjects and their school districts were selected at random by the Minnesota Department of Education mailing service. The individuals were chosen

from a list of licensed educators including reading teachers, special education teachers, school counselors, and school psychologists at the secondary level who work with students in grades 7 through 12. After the list of subjects and schools in Minnesota were selected at random, each subject was selected by searching each district's website for psychologists, school counselors, special education teachers, and reading teachers who are involved with reading programs. After the subject list was compiled by the investigator, 300 subjects were selected at random.

Each subject was given 8 days to complete the survey and send return it to the researcher in a self-addressed stamped envelope. A follow-up reminder was sent to those participants who had not responded to the first request.

Instrumentation

In order to assess the need for reading interventions at the secondary level, the researcher developed a survey asking educators in Minnesota about the types of interventions used by their districts, the effectiveness of their reading programs/ interventions, the support for reading programs in their schools, as well as demographic information. The survey instrument consisted of 25 questions. Because the instrument was developed by the researcher for the purpose of this study, tests of reliability and validity were not completed prior to dissemination.

The survey was composed of several different groups of questions. The beginning of the survey asked questions about the educator such as his or her district role and the grades that they worked with on a daily basis. The second group of questions asked about available reading programs for at-risk readers, the percentage of below, at, and above grade level readers, and the process for screening for at-risk readers.

The third group of questions asked about the duration of interventions, including the days and weeks for the interventions as well as progress monitoring. The fourth group of questions focused on district support, the areas of reading in which at-risk readers struggle (such as reading fluency, decoding/phonemic awareness, vocabulary, and reading comprehension), and the perceived importance of effective reading programs in the district.

The subjects were asked to rate the items on three different Likert scales. The first question (question 14) asked the subjects to rate their beliefs about district support on a Likert scale of 1 (not supportive) to 5 (very supportive). The second set of questions, questions 15-18, asked the participants to rate those areas struggling readers demonstrate the most difficulty on a Likert scale of 1 (not difficult) to 5 (very difficult). Finally, the last set of questions, questions 19 and 20, asked each subject to rate their own and their district's level of support on a Likert scale of 1 (not important) to 5 (very important).

The final draft of the survey was reviewed by the researcher's graduate thesis advisor and by the IRB committee through University of Wisconsin-Stout research services. A copy of the finalized survey is included in Appendix B.

Data Collection

The researcher asked the subjects to participate in the survey through a random mailing to Minnesota educators in the public school system. Each subject received a cover letter explaining the purpose of the study and an informed consent to participate. The informed consent discussed confidentiality, voluntary and anonymous participation, contact information of the researcher and advisor, and an option to be chosen for a raffle

drawing. Participants who were interested in being chosen for the raffle drawing were asked to email and/or mail their contact information.

Data Analysis

The data was analyzed through SPSS system at the University of Wisconsin-Stout. Descriptive analyses were completed for each item. Frequencies, percentages, means, and standard deviations were used for data analyses.

The survey items were divided into four sections. The first section resulted in demographic descriptive data in the following categories: the role of the participant, the grades taught, the ethnicity of students, the district's student population at secondary level, the number of special education students, the number of students using the free/reduced lunch program, and the district's graduation rates. The second section produced frequency and percentage data about the available reading programs, the referral procedures for at-risk readers, and the reading performance of students. The third section addressed the duration of reading interventions (i.e., the minutes, days, and weeks of the interventions) and the methods used for progress monitoring using percentages and frequencies. Finally, the fourth section assessed the most difficult areas for at-risk readers, district support for materials, and perceived importance for more effective/data-based reading interventions using means and standard deviations.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter focused on the results of the survey sent out to educators throughout the state of Minnesota. The results describe the types of interventions used by educators in Minnesota as well as how the interventions were monitored. The results also focus on the reading areas in which students at the secondary level struggle the most, and on the support provided at the district level by public schools in Minnesota. This chapter will report the demographics followed by the types of interventions used, and the areas of reading difficulty. The chapter will conclude with the estimated level of support for materials and reading curricula used at the secondary level. A discussion of the results concludes this chapter.

Demographic Information

The demographic information was included in this study to gain an understanding of the types of educators working with at-risk readers in our middle schools and high schools. It also provided a description for the kinds of students referred for reading interventions. The researcher asked the participants to report on the following: their role in the district, the grade levels frequently taught and/or engaged in, an estimate of the student population, the ethnicity of the students, an estimate of the special education population, the number of students receiving free/ reduced lunch, and the graduation/drop-out rates at their district. There were a total of 300 surveys sent to educators throughout the public school system in the state of Minnesota. The surveys were sent to educators during May and June of 2006. Out of the 300 surveys sent to

educators, 50 were returned; 49 were used for data analysis. This resulted in a 16 percent return rate.

District Role

The types of participants selected for the survey included English/language arts teachers, reading teachers, special education teachers, school psychologists, and guidance counselors. The majority of respondents were English/language arts teachers. Of the 49 participants, 20 were English/language arts teachers (40.8%); 10 reading teachers (20.4%), 16 special education teachers (32.7%), 4 school psychologists (8.2%), and 6 guidance counselors (12.2%). Of the 49 participants, 3 indicated having other and/or multiple roles in the district (6.1%), including a social studies teacher, a science teacher, as well as those with specialist licenses (see Table 1).

Table 1

District Role

District Role	Frequency	Percentage
English/ Language Arts Teacher	20	40.8
Reading Teacher	10	20.4
Special Education Teacher	16	32.7
School Psychologist	4	8.2
Guidance Counselor	6	12.2
Other	3	6.1

Grade Levels of Students Worked with on a Daily/Consistent Schedule

Most secondary students in Minnesota public schools are in grades 7th through 12th. Therefore, participants were asked to report the grades taught and/or worked with on a consistent schedule. Of the 49 participants, the majority reported working with 7th, 8th, and 9th graders. Of the 49 participants, 26 stated they were working with 8th graders (53.1%), and 24 reported working with 7th and 9th graders (49.0%). The rest of the participants indicated the following: 17 reported working with 10th graders (34.7%), 15 with 12th graders (30.6%), and 14 with 11th graders (28.6%).

Table 2

Grades of Students

Grade Level	Frequency	Percentage
7 th grade	24	49
8 th grade	26	53.1
9 th grade	24	49
10 th grade	17	34.7
11 th grade	14	28.6
12 th grade	15	30.6

Population of Students at Secondary Level

The population of students at the middle school and/or high school level was reported by participants. Most of the participants reported having over 500 students in their middle schools and/or high schools. Out of the 48 of 49 participants who answered

this question, 16 reported having a population of over 3500 students (33.3%). Others reported the following: 14 with 500-1500 students (29.2%), 10 with 1500-2500 students (20.8%), and 4 with under 500 students (8.3%), and 4 with 2500-3500 students (8.3 %).

Table 3

Population of Students at Secondary Level

Population	Frequency	Percentage
Under 500	4	8.3
500-1500	14	29.2
1500-2500	10	20.8
2500-3500	4	8.3
Over 3500	16	33.3

Ethnicity of Students

The participants for the study were also asked to report the top two student ethnicities of the student population in their district. As shown in Table 4, White/Caucasian students were reported as the most prevalent population in the surveyed school districts in Minnesota. The second most prevalent population was Hispanic students. Out of the 49 participants who answered this question, 47 reported the district as having predominately White/Caucasian students (95.9%), 21 stated Hispanic students (42.9%), 14 responded African American/Black students (28.6%), 11 reported Asian American/Pacific Islander students (22.4%), 3 indicated Native American students (6.1%), and 1 reported having an other population, which was written by the respondent as Hmong students (2.0 %).

Table 4

Ethnicity of Students

Ethnicity	Frequency	Percentage
Caucasian/White	27	95.9
Hispanic	21	42.9
African/American/ Black	14	28.6
Asian American or Pacific Islander	11	22.4
Native American	3	6.1
Other (Hmong)	1	2

Percent of Students Receiving Free/Reduced Lunch

In order to gain some perspective of the socioeconomic status of the students, the participants were asked to estimate the number of students who received free/reduced lunch. The highest percentage reported by participants, as shown in Table 5, was 16 to 25 percent of their middle and/or high school students received free/reduced lunch. Out of the 44 of 49 participants who responded to this question, 14 stated 16-25 percent of their students received free/reduced lunch (31.8%). Eight participants reported 5-15 percent, and 8 other participants responded 35-50 percent (18.2%), 6 respondents indicated 26-35 of their student population , and 6 other reported more than 50 percent of their students (13.6%) received free and reduced lunch services. Finally, 2 participants stated less than 5 percent of their students received free/reduced lunch (4.5%).

Table 5

Percent of Students Receiving Free/Reduced Lunch

Students Receiving Free/Reduced Lunch	Frequency	Percentage
Less than 5 percent	2	4.5
5-15 percent	8	18.2
16-25 percent	14	31.8
26-35 percent	6	13.6
35-50 percent	8	18.2
More than 50 percent	6	13.6

Percent of Students in Special Education

To gain perspective of the number of students in special education, the participants were asked to estimate the number of students receiving special education in their district. As shown in Table 6, most of the participants responded to having between 9 and 15 percent of their population in special education. Out of the 44 of 49 participants who responded to this question, 19 reported that 12-15 percent of their student population receives special education services (43.2%). Of the other participants who responded, 17 indicated 9-11 percent (38.6%), 4 reported 15-25 percent (9.1%), 2 stated less than 8 percent (4.5%), and 2 reported more than 25 percent (4.5 %).

Table 6

Percent of Students in Special Education

Students in Special Education	Frequency	Percentage
Less than 8 percent	2	4.5
9-11 percent	17	38.6
12-15 percent	19	43.2
15-25 percent	4	9.1
More than 25 percent	2	4.5

Item Analysis

Section two of this chapter focuses on types of reading interventions available in Minnesota school districts and the selection process for at-risk readers into these programs. First, the types of interventions will be reported. The respondents were asked to choose from the following strategies: Peer Assisted Learning Strategies (PALS), tutoring programs, Class Wide Peer Tutoring (CWPT), reading assistive software, Read 180, Reading Mastery, and other. Most participants reported having other programs than those listed.

Out of 46 of 49 who answered this question, 26 responded to having other reading intervention programs (56.5%). These programs included the following: Comprehensive Assessment for Reading Strategies (C.A.R.S), summer reading classes, remedial reading classes, University of Kansas Word Identification Strategy and Self-Questioning Strategy, Read Naturally, Rewards, skills tutors, language classes, special education reading, school within a school, teacher instruction, Title 1, paraprofessionals/teacher

aides, inclusion, reading resource room, support reading classes. Of the other programs listed, 19 reported using tutoring programs (41.3%), 14 responded using Read 180 (30.4%), 9 stated using reading assistive software (19.6%), 7 reported using Peer Assisted Learning Strategies (15.2%), 6 indicated using Reading Mastery (SRA) (13.0%), and 1 stated using Class Wide Peer Tutoring (CWPT) (2.2%).

Table 7

Types of Reading Programs Available

Types of Reading Programs	Frequency	Percentage
Peer Assisted Learning Strategies	7	15.2
Tutoring Programs	19	41.3
Class Wide Peer Tutoring (CWPT)	1	2.2
Reading Assistive Software	9	19.6
Read 180	14	30.4
Reading Mastery (SRA)	6	13.0
Other	26	56.5

Participants were also asked to identify in which at-risk readers are selected for reading programs/interventions. The majority of students were selected through statewide/district wide achievement testing. Of the 49 respondents, 41 responded to using achievement testing to select these at-risk readers (83.7%). Of the other strategies the participants were asked to select from, 39 stated using teacher/guidance counselor referrals (79.6%), 29 reported using recommendations by student support/child study

teams (59.2%), 24 responded using parent/guardian referrals (49.0%), 4 indicated other strategies (8.2%) such as student records, assessments given by reading specialists, MAP testing, and STAR testing. Four responded to not having reading programs available in his/her district (8.2%). Several participants responded to more than one selection process (see Table 8).

Table 8

Selection of At-Risk Readers for Reading Programs/Interventions

Selection	Frequency	Percentage
Referred by teacher/guidance counselor	39	79.6
Referred by parent/guardian	24	49.0
Recommended by Student Support Team/Child Study Team	29	59.2
Identified through statewide/district wide achievement testing	41	83.7
Do not have reading programs for At-risk readers	4	8.2
Other	4	8.2

Section three of this chapter focuses on the reading levels of middle school and high school students in Minnesota schools. This section covers items 4 through 7. Participants of the survey were asked to estimate the percentage of students reading Below Grade Level, At Grade Level, and Above Grade Level in their district. Participants were also given the option to indicate that they had no data. Of the students reading at Below Grade Level, most respondents reported within the range of responses from less

than 10 percent to more than 50 percent. Of the 17 out of 49 respondents who answered this question, 5 indicated that 20 percent of his/her students were reading Below Grade Level (29.4%), 4 reported 30 percent (23.5%), 4 others reported greater than 50 percent of his/her students (23.5%), 3 stated less than 10 percent (17.6%), and 1 indicated 40 percent (5.9 %).

Of the students reading At Grade Level, most respondents who answered this question indicated that over half of his or her students were reading At Grade Level. Of the 37 out of 49 respondents who replied to this question, 11 stated that greater than 50 percent of his or her students were reading At Grade Level (29.7%), 9 indicated less than 10 percent (24.3%), 8 reported 30 percent (21.6%), 7 stated 40 percent (18.9%), and 2 indicated 20 percent of his/her students were reading At Grade Level (5.4%).

Of the students reading Above Grade Level, respondents indicated that most of his/her students were not reading above grade level. Of the 27 out of 49 who responded to this question, 12 reported that less than 10 percent of his/her students were reading Above Grade Level (44.4%), 9 stated 20 percent (33.3%), 4 reported 30 percent (14.8%), and 2 indicated greater than 50 percent of his/her students read Above Grade Level (7.4%). Seven participants reported that data was not available to him/her (14.3%). The frequency and percentages are listed in Table 9.

Table 9

Item Analysis: Reading Grade Level

Item	Less than 10%	20%	30%	40%	Greater than 50%
4. Below Grade Level	17.6%	29.4%	23.5%	5.9%	23.5%
5. At Grade Level	24.3%	5.4%	21.6%	18.9%	29.7%
6. Above Grade Level	44.4%	33.3%	14.8%	---	7.4%
7. Data is not available	14.3%	---	---	---	---

Section four of this chapter focuses on several aspects of reading interventions for at-risk readers. This section centers on the duration of the interventions including; (a) the number of days, minutes, and weeks the interventions were used; (b) the frequency of students referred for special education after interventions were used, and (c) the assessments used for progress monitoring. As shown in Table 10, the majority of respondents indicated that the reading intervention programs were used 5 days per week, over 200 minutes per week, and lasted between 24-36 weeks. Of the 44 out of 49 who responded to the days per week, 39 stated that the interventions were used 5 days per week (88.6%). Two reported using the interventions 2 days (4.5%), 2 indicated 3 days (4.5%), and 1 stated using interventions 1 time per week (2.3%).

Table 10

Days Per Week of Intervention

Days per Week	Frequency	Percentage
1 day/week	1	2.3
2 days/week	2	4.5
3 days/week	2	4.5
5 days/week	39	88.6

Of the 43 out of 49 who responded to the number of minutes devoted to reading interventions per week, 29 reported spending over 200 minutes per week (67.4%), 6 stated 100 minutes (14.0%), 5 indicated 50 minutes (11.6%), 2 stated 200 minutes (4.7%), and 1 reported 150 minutes per week (2.3%) (see Table 11).

Table 11

Total Minutes Per Week of Intervention

Total Minutes per Week	Frequency	Percentage
50 minutes/week	5	11.6
100 minutes/week	6	14.0
150 minutes/week	1	2.3
200 minutes/week	2	4.7
Over 200 minutes week	29	67.4

Of the 35 out of 49 who responded to the number of weeks of implementation, 19 reported using the intervention for 24-36 weeks (54.3%), 8 stated 9-18 weeks (22.9%), 6 indicated 18-24 weeks (17.1%), and 2 responded to 4-8 weeks (5.7%).

Table 12

Number of Weeks for Implementation of Interventions

Number of Weeks	Frequency	Percentage
4-8 weeks	2	5.7
9-18 weeks	8	22.9
18-24 weeks	6	17.1
24-36 weeks	19	54.3

Participants also were asked to estimate the number of students referred to special education after the interventions had been implemented. More than half of the respondents indicated that less than 5 percent of those at-risk students were referred to special education after the reading intervention. Of the 38 out of 49 who responded to this question, 20 stated that less than 5 of his/her students were referred on to special education (52.6%), 7 reported 20 percent (18.4%), 6 indicated 5 percent (15.8%), 3 stated 10 percent (7.9%), and 2 reported 15 percent of his/her students (5.3%). The frequencies and percentages are listed in Table 13.

Table 13

Percent of At-Risk Readers Referred on to Special Education

Percent Referred to Special Education	Frequency	Percentage
Less than 5	20	52.6
5 percent	6	15.8
10 percent	3	7.9
15 percent	2	5.3
20 percent	7	18.4

Participants were asked to indicate the methods for monitoring the progress of these at-risk readers while the interventions were implemented. Over half of the participants stated using statewide and district assessments. Of the 44 out of 49 who responded, 30 reported using statewide/district assessments (68.2%), 26 stated standardized testing (59.1%), 22 indicated curriculum-based measurement (CBM) (50.0%), 14 reported district curriculum assessments (31.8%), 5 indicated other (11.4%), and 3 reported they did not use monitoring procedures (6.8%). Some individuals who indicated no monitoring was being done also commented that progress monitoring needed to be done. Some of the other monitoring procedures included: (a) Read 180, (b) collection of records, (c) MAP testing, and (d) teacher observations and recommendations. Some indicated they were not aware of any procedures due to the newness of the program in his/her district (see Table 14).

Table 14

Progress Monitoring of At-Risk Readers

Progress Monitoring	Frequency	Percentage
No monitoring	3	6.8
Curriculum-Based Measurement (CBM)	22	50.0
District Curriculum Assessments	14	31.8
Standardized Testing	26	59.1
Statewide/District Assessments	30	68.2
Other	5	11.4

Section five of this chapter focused on an item analysis in three separate areas. The first area centered on how the respondents felt about the level of support from their district regarding supplying appropriate materials for reading programs/interventions at the secondary level. The second area concentrated on the areas of reading perceived as the most difficult for secondary students. The last area asked the respondents to rate individual support and perceived district support regarding the need for more effective/data-based reading programs in their district.

The first analysis was question 14 of the survey. Question 14 of the survey was asked with a Likert scale of 1 (not supportive) to 5 (very supportive). Of the 49 respondents, the majority indicated that his/her district was supportive. Ten reported his/her district was very supportive regarding supplying materials for the reading

programs (20.4 %). Fifteen indicated their district was supportive (30.6%), 12 stated their district was somewhat supportive (24.5%), 9 reported little support (18.4%), and 3 indicated no support (6.1%).

Table 15

Item Analysis: Beliefs about Support of District

Rating	Frequency	Percentage
Not Supportive	3	6.1
Little Support	9	18.4
Somewhat Supportive	12	24.5
Supportive	15	30.6
Very Supportive	10	20.4

The second analysis included questions 19 and 20 of the survey. These items were rated on a Likert scale of 1 (not important) to 5 (very important). Participants were asked to rate how much importance their district places on the need for more effective interventions (item 19) and how the individual participant rates the importance of effective interventions.

The mean scores and standard deviations for each item are listed in Table 16. The mean scores for the two survey items were very similar. The participants rated their level of importance higher than their district's level of importance. However, both means indicated that the respondents and the district believed effective reading programs were important. The mean for the district was 3.73, and the individual mean was 4.39.

Table 16

Item Analysis: Need for More Effective/Data Based Reading Programs

Item	Rank	Mean	Standard Deviation
19	2	2	.953
20	1	4.39	.975

Respondents were also asked to rate the areas of reading by difficulty level. Questions 15 to 18 were asked on a Likert scale of 1(not difficult) to 5 (very difficult). Reading comprehension was rated as the most difficult area for students at the secondary level. Reading comprehension was followed by vocabulary, reading fluency, and decoding/phonemic awareness. The mean and standard deviations are reported in Table 17. Means ranged from 4.49 to 3.66. Although these areas were rated from highest mean to lowest, all areas were reported to be somewhat difficult for at-risk readers at the secondary level.

Table 17

Item Analysis: Areas Struggling Readers Demonstrate Difficulty

Item	Rank	Mean	Standard Deviation
15. Reading Fluency	3	3.91	.960
16. Decoding/ Phonemic Awareness	4	3.66	.888
17. Vocabulary	2	4.39	.722
18. Reading Comprehension	1	4.49	.631

The final section of this chapter addressed the drop-out rate for at-risk readers before completing high school. It was estimated between 5 and 10 percent of students drop-out before completing high school. Of the 34 out of 49 respondents who completed this question, 11 responded less than 5 percent (32.4%), 10 indicated 10 percent (29.4%), 7 reported more than 20 percent (20.6%), 5 responded to 15 percent (14.7%), and 1 stated 20 percent (2.9%).

Table 18

Drop-out Rate of At-Risk Readers

Drop-out Rate	Frequency	Percentage
Less than 5 percent	11	32.4
10 percent	10	29.4
15 percent	5	14.7
20 percent	1	2.9
More than 20 percent	7	20.6

Discussion

The purpose of this survey was to evaluate the types of reading interventions used by educators in Minnesota's public schools. The respondents consisted of school psychologists, school counselors, reading teachers, and special education teachers. Most respondents were reading teachers at the middle school level.

The majority of the respondents worked with/taught students in a district where the majority of the students were of White/Caucasian and Hispanic ethnicity. The estimate of the percentage of students reading at grade level was slightly higher than

those reading below grade level. As discussed in chapter two, research indicates Hispanic students read at a significantly lower rate than their White counterparts. Therefore, the results to this survey did not directly correspond with the national reading results. Perie et al. (2005) reported that 52 percent of Black 8th grade students and 56 percent of Hispanic 8th students were reading at or above basic proficiency level compared to 82 percent of White students who were reading at the same level. Most participants indicated that their students were reading at-grade level or below. Very few responded that their students were reading above grade level.

It is important to take into account that a small amount of Minnesota educators were questioned. Also, other ethnic populations were not adequately represented to make generalizations regarding the reading level of readers at the secondary level in Minnesota's public schools.

Many educators in Minnesota described using similar interventions/at-risk reading programs. These interventions consisted of using remedial reading programs, tutoring programs, Title 1 services, resource rooms, ect. However, the interventions were not specifically tied to those interventions that have been found to be researched-based such as the peer tutoring models. Although many types of tutoring programs are being used in Minnesota schools, the information gathered about these interventions was not detailed enough to suggest that most schools are using the research-based interventions suggested by Fuchs and Fuchs and other experts in the field of reading. Further, only one educator indicated using the CWPT. Research has suggested positive results for CWPT. Students using CWPT in middle school and high school have had continued success on achievement tests such as the California Test of Basic Skills in reading, math, and

language (Greenwood & Delquadri, 1995). The CWPT strategy keeps students “actively on task” (Fulk & King, 2001, p. 51). Further, research suggests serving as a tutor is beneficial to low achieving students because it improves self-esteem and social skills (2001).

The survey also focused on the essential components of reading in which many students at the secondary level struggle: decoding, fluency, comprehension, and vocabulary. The survey data indicated that although all the areas of reading are important for at-risk readers, reading comprehension was rated as most difficult for students at the secondary level. This data concurs with the research reported in chapter two.

For struggling secondary readers, decoding, fluency, vocabulary, and reading continue to be a problem. Because of inefficiency or a lack of skills, struggling readers often read between the 2nd and 5th grade levels (Archer et. al, 2003). Reading comprehension often appears to be the most difficult skill to master for most students in middle schools and high schools; however, reading comprehension difficulties are often due to poor vocabulary, fluency, and decoding skills. Fluency assists reading comprehension because a fluent student does not have to consciously interpret every word. Students who lack reading fluency often fail to extract meaning from previously read materials (National Reading Panel, 2000). “Reading vocabulary is crucial to the comprehension process of a skilled reader” (p. 4-3).

When students are identified as at-risk for reading, research has indicated that there is an increase in the high school drop-out rate. According to Child Trends (2004), the high school drop-out rate for Hispanic students in 2004 was 40 percent for students between the ages of 16 and 24. When educators in Minnesota were asked this question,

the majority indicated that 5 to 10 percent of at-risk readers drop-out of high school. However, the majority of respondents, approximately 95 percent, indicated that the student population was predominately White/Caucasian. The second highest population was Hispanic. However, there was not a specific number to indicate the proportion of White students to Hispanic students that drop-out.

In order to evaluate the effectiveness of the intervention, respondents were asked about methods used for progress monitoring. According to the Minnesota educators who completed the survey, the majority used state-district wide assessments to monitor the progress of students, and about half used CBM's to evaluate the progress of their students.

Most of the information collected from these findings concurred with data found in chapter two. However, the number of respondents was small. Also, some questions may have been interpreted incorrectly by the participants.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This chapter focused on the summary of data collected from surveys completed by educators in Minnesota's public schools. It also focused on implications for educators in the area of reading. This chapter concludes with recommendations for future reading intervention studies at the secondary level.

Summary

The purpose of this study was to evaluate the use of literacy programs/interventions used in Minnesota's public schools for at-risk readers. The subjects chosen for this study were educators at the secondary level in Minnesota during May and June of 2006. The educators included reading/English teachers, special education teachers, school counselors, and school psychologists in Minnesota's public school system.

Three hundred surveys were sent randomly to 300 educators in Minnesota statewide. Fifty surveys were returned to the examiner; forty-nine surveys were used for the data analysis. This resulted in a return rate of 16 percent. The survey instrument was designed by the researcher and approved through the IRB process at the University of Wisconsin-Stout. It consisted of 25 questions. Because the instrument was developed by the researcher for the purpose of this study, tests of reliability and validity were not completed prior to dissemination.

Section one centered on the demographics of the respondents as well as the demographics of the students he/she worked with on a consistent basis. Most of the

respondents were English/Language Arts teachers (40.8%). The second largest respondent group were special education teachers (32.7%). The majority of participants worked with/taught students in 7th (49%), 8th (53%), and 9th (49%) grades. Several of the respondents worked in districts with a student population of over 3500 students (33.3%). The majority of these students were reported to be white/Caucasian (95%) and Hispanic (42%). Most of the subjects stated that 16 to 25 percent of his/her students received free and reduced lunch (31.8%). Several participants indicated that 12 to 15 percent of his/her students receive special education services (43.2%).

The types of reading interventions available in Minnesota school districts and the selection process for determining at-risk readers was discussed. Participants were asked to circle several interventions if applicable to his/her district. However, the majority responded to having other interventions (56.5%) such as Title 1 services, remedial reading programs, special education reading, language classes, support reading, and resource room. Approximately, 41.3 percent of the subjects described using some type of tutoring program. When referring struggling readers for interventions/programming, most indicated using statewide/district wide assessments (83.7%) and teacher/guidance counselor referral (79.6%).

Section three concentrated on the varying reading levels of students in Minnesota public schools. Respondents were asked to rate the number of students reading below-grade level, at-grade level, and above grade level. Most participants indicated their students were reading at-grade level or below. Very few responded that their students were reading above grade level.

In order to evaluate the interventions used in Minnesota, the duration of the interventions was also illustrated in the survey. The duration included the days per week, total minutes per week, and the interval of weeks. The types of progress monitoring procedures used to assess for intervention effectiveness were also addressed. The majority of interventions were conducted 5 days a week (88.6%), 200 minutes a week (67.4%), and for 24 to 36 weeks (38.8%). Most of the respondents reported using district/state wide assessments (68.2%), standardized assessments (59.1%), and CBM (50%).

The final section focused on an item analysis of three areas using a Likert scale format. The first area (question 14) asked the respondents about district support regarding materials for reading programs. Of the 49 respondents, the majority indicated that his/her district was supportive. Ten reported his/her district being very supportive regarding supplying materials for the reading programs (20.4 %), 15 indicated being supportive (30.6%), 12 stated being somewhat supportive (24.5%),

The second area (questions 19 and 20) asked the respondents to rate the individual's level of support and perceptions of district support regarding the need for more effective/data-based reading programs in his/her district. The mean scores for the two survey items were very similar. The participants rated his/her individual importance higher than his/her district importance. The mean for the district was 3.73, and the individual mean was 4.39 on a five point scale.

The third area (questions 15 to 18) focused on areas of reading perceived as the most difficult for secondary students. The areas of reading included: reading comprehension, vocabulary, reading fluency, and decoding/phonemic awareness.

Reading comprehension was rated as the most difficult area for students at the secondary level. Reading comprehension was followed by vocabulary, reading fluency, and decoding/phonemic awareness. Means ranged from 4.49 to 3.66 on the five-point scale. Although these areas were rated from highest mean to lowest, all areas appear to be somewhat difficult for students at the secondary level.

Conclusions

The following section will review the research questions and discuss the data obtained from educators in Minnesota schools. The research questions focused on the types of interventions used in Minnesota schools, progress monitoring procedures, number of students referred for special education, areas of reading difficulty for the students at the secondary level, the support from the district for materials and its emphasis on assisting at-risk readers, and the high school drop-out rate.

Research Questions

What types of reading interventions are being used by educators in Minnesota schools at the secondary level?

Although participants were asked about the use of several research based interventions such as PALS and CWPT, the majority of respondents described using other types of interventions in their districts. These programs included the following: Comprehensive Assessment for Reading Strategies (C.A.R.S), summer reading classes, remedial reading classes, University of Kansas Word Identification Strategy and Self-Questioning Strategy, Read Naturally, Rewards, skills tutors, language classes, special education reading, school within a school, teacher instruction, Title 1, paraprofessionals/teacher aides, inclusion, reading resource room, reading support

classes. However, it is important to recognize that several of the subjects endorsed several of the interventions. Approximately 41 percent of the respondents stated that they used the Read 180 program.

What type of support and materials are being provided for educators in Minnesota at the school district level?

Because most funding has been used for resources at the elementary level, the respondents were asked about their district support regarding supplying materials for at-risk reading programs at the secondary level. The majority of participants indicated that his/her districts were supportive and supplied adequate materials for their programming.

What types of progress monitoring is being used in Minnesota schools?

As discussed in the review of literature, curriculum-based measurement (CBM) is a research-based tool for monitoring student progress in reading, writing, and mathematics. However, the majority of respondents indicated the use of district/state assessments for monitoring the progress of his/her students. Approximately, 68 percent of respondents used these assessments. Curriculum-based measurement was also used approximately 50 percent of the time. Only about 6 percent indicated that he/she did not use any monitoring tools for student progress.

After interventions are used, what is the percentage of students referred on to special education?

As illustrated, most interventions were used 5 days a week for 24 to 36 weeks. After these interventions were implemented, approximately half of the participants surveyed indicated that less than 5 percent of his/her students were referred to special

education. A few indicated that some of the students were already in a special education program.

What area of reading is most difficult for at-risk readers?

As described in the review of literature, readers struggle with the following areas: vocabulary, comprehension, fluency, and word decoding skills. Research has indicated that the majority of students at the secondary level struggle in the all of these areas to a varying degree. However, reading comprehension is an area that is affected by fluency, decoding skills, and vocabulary. Similar to many previous studies, participants in the survey also indicated that reading comprehension was the area in which at-risk readers struggle the most. Reading comprehension was followed by vocabulary, fluency, and decoding skills.

What percent of at-risk readers drop-out before graduating high school?

In the introduction, research indicated that struggling readers' drop-out from high school at a higher rate than their higher performing peers. The respondents from this survey reported less than 5 percent to more than 20 percent of their at-risk readers dropped out of high school. The variation may be due to differences in socioeconomic, cultural, and ethnic backgrounds of the students from region to region.

Recommendations for Further Research

Future research might focus on one type of intervention commonly used by educators in Minnesota, such as the Read 180 program or Reading Mastery. Therefore, educators may have a clearer picture of the effectiveness of these specific interventions. Due to its exploratory nature, this study was rather broad in its scope and was intended to

assess which programs were effective. Future research could include perceptions of teachers and students who use Read 180 or Reading Mastery.

Also, future researchers may choose a different time of the year to survey educators. The end of the school year may not be the most optimal time to obtain a satisfactory response rate. Researchers may also want to send surveys through email format for convenience to the participant which may result in a higher response rate.

In order to evaluate the reading proficiency level for students in Minnesota, the researcher may want to examine and compare the differences between White/Caucasian, Hispanic, and African Americans to determine differences in their reading level. The examiner may also want to compare those students who qualify and receive free and reduced lunch to those who do not receive assistance.

Finally, future researchers may want to compare the types of tools used for progress-monitoring in Minnesota schools. Because the majority of respondents surveyed used state-wide/district assessments, one might want to compare the effectiveness of using curriculum-based measurement versus state-wide/district assessments for instructional planning.

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APPENDIX A

April 24, 2006

Dear Educator in Minnesota:

Hello. My name is Amy Barr. I am a School Psychologist Intern in the Buffalo-Hanover-Montrose school district in Minnesota. I am in the process of completing my Educational Specialist Degree (Ed.S) at the University of Wisconsin-Stout and greatly need your assistance.

The state of Minnesota is making changes in identifying at-risk students. However, the future for many educators will be the need for Responsiveness to Intervention (RTI) and meeting the guidelines of No Child Left Behind (NCLB). However, many interventions in reading are available for elementary students, but are lacking at the secondary levels, which in turn often causes at-risk readers to struggle and eventually drop-out before completing high school. Therefore, we would like your feedback regarding interventions/reading programs at the secondary level in your district.

While your participation in this study is entirely voluntary, I would hope that you participate. If you do choose to participate, your responses will be treated with confidentiality. Your name will not be included on any documents.

However, if you choose not to participate, there are no adverse consequences to you. However, should you choose to participate and later wish to withdraw from the study, there is no way to identify your anonymous document after it has been submitted to the investigator.

Please answer the survey questions to the best of your knowledge. The survey will take you approximately 15 minutes to complete. **Please complete the survey by May 5, 2006.** If you choose to participate and would like to be entered in a raffle drawing, please email your name and address to barra@uwstout.edu. One winner will receive a \$65.00 gift certificate to Amazon.com.

Thank you for your help! Please feel free to contact me with any questions regarding this study. You may contact me by phone at (763) 244-0250 or by email at barra@uwstout.edu.

Sincerely,

Amy Barr, School Psychologist Intern
University of Wisconsin-Stout

APPENDIX B

READING INTERVENTIONS FOR SECONDARY STUDENTS SURVEY

Informed Consent:

By completing this survey, I agree to participate in the project entitled, "The Importance of Reading Interventions at the Secondary Level." I am giving my informed consent as a participant in this study. I understand the basic nature of the study and agree that any risks are potentially small. I also understand the potential benefits that might result from the completion of this survey. I am assured that my responses will be treated with confidentiality. I realize the right to refuse my participation at any time during the study.

This study has been reviewed and approved by The University of Wisconsin-Stout's Institutional Review Board (IRB). The IRB has determined that this study meets the ethical obligations required by federal law and University policies. If you have any questions or concerns regarding this study, please contact the research, Amy Barr, or her advisor, Karen Zimmerman. If you have any questions, concerns, or reports regarding your rights as a research subject, please contact the IRB Administrator.

Researcher: Amy Barr, (763) 244-0250, barra@uwstout.edu

Advisor: Karen Zimmerman, (715) 232-2530, zimmermank@uwstout.edu

IRB Administrator: Sue Foxwell, (715) 232-2477, foxwells@uwstout.edu

Director, Research Services

152 Vocational Rehabilitation Bldg.

UW-Stout, Menomonie, WI 54751

Please Circle All Responses that Apply.

1. What is your role in your district?
 - a. English/Language Arts Teacher
 - b. Reading Teacher
 - c. Special Education Teacher
 - d. School Psychologist
 - e. Guidance Counselor
 - f. Other (Please Specify) _____

If you circled f and do not work with at-risk readers, you may discontinue the survey at this time.

2. Please circle all of the grades that you work with on a daily/consistent basis.
 - a. 7th grade
 - b. 8th grade
 - c. 9th grade
 - d. 10th grade
 - e. 11th grade
 - f. 12th grade

3. What types of reading programs are available for at-risk readers at the secondary level in your district?
 - a. Peer Assisted Learning Strategies
 - b. Tutoring Programs
 - c. Class Wide Peer Tutoring (CWPT)
 - d. Reading Assistive Software (ex. Kurzweil)
 - e. Read 180
 - f. Reading Master (SRA)
 - g. Other (Please Specify) _____

Approximately, what percent of your students are reading at the following grade level. Please mark the approximate percentage for each question. Please circle the percent.

4. At Grade Level	Less than 10	20	30	40	Greater than 50
5. At grade level	Less than 10	20	30	40	Greater than 50
6. Above grade level	Less than 10	20	30	40	Greater than 50
7. Data is not available	Less than 10	20	30	40	Greater than 50

Please Circle All that Apply.

8. How are at-risk readers at the secondary level selected for reading programs/interventions?
- Referred by teacher/guidance counselor
 - Referred by parent/guardian
 - Recommended by Student Support Team/Child Study Team
 - Identified through statewide/district wide achievement testing
 - Do not have reading programs for at-risk readers
 - Other (Please Specify) _____

If you don't have any interventions available for at-risk readers, SKIP TO QUESTION 14.

9. If reading program/intervention is implemented, how many days per week is the intervention used?
- 1
 - 2
 - 3
 - 4
 - 5
10. How many total minutes per week is the intervention/reading program used?
- 50
 - 100
 - 150
 - 200
 - Over 200
11. How many weeks are reading programs/interventions implemented with these students?
- 4-8 weeks
 - 9-18 weeks
 - 18-24 weeks
 - 24-36 weeks
 - More than 8 weeks
12. In the past year, what percent of these at-risk readers at the secondary level is referred on to special education?
- Less than 5
 - 5
 - 10
 - 15
 - 20

13. How is the progress of these at-risk readers monitored over time? (Check All that Apply.)
- No monitoring
 - Curriculum Based Measurement
 - District Curriculum Assessments
 - Standardized Testing
 - Statewide/District Assessments
 - Other (Please Specify)_____

Please rate the following statement based upon your beliefs about support in your district. Rate each item on a scale of 1 to 5, with 1 meaning that your district is not supportive, and 5 meaning your district is very supportive.

1=Not Supportive, 2=Little Support, 3=Somewhat Supportive, 4=Supportive, and 5=Very Supportive

14. How supportive has your school district been with supplying appropriate materials for reading programs/interventions at the secondary level?

1 2 3 4 5

The following are areas in which struggling readers demonstrate difficulty. Rate each item on a scale of 1 to 5, with 1 meaning that it is not difficult, and 5 meaning it is very difficult for struggling readers.

1= not difficult, 2= little difficult, 3= somewhat difficult, 4= difficult, and 5= very difficult

- ___ Reading Fluency
- ___ Decoding/Phonemic Awareness
- ___ Vocabulary
- ___ Reading Comprehension

Please rate the following statements. Rate each item on a scale of 1 to 5, with 1 meaning that your district places no importance, and 5 meaning your district feels this is very important.

1=Not Important, 2=A little Important, 3=Some what Important, 4=Important, and 5=Very Important

19. How much importance does your district place on the need for more effective/data based reading programs in your district at the secondary level?

1 2 3 4 5

20. How would you rate the importance for more effective/data based reading programs at the secondary level?

1 2 3 4 5

21. Approximately, what percentage of at-risk readers drops out before completing high school?
- Less than 5
 - 10
 - 15
 - 20
 - More than 20

The following discuss demographics for your school district. Please answer the questions to the best of your knowledge.

22. What is the population of students at the secondary level (middle and/or high school) in your district?

- Under 500
- 500-1500
- 1500-2500
- 2500-3500
- Over 3500

23. Select the top two student populations in your district.

- African American/Black
- Native American
- Caucasian/White
- Asian American or Pacific Islander
- Hispanic
- Other (Please Specify) _____

24. What percent of student receive free/reduced lunch at the secondary level?

- Less than 5
- 5-15
- 16-25
- 26-35
- 35-50
- More than 50

25. What percent of your students in special education in your district at the secondary level?

- Less than 8
- 9-11
- 12-15
- 15-25
- More than 25