EFFECTS OF SILENT READING ON INTERMEDIATE STUDENTS’ READING GROWTH

by

Alison S. Rosseau

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF MASTER OF ARTS IN EDUCATION
AT NORTHERN MICHIGAN UNIVERSITY

April 26, 2012
Table of Contents

Abstract ................................................................................................................................4

Chapter I: Introduction .........................................................................................................5
  Statement of Problem ........................................................................................................5
  Purpose of Study .................................................................................................................6
  Research Question ..............................................................................................................6
  Theoretical Framework ......................................................................................................6
  Definition of Terms ............................................................................................................7

Chapter II: Review of Literature ..........................................................................................9
  Debates Among Researchers About Sustained Silent Reading .........................................9
    Purpose of Silent Reading .................................................................................................9
    National Reading Panel Findings ....................................................................................9
    National Reading Panel Disputes ..................................................................................10
  Implications on Reading and Motivation .............................................................................11
    Student Accountability ....................................................................................................12
    Surveys of Student Interests ............................................................................................13
    English Language Learners ..............................................................................................14
    Discussions After Silent Reading ....................................................................................15
  Implications on Fluency and Comprehension ....................................................................18
    Scaffolded Silent Reading ...............................................................................................18
    Silent Reading Outside of School ....................................................................................19
    Writing After Silent Reading ..........................................................................................20
Abstract

The purpose of this review of literature was to describe the effectiveness of sustained silent reading. Demands of No Child Left Behind, increases in mandated curriculum, and the National Reading Panel’s statement that silent reading is ineffective has created controversy. The literature review included experimental studies conducted in diverse schools among intermediate students. Researchers measured students’ reading attitudes, motivation, fluency, comprehension, and test scores. Results and conclusions indicated that silent reading is effective in increasing students’ reading attitudes. Researchers showed evidence that silent reading increases other areas of students’ reading achievement, particularly when silent reading is altered. Recommendations for improving the effectiveness of sustained silent reading include promoting student choice and text variety, conducting more research, and modifying the practice.
Chapter I: Introduction

Statement of Problem

Silent reading has been a familiar component of most reading programs for decades (Garan & DeVoogd, 2006). Researchers and literacy teachers once agreed that fostering students’ reading attitudes was a crucial step in creating strong readers (Yoon, 2002). In 2000, in an effort to determine if students that read a lot become good readers, or if good readers simply choose to read a lot, the National Reading Panel (NRP) researched effects of silent reading and concluded sustained silent reading (SSR) is not effective in promoting reading growth (National, 2000). Although the panel did not determine SSR as a defective practice, a clear definition of what makes a good reader could not be made, which ultimately led to the panel’s decision and the controversy now surrounding the common school practice (Reutzel, Fawson, & Smith, 2008).

Teachers facing increased pressure to meet goals of No Child Left Behind are questioning SSR and its effectiveness in classrooms. A number of teachers have begun teaching mandated reading curriculum focusing on small group instruction with leveled readers, leaving little time for reading for enjoyment. Other teachers still implementing SSR are now wondering whether doing the same would be a wiser use of instruction time (Fisher, 2004). Some educators are both alarmed and concerned about the lack of time students have for reading for enjoyment, which can instill a love for literature (Garan & DeVoogd, 2006). Furthermore, reading attitude has shown to affect reading growth, and giving students choices among texts has shown to be important in creating positive reading attitudes (Yoon, 2002). With strong opinions by the National Reading Panel that silent reading is ineffective (National, 2000) and equally strong opinions by some researchers and educators that silent reading is effective, is there any surprise that so much confusion surrounds the idea of giving students time to read silently in school?
Purpose of Study

Students in the United States spend about 18.5 minutes per day reading printed material outside of school (Yoon, 2002). On top of small amounts of time spent reading at home, students are getting less time to read in school (Fisher, 2004). Time spent reading, however, has shown to be a strong predictor of reading achievement (Anderson, 1988).

The following literature review addresses researched effects of silent reading on intermediate and middle school students’ reading achievement. Silent reading is defined, as well as common alternative names and variations implemented to assist teachers in measuring student progress. Finally, benefits of silent reading are discussed. Specifically, effects on reading motivation and attitude, fluency, comprehension, and test scores are examined. Upper grade levels will be focused upon because as Russian psychologist Lev Vygotsky acknowledged, younger students often do not read or even think silently, and speaking is an important component of development (Garan & DeVoogd, 2006).

Research Question

Researchers have shown errors in the NRP’s study (Fisher, 2004; Garan & DeVoogd, 2006; Reutzel, Fawson, & Smith, 2008; Trudel, 2007; Yoon, 2002), yet questions remain regarding silent reading in school. What are the effects of silent reading on attitude and motivation, fluency, comprehension, and tests scores?

Theoretical Framework

Under the Constructivist Learning Theory, learning is viewed as an active process and different for each learner. Students often make sense of ideas on their own while the teacher guides learning. Readers actively build comprehension through the texts they read along with prior knowledge, or schemata (Skivey, 1989). The Cognitive Learning Theory, developed by
Jean Piaget, also views the reader as an active learner, making sense of text based on what is already known. Meaning, then, is made when the reader connects new knowledge with prior knowledge based on being able to select strategies and schemata (Atherton, 2009).

**Definitions of Terms**

Over the years, silent reading has evolved into a number of different names and definitions. Traditional sustained silent reading (SSR) is defined as an in-classroom reading activity in which students are given a certain amount of time to silently read self-selected material for pleasure or information as a way of cultivating a love of reading without assessment, skills work, monitoring, or instruction from the teacher (Garan & DeVoogd, 2006; Yoon, 2002). In efforts to make SSR more purposeful, teachers have incorporated variations of silent reading in their instruction (Kelley & Clausen-Grace, 2006). Independent Reading (IR), Guided Repeated Oral Reading (GROR), and Scaffolded Silent Reading (ScSR) are three variations of the original sustained silent reading program. Independent reading involves increased collaboration among students and teachers and is defined by the following five characteristics: “Teachers provide guidance in the students’ text selections, students keep records of what they read, students reflect on what they read, and both teacher and students participate in mini-lessons and discussions from time to time” (Trudel, 2007, p. 309). Guided Repeated Oral Reading involves students reading a text aloud often between 3-5 times while getting feedback from a teacher or other students (Reutzel, Fawson, & Smith, 2008). Lastly, scaffolded silent reading (ScSR) is silent reading using independent-level texts selected from varied genres, periodic teacher monitoring of and interaction with individual students, and accountability through completed book response assignments. Scaffolded silent reading was designed to address weaknesses of traditional sustained silent reading (Reutzel, Fawson, & Smith, 2008). Depending
on a school or district, other terms for sustained silent reading, independent reading, or scaffolded silent reading may be used. Uninterrupted Sustained Silent Reading (USSR), Drop Everything and Read (DEAR), FVR (Free Voluntary Reading), and SQUIRT (Super Quiet Reading Time) are a few examples (Garan & DeVoogd, 2006; Gardiner, 2001).

Summary

Silent reading has a number of variations. Some allow time for students to sit back and enjoy reading without any requirements, while others provide teachers with more control and flexibility in assessing students (Kelley & Clausen-Grace, 2006; Reutzel, Fawson, & Smith, 2008; Trudel, 2007). With researchers suggesting amount of time spent reading correlates with reading ability, and contradicting statements by the National Reading Panel that silent reading is not effective, confusion surrounds silent reading. The literature review will examine the National Reading Panel’s report and address researched benefits of silent reading among intermediate students.
Chapter II: Literature Review

Purpose of Silent Reading

Fostering a love for reading was the original purpose of sustained silent reading (Yoon, 2002). Researchers have shown that when students are given choices in selecting texts, they are more motivated to read. More motivation leads to more time spent on-task reading. Additionally, the theory of self-determination and intrinsic motivation explains that children’s’ desire to learn is fueled by a natural curiosity while the self-determination theory suggests that children are motivated when given choice and ownership in what they read. Both theories correlate with cultivating a love of reading. Therefore, silent reading was originally developed to promote a love of reading while simultaneously supporting student achievement in reading (Yoon, 2002).

National Reading Panel Findings

Part of a well-known study by the National Reading Panel (NRP) assessed the effectiveness of silent reading and its impact on developing fluency to lead to higher comprehension. In a nationally representative study, 44% of fourth-grade students were not reading grade-level texts fluently. The NRP recognized an ability to read texts fluently leads to higher comprehension of texts (National, 2000). Consequently, the National Reading Panel decided to study fluency instruction. Specifically, repeated reading, guided oral reading, and encouraging students to read more (silent reading) were examined. In short, researchers found evidence in support of guided oral reading and its effectiveness in increasing fluency. However, the National Reading Panel claimed that silent reading has little effect on reading growth. While panel members recognized that encouraging children to read a lot would likely increase fluency and ultimately comprehension, evidence for the claim was unclear. Does reading more make one a better reader or do better readers just choose to read more? The National Reading Panel, in a
quest for answers, conducted online searches for articles that met focused criteria relating to silent reading. The panel started out with 34,448 articles, but narrowed matches down to just 14. Many studies were later found to be weak in design—none truly focused on the effects of silent reading on fluency, which was the National Reading Panel’s purpose for conducting research (Fisher, 2004; Garan & DeVoogd, 2006; Trudel, 2007; Yoon, 2002). Three studies of the 14 reported reading gains for encouraging students to read more and most gains were so small that the benefits remained questionable. Overall, the NRP was not able to determine from research whether or not reading silently to oneself helped to improve reading fluency. Questions remained regarding whether or not silent reading leads to better readers or if better readers just choose to read silently more often. Due to uncertainty, the panel suggested that silent reading be combined with other reading instruction if being used to build reading skills and fluency. Furthermore, the panel recommended much more research be conducted on the effectiveness of independent silent reading and other reading practices (National, 2000).

**National Reading Panel Disputes**

Findings by the National Reading Panel caused a stir among many researchers, fueling more research about effects of sustained silent reading (Reutzel, Fawson, & Smith, 2008). Essentially, in a study conducted by Reutzel, Fawson, and Smith, errors were found in how the National Reading Panel studies were conducted and more support for silent reading was published. For instance, the NRP chose only 10 peer-reviewed articles from experimental or quasi-experimental studies. Some articles focused on college or secondary students. Furthermore, many control groups in the NRP’s study varied greatly. Some were taken from full, already-set-up classrooms, while other control groups varied in amount of time spent reading. Some control groups practiced skills from spelling and health lessons. Time spent reading, skills
being practiced, and bias in samples were not reported in some of the studies (Reutzel, Fawson, & Smith, 2008). Moreover, Joanne Yatvin, a member of the National Reading Panel, admits research by the panel did not follow best methods. “Along the trail, pressured by isolation, time limits, lack of support, and the political aims of others, we lost our way—and our integrity,” she noted (Yatvin, 2002, p. 365). Yatvin mentioned that all 15 members of the panel had full-time jobs elsewhere, were expected to examine massive amounts of research studies, and draw conclusions about how best to teach reading to children.

In an analysis of the National Reading Panel’s findings conducted by Elaine Garan and Glenn DeVoogd (2006), not all panel members agree that SSR is not a good idea. One member, S. Jay Samuels, supports independent reading in school. He conducted a six-month, quasi-experimental study on time spent reading and reading growth. Data analysis supports claims that time spent reading has a strong effect on reading achievement. Furthermore, smaller achievement gains were found in a control group in which little time was given for reading in school. Results show greater gains in vocabulary among poor students that read at least 15 minutes and greater gains in comprehension when students were given time to read for 40 minutes. Overall, Garan and DeVoogd point out that insufficient data on SSR in the National Reading Panel’s report, a lack of consensus among panel members, and evidence supporting SSR in schools all contribute to the verification that silent reading is an effective method for supporting reading growth in students (Garan & DeVoogd, 2006).

**Implications on Attitude and Motivation**

One way to engage students in reading is to allow them to read interesting texts (Yoon, 2002). Evidence of reading growth was discovered in Heidi Trudel’s classroom of grades three and four where silent reading was regularly practiced. In an effort to understand if sustained
silent reading was worthwhile, Trudel conducted an experimental study. The sample of Trudel’s 16 third and fourth graders was not random and no control group was implemented. However, Trudel began by collecting data about students’ attitudes toward reading as well as current displayed behaviors during sustained silent reading (SSR) for six weeks. A mean score of 84% was documented for on-task behavior during 30 minutes of SSR during the six weeks. Later, similar data were collected when students switched to independent reading (IR) for six weeks. During independent reading, students read self-selected material and were held accountable for documenting progress. Trudel also met with students. In a quantitative data analysis, 11 out of 16 students’ reading attitude scores decreased slightly after switching from sustained silent reading to independent reading, yet overall, an increase in attitude was present. Fourteen out of 16 students increased on-task behavior. Trudel decided to try IR to give her more control in assessing the effects of silent reading (Trudel, 2007). Not only were students more engaged during independent reading, but response to texts was improved, too. Students learned how to record summaries, vocabulary, predictions, and questions in notebooks, which, in turn, helped Trudel make plans for future reading instruction. Overall, Trudel found evidence that providing students with meaningful, connected text leads to increased attitudes toward reading, vocabulary knowledge, fluency, and word recognition. Evidence for increased reading and listening comprehension among third and fourth grade students was also supported (Trudel, 2007).

In a meta-analysis, Yoon (2002) reviewed seven studies on the effects of silent reading on students’ reading attitudes in grades four through seven to determine the effects of sustained silent reading on students’ attitudes toward reading. Yoon searched ERIC and UMI databases to identify relevant articles. First, 350 articles were retrieved and reviewed, and 307 articles were eventually eliminated due to insufficient available data for calculating effect size. Out of 43
studies remaining, seven were selected after meeting criteria for 1) including a SSR group and a control group, 2) sufficient data to determine effect size, 3) publishing dates were after 1970, and 4) results included reading attitude. Eleven effect sizes were calculated. First, the null hypothesis was tested and variables of SSR were identified by using a Q statistic to assess whether or not the effects produced by the seven studies differed due to sampling error or differences between the studies. Some studies lasted six weeks while others lasted six months. A mean of the effect size of student reading attitude was 0.12 with a standard error of .04. Overall, reading attitude scores of students involved in SSR were higher than 55% of students in a control group, which shows evidence in support of SSR effectiveness in positively impacting students’ reading attitudes (Yoon, 2002).

When thinking of middle school students, one may think of negative reading attitudes. The purpose of Ivey and Broaddus’s study (2001) was to identify what makes middle school students want to read. A survey was given to 1,765 sixth-grade students at 23 schools. Schools were located in an urban area of the northeastern United States and a rural area in the mid-Atlantic. Both areas consisted of a wide variety of socioeconomic and cultural diversity. Seventy-four teachers and 109 classrooms participated. Of participating classrooms, 74% of students received parental permission for participation in the survey. Classrooms consisted of a wide range of abilities. Open-ended and short-answer questions were included on the survey as well as checklist items. Interviews with 16 females and 15 males from three diverse classrooms were conducted after analyzing survey answers to gain more information about emerging data. In a quantitative data analysis, 1,111 or 63% of middle school students favored free reading in school and 65% felt silent reading was a method that helped with comprehension. Personal choice in selecting texts was positively correlated with positive reading attitudes. Furthermore,
when asked how they find books to read, 61% of students noted the public library and 56% mentioned a bookstore, while 28% stated interesting books were in the classroom. In a qualitative analysis comparing free reading at home and school, students listed a wide variety of texts for home and mostly award-winning titles at school. Nonfiction, recently published books, or informational magazines were rarely listed for school reading. In conclusion, silent reading was a factor in middle school students’ interest in reading and having choice and variety in reading material was important in reading engagement. More research is encouraged to understand changes in attitudes toward reading motivation across grade levels (Ivey & Broaddus, 2001).

An experimental study conducted by Kyung and Dong (2008) investigated effects on reading interest and language/literacy development on sixth-grade Korean students in Korea during a mixture of read-alouds and sustained silent reading. Participants had studied English for three years. Two groups of 28 students each were formed. Experimental group participants listened to teacher read-alouds for 10-15 minutes per day followed by regular English instruction. Experimental participants also engaged in self-selected reading one day per week for forty minutes. Control group participants followed regular English instruction. Both groups were instructed by the same teacher. After 21 weeks, students were given a language test to measure gains in listening, reading, and writing in English, a questionnaire to measure changes in attitudes, and observations were made on student use of the English library. Data analysis showed higher gains on the English test in all areas for experimental participants. Scores of students in the control group went down on the reading portion of the language test while no gains were made on listening and writing portions. Furthermore, 79% of students listed sustained silent reading as an enjoyable activity, 89% felt read-alouds and SSR help
improve English proficiency, and 86% would like to continue SSR in middle school. Library usage was increased in the experimental group while the control group did not use the library to check out books. In conclusion, read alouds and sustained silent reading created positive attitudes toward reading among sixth-grade Korean students, while also increasing language development (Kyung & Dong, 2008).

In a study conducted by Judy Parr and Colleen Maguiness (2005), bringing talk into sustained silent reading can be helpful in promoting student reading and helping teachers get to know student reading behaviors. The purpose of the qualitative study was to support SSR and promote reading of reluctant readers through an instructional conversation model. Students ranged in age from 13-18 and were from an inner-city school in New Zealand. Three teachers of various subjects allowed SSR for 20 minutes each day. Students chose reading materials. The study had two parts. One part focused on developing a conversation model through attending workshops with an expert. The second part focused on tracking and assessment of conversations with students during SSR. Over 10 weeks, teachers met with students in small groups or individually about once per week to discuss selection of books and what students had been reading. Meetings were partially structured and teachers met regularly to discuss progress. In a qualitative data analysis, teachers noted a rise in reading attitudes. All but one student was less reluctant to read at the end of the study. Teachers felt that students had learned to view reading as a social situation and discussing books made reading more interesting. Implementing time for discussion in SSR showed positive benefits for students’ reading attitudes and motivation and teachers’ knowledge of students’ reading habits (Parr & Maguiness, 2005).

Time spent reading is correlated with reading achievement (Anderson, 1988). The purpose of one study conducted among 14 third-grade students was to examine the effect of teacher
modeling on student on-task behavior when applied to sustained silent reading (Methe & Hintze, 2003). All participants attended a rural school in the northeast section of the country. Students were Caucasian, and there were seven females and seven males participating in the experimental study. Students were observed during regular SSR periods in class. The sole teacher in the study had over ten years of experience teaching sustained silent reading and is the reason behind researchers choosing to observe her class of students. Students were encouraged to choose books from the classroom, school library, or home before reading at their desks. Researchers observed on-task behavior of all students four separate times. Every student was observed for ten seconds each time. Researchers used five seconds to record observations. Microcassette players and earphones were used to record observations of each student. The procedure took fourteen minutes to observe all fourteen students’ reading behaviors four times. Researchers also used recording sheets to document student behavior. A checkmark was made when students were engaged while a blank was left on the paper if students were not engaged. Disengaged behavior included looking away from the book for three or more seconds, selecting a different book, or getting up out of a seat. Throughout the study, the teacher conveyed enjoyment of silent reading by through verbal exclamations, directions given to students, and modeled reading behavior. The study shifted between no teacher modeling and teacher modeling. Researchers compared results of both methods, and a strong relationship between on-task reading behavior and teacher modeling was found. After teacher modeling, on-task reading of students greatly increased. Researchers recorded a mean of 93% on-task reading behavior after teacher modeling compared to a mean of 71% when teacher modeling was not involved. Furthermore, a reliable change index between both methods resulted in an effect magnitude of 2.83. The on-task reading behavior of students after teacher modeling was about three standard deviations greater compared to the control of no
implementation of teacher modeling. Evidence that teacher modeling of desirable behavior results in on-task reading was shown. In conclusion, on-task reading behavior, or time spent reading, can be a factor for increasing reading skills. Researchers recommend similar long-term studies be conducted (Methe & Hintze, 2003).

Statistics about the effectiveness of silent reading are widely published, yet complete studies are difficult to locate. For instance, students in the United States that read interesting books demonstrate higher reading attitudes and reading comprehension than in books of less interest. Data have also shown that students process material more deeply when reading something personally interesting (Yoon, 2002). Furthermore, researchers and teachers have found that scheduling a specific time for students to read on their own can have positive effects on students’ attitude toward reading (Fisher, 2004). In a six-month quasi-experimental study, data analysis showed that increased time reading independently had a significant effect on achievement compared to a control group in which less time was given for independent reading. Poor readers achieved the greatest gains in word recognition and vocabulary (Garan & DeVoogd, 2006). Researchers of another study involving middle school students found 63% of 1,765 middle-school students enjoy independent reading (Fisher, 2004). Lastly, Trudel’s results of third and fourth graders found a small decrease in reading attitude after switching from traditional, sustained silent reading to independent reading in which students responded to reading in notebooks. Evidence suggests that students enjoy the simple act of reading over reading assignments (Fisher, 2004; Garan & DeVoogd, 2006; Ivey & Broaddus, 2001; Trudel, 2007; Yoon, 2006).

**Implications on Fluency and Comprehension**

Difficulty measuring students’ growth in reading fluency and comprehension during
silent reading has been an area of concern for teachers (Trudel, 2007). Scaffolded silent reading (ScSR), in which teachers ‘check-in’ with students regularly, was one part of a study, while guided repeated oral reading (GROR) was the other half. Reutzel, Fawson, and Smith (2008) asked the question, “Is scaffolded silent reading as effective as guided repeated oral reading with feedback in promoting third-grade students’ development of reading fluency as measured by reduction in error rates, increase in words read correctly per minute, increase in expression rating scores, and increase in comprehension?” (Reutzel et al., 2008, p. 39). Four third-grade teachers and 72 third-grade students participated in the experimental study for nine months. Participants came from four different classrooms at two schools. Students from both schools were from low socioeconomic and diverse backgrounds. Teachers received extensive training and feedback from literacy experts throughout the year. No control of regular reading instruction was used. Students were randomly assigned to one treatment group, either ScSR or GROR by computer-generated numbers. During the ScSR treatment, teachers spent approximately five minutes modeling and discussing fluent reading with students. Students selected books from various genres to read silently and independently. Teachers conferred with students individually for 4-5 minutes by listening to them read, asking questions, and encouraging them to set reading goals for themselves. During the GROR treatment, teachers also spent about five minutes modeling and discussing fluent reading with students. Whole-group choral reading of a teacher-selected text was read followed by partner readings of the same text. At the end of the year, teachers used several researched assessments to specifically measure each student’s reading rate, accuracy, comprehension, and reading expression. A quantitative data analysis of mean scores shows no differences between scaffolded silent reading and guided repeated oral reading in regard to growth in accuracy, reading rate, comprehension, and reading expression. However, students in
both groups increased their fluency at rates higher than the national average. Qualitative observational data indicate that strong fidelity to teaching both methods was used by all four teachers. No differences were found between scaffolded silent reading and guided repeated oral reading. Evidence supports claims that ScSR is as effective as GROR in increasing fluency of third-grade students, and both methods increase students’ fluency and comprehension (Reutzel et al., 2008).

Another study measured reading growth of second and fifth-grade students in Illinois in which reading independently at home was the focus (Anderson, 1988). Fifty-two students were selected from two classrooms in a village school while 103 were selected from five classrooms in a middle-class area of Central Illinois. A total of 85 boys and 70 girls were involved in the experimental study. Even though a mix of low income and minority children was present, an overall underrepresentation occurred in comparison to the national average. Regarding reading ability, students tested above the national average on a reading comprehension test, but wide ranges of abilities were present. After answering a series of questions on a questionnaire and completing three reading tests twice that measured reading comprehension, vocabulary, and reading speed, students were trained by one of two investigators to keep track of daily activities, including reading. Students were held accountable for recording 330 minutes on weekdays and 630 minutes on weekends. Training was provided and investigators were available on-site to answer questions for one school week. Once students were familiar with all expectations, activity forms were completed each day in school, documenting students’ previous activities. Fifth graders living in the village filled out activity forms for eight weeks in March and April while fifth graders in the city filled out forms the following fall for 26 weeks. Data analysis showed a strong correlation between reading as an activity and reading growth. Furthermore, the best
predictor of a student’s reading growth was time spent reading. Many students showed little
reading at home. However, students read 3.6 times more in classrooms in which interesting
material was provided and teachers promoted reading than in classrooms in which teachers did
not. A quantitative analysis of mean scores showed more reading comprehension, vocabulary,
and fluency growth among students that read more. Overall, researchers show evidence that

Kelley and Clausen-Grace (2006), in an effort to understand and improve student reading
behavior during SSR blocks, studied a group of third-grade students. Students were assessed on
the Developmental Reading Assessment (DRA) designed for grades 4-8. Student scores on the
initial Student Reading Survey confirmed concerns that third-graders had poor views of reading,
read from few genres, and had little strategies to monitor comprehension. Researchers redesigned
SSR to include direct instruction of specific comprehension strategies. Three days per week,
after reading self-selected texts for 10-25 minutes, students reflected on reading through writing.
Writing about reading was taught during minilessons, guided reading, and read-alouds. Each day,
the teacher held one-on-one conferences with students where goals would be set and strategies
would be discussed. At the end of four months, Kelley and Clausen-Grace administered the DRA
Student Engagement Survey again. After seven months, the complete DRA test was given which
measures fluency, accuracy, and comprehension. In a quantitative data analysis, 100% of
students scored at independent or advanced levels for wide reading, self-assessment, and goal
setting compared to 33% at the beginning of the study. Furthermore, comprehension improved.
When the study began, 89% were at the instructional level. Only 5% remained at the
instructional level after 7 months. Researchers suggest that SSR can be deceiving, meaning
teachers cannot monitor student reading. Evidence supports SSR, along with teacher instruction
and individual conferences, in increasing student reading engagement and comprehension (Kelley & Clausen-Grace, 2006).

Stephen Krashen (2009) asserts that being able to decode words comes from reading. Methods of instruction including Reading First and Direct Instruction in which phonemic awareness and phonics are heavily focused upon have been implemented to increase students’ reading scores. However, on multiple achievement tests, including the Wide Range Achievement Test and Metropolitan Achievement Test, scores on decoding portions of tests were much higher than national norms, but comprehension scores were in the 25th and 35th percentiles. Results show evidence that heavy skill instruction is not necessary in creating readers that can comprehend texts. Researchers suggest that students that learn through reading do well on tests of decoding and comprehension while students that learn through decoding instruction do well on decoding portions of tests (Krashen, 2009). Results of the study support giving students time to read in classrooms.

Some students may benefit from different types of reading instruction. Hale et al. (2007) investigated student reading comprehension after reading both silently and aloud. Fifty-one fourth and fifth-grade students from a large Southeastern district in the United States participated in the experimental study. Parental permission was required. About 57% of students received free or reduced lunch. Students read aloud grade-level texts, and words correct per minute (WCPM) were used to place students at appropriate levels. Between October and November, each student read six passages, either aloud or silently, and then answered corresponding multiple-choice comprehension questions. In a quantitative data analysis, a mean score of 7.75 resulted from students that read aloud while a mean score of 7.19 resulted from students that read silently. Researchers suggest that reading aloud may positively affect comprehension rates
among students better than reading silently. However, due to contradicting results from other studies, researchers suggest more research be conducted to examine the effects of silent and aloud reading on student reading comprehension (Hale et al., 2007).

Researchers in another study wanted to know if comprehension is stronger after silent reading or oral reading (Prior et al., 2011). The experimental study consisted of 172 elementary and middle-school students from three elementary schools and one middle school in Canada. Participants were selected based on permission letters sent back by parents. In each grade level from first through seventh, 24 to 25 students were selected. Both males and females participated. The Reading Recognition sub-test of the PIAT-R was used to measure students’ abilities to translate printed words to oral language. The Ekwall/Shanker Reading Inventory (ESRI), which consists of leveled reading passages for each grade level, was used to assess comprehension. Each passage consisted of 10 comprehension questions. Participants were tested individually in a quiet room. Researchers administered the PIAT-R test, followed by the ESRI assessment. Students answered 10 oral comprehension questions. No students were timed. Students’ answers were videotaped and recorded manually. Results of the PIAT-R test showed that all students were reading at grade level, so the leveled passages administered during the ESRI were appropriate. In a quantitative data analysis, a mode score of 25.389 was present for the PIAT-R test. The first-grade scores were the lower than all other grades. Comprehension scores for fourth and fifth-grade students were lower than students in second, third, sixth, and seventh grade. Students in first through fifth grades had much higher comprehension after oral reading when compared to silent reading. Type of reading did not matter for sixth-grade participants’ comprehension scores, yet seventh-grade students scored higher during silent reading. Researchers showed evidence that reading orally supports students’ comprehension in
elementary school while silent reading supports comprehension of seventh-grade students. Researchers support the idea of balancing aloud reading and silent reading to promote students’ reading comprehension. Additional studies should be conducted on more diverse populations of students with equal focus on both male and female groups (Prior et al., 2011).

Difficulty assessing students’ fluency and comprehension during sustained silent reading has been one concern among teachers, yet some researchers have found evidence to support the simple act of reading for increasing students’ fluency and comprehension (Anderson, 1988; Krashen, 2009). One researcher showed that learning to read through reading can yield better results on comprehension portions of tests than students that learn to read through phonics (Krashen, 2009). Furthermore, in response to teachers’ inabilities to measure reading growth during silent reading, modifications to the practice have been implemented with positive results. For example, researchers have found that scaffolded silent reading, a practice where teachers quickly model fluent reading and individually confer with students for a few minutes, increased students’ fluency and comprehension scores at rates higher than the country’s average (Reutzel et al., 2008). In another study, teachers adjusted silent reading to include instruction of specific comprehension strategies, conferences with students, and implementation of student writing about reading. As a result, all students involved in the experimental study scored at independent or advanced levels of reading (Kelley & Clausen-Grace, 2006). Methe and Hintze (2003) showed a correlation between teacher modeling and student on-task reading behavior. Researchers have shown evidence to support sustained silent reading in classrooms for the purpose of increasing students’ fluency and comprehension, particularly when teachers make changes to become more involved in the process (Anderson, 2009; Kelley & Clausen-Grace, 2006; Krashen, 2009; Methe & Hintze, 2003; Reutzel et al., 2008).
Implications on Test Scores

Test scores are an important component of students’ success in education. In an experimental study, the Gates-MacGinitie reading test was given to middle school students in an urban school at the beginning of the year. Student progress was followed in classrooms in which sustained silent reading was provided and in classrooms in which SSR was not. At the end of the year, students who were given time to read independently every day outscored their peers who were not given daily time to read on their own on the end of-the-year reading assessment by 0.6 of a year. Researchers suggest silent reading can help increase students’ test scores in reading (Fisher, 2004).

Parcel and Dufur (2001) assert that school is not the only place affecting student achievement in reading. In a study questioning whether investing resources into schools boosts student achievement and if family resources are crucial in supporting student success, researchers investigated the effects on reading scores. Schools were given the National Longitudinal Survey of Youth (NLSY) to interview 12,686 students. Participants were re-interviewed each year. Furthermore, schools were asked to provide information regarding family conditions, maternal backgrounds, occupational conditions, and child intelligence outcomes based on school resources and experiences. Reading growth was measured using age-appropriate assessments of reading recognition and pronunciation ability through all grade levels. In a quantitative data analysis, capital investment at home was positively correlated with student achievement in reading while investing more resources into schools was not. In a data analysis of mean scores, family wages and maternal education were positively correlated with reading achievement. Researchers provide evidence that outside factors, such as having family resources, help students increase reading scores (Parcel & Dufur, 2010).
Reading, listening, and writing scores of sixth-grade Korean students were examined by researchers (Kyung & Dong, 2008). An experimental group and a control group were formed. Experimental group participants listened to teacher read-alouds for 10-15 minutes per day, followed regular English instruction, and engaged in self-selected reading one day per week for forty minutes. Control group participants followed regular English instruction. Both groups were taught by the same instructor. After 21 weeks, students were given a language test to measure reading, listening, and writing growth. In a quantitative data analysis, experimental group participants had a pre-study mean reading score of 3.43 and a post-study mean reading score of 3.86. A gain of 2.34 points resulted. Control group participants had a pre-study mean reading score of 3.32 and a post-study mean reading score of 2.89. A decrease in scores resulted. Researchers show evidence supporting silent reading in helping students achieve higher reading test scores (Kyung & Dong, 2008).

Non-proficient students are often tested using the Developmental Reading Assessment (DRA). In a study that introduced discussions about reading strategies and writing about reading into sustained silent reading, third-grade students were tested using the DRA (Kelley & Clausen-Grace, 2006). Beginning tests showed students had poor views of reading. Students had few comprehension strategies. After four months of integrating mini-lessons focusing on specific reading comprehension strategies into silent reading, students were assessed by the DRA again. In a data analysis, students increased scores on all test segments. Growth in comprehension, wide-reading selection, and self-assessment/goal setting were documented. Researchers show evidence that including specific mini-lessons focusing on comprehension strategies into sustained silent reading can help students increase reading test scores (Kelley & Clausen-Grace, 2006).
Reading test scores can be affected by a number of factors. For instance, in a qualitative data analysis among over 12,000 students, reading growth was affected by family wages and maternal education (Parcel & Dufur, 2001). In another study involving students learning English, quantitative data analysis showed a gain of 2.34 points on language tests measuring reading when students were involved in teacher read alouds and silent reading compared to a negative gain among students that did not participate in silent reading or read alouds (Kyung & Dong, 2008). When third-grade students were directly taught comprehension strategies before silent reading, data analysis showed an increase in all test segments on the Developmental Reading Assessment (Kelley & Clausen-Grace, 2006). Finally, in a data analysis of another study, researchers showed evidence that traditional sustained silent reading yields increased reading test scores. In classrooms in which sustained silent reading was provided, students outscored their classmates not participating in sustained silent reading by 0.6 of a year (Fisher, 2004).

Researchers showed evidence that sustained silent reading and modified silent reading can increase students’ test scores in reading (Fisher, 2004; Kelley & Clausen-Grace, 2006; Kyung & Dong, 2008; Parcel & Dufur, 2001).

**Chapter III – Results and Analysis Relative to Problem**

Researchers have identified several major flaws with the National Reading Panel’s findings (Garan & DeVoogd, 2006; Reutzel et al., 2008; Yatvin, 2002). In all research, flaws are likely. However, the number of errors in the NRP’s study makes it difficult for one to take its conclusion that silent reading is not an effective practice seriously. In response to the NRP’s lack of quality research, other researchers immersed themselves in independent studies, hoping to reveal truer answers regarding the effects of sustained silent reading (Ivey & Broaddus, 2001; Kyung & Dong, 2008; Parr & Maguinness, 2005; Trudel, 2007; Yoon, 2002).
One aspect further investigated was the effect of silent reading on students’ reading attitudes and motivation, which alone can lead to stronger readers (Yoon, 2002). Researchers showed evidence that students enjoy sustained silent reading and feel it is a worthwhile practice (Ivey & Broaddus, 2001; Kyung & Dong, 2008; Trudel, 2007; Yoon, 2002). Factors influencing positive attitudes were student choice and variety of texts (Ivey & Broaddus, 2001; Parr & Maguinness, 2005). Of course, students are unique individuals with different interests. Therefore, when teachers allow students to choose books, there is a greater chance that all students’ interests will be met compared to when a teacher assigning a specific text. Thus, students will enjoy reading more. Educators teaching mandated reading curriculum are encouraged to think about incorporating student choice into their reading program not only to help increase students’ reading attitudes, but to increase overall reading abilities, too, since reading attitude has been shown by researchers to be a factor in reading growth (Yoon, 2002). Another noteworthy aspect of reading attitudes and motivation among intermediate students was student accountability. When students were held accountable for reading by having to write about reading, there was a slight decrease in attitude. However, when students were asked to talk about books being read, attitudes improved (Trudel, 2007; Parr & Maguinness, 2005). Perhaps students that struggle with writing or are not motivated by grades stopped enjoying silent reading when assignments became involved. Many students may enjoy talking and sharing ideas with others. The act of reading, then, is even more enjoyable when students get to share ideas with peers. Furthermore, attitudes of students that are not motivated by grades would not be affected nor would attitudes of students that struggle with writing. Teachers faced with the sustained silent reading dilemma may want to look into incorporating book talks or literature circles into reading instruction to improve comprehension while preserving positive attitudes toward literature. Books that interest
individual students can be more enjoyable than assigned books. Assigned books likely meet the interests of just several students while student choice allows all students the ability to find an enjoyable text. Mandated curriculum often does not allow student choice. Providing students with some form of silent reading can help create readers that want to read.

Another aspect researchers focused upon was students’ growth in fluency and comprehension during silent reading. Factors that increased students’ fluency and comprehension were modeling fluent reading, direct instruction of reading comprehension strategies, one-on-one conferencing, and teaching students how to reflect and set individual reading goals through writing. Educators were trained in several of the studies (Anderson, 1988; Kelley & Clausen-Grace, 2006; Methe & Hintze, 2010; Reutzel et al., 2008). Students taught by highly trained and motivated teachers will likely make academic gains. Furthermore, teacher modeling and direct instruction are common practices of ‘good teaching.’ While students participated in silent reading in the studies, it is not truly clear if silent reading was the factor increasing fluency and comprehension. Incorporating better teaching practices, sometimes from experts, may be a truer reason for increased reading abilities. For instance, one-on-one conferencing is often helpful for building positive teacher-student relationships. Students that are connected to school seem perform better in school than students that are not. As Trudel (2008) noted, fluency and comprehension are difficult to measure during sustained silent reading. Researchers investigating these aspects modified the practice of silent reading. Modified silent reading, such as scaffolded silent reading, includes more investment in students by the teacher. While it may be true that a form of silent reading is beneficial for increasing fluency and comprehension, even more questions about students’ reading growth relating to silent reading remain.
Reading test scores were examined by researchers investigating the effects of sustained silent reading. Family resources helped determine if students did well on reading tests (Parcel & Dufur, 2001). Perhaps a simple conclusion is that parents with monetary resources tend to purchase more books for their children. It has been documented that middle and upper class parents talk to their children more than lower class parents; and, as a result, children perform better in school. Children that are spoken to and have discussions with educated parents tend to have higher vocabulary banks, which probably lead to higher scores on reading tests (Rowe, 2008). Another factor positively affecting students’ test scores was the integration of modified instruction into sustained silent reading (Kelley & Clausen-Grace, 2006; Kyung & Dong, 2008). Student accountability, discussion among peers and educators, and integration of writing into reading were changes that teachers made to sustained silent reading. As a result, students were more engaged and interested and performed better on a variety of reading tests. One reason for the boost in scores that researchers saw on tests might be due to the fact that students were writing more. Writing and reading are intertwined. If students can write about their reading effectively, educators can determine if students are reading successfully on their own. Therefore, student work guides teachers’ instruction. When writing is not involved, it is more difficult to gauge a student’s silent reading progress, thus making it troublesome to teach students as effectively. Again, teacher investment into silent reading seems to be a factor in reading growth and effective silent reading programs.

Since measuring students’ fluency and comprehension during sustained silent reading is difficult, teachers have made modifications (Kelly & Clausen-Grace, 2006; Reutzel et al., 2008; Trudel, 2007). Adjustments included teacher modeling, direct instruction of reading strategies, writing about reading, developing individual goals, and conferring with students. Family
resources were an external factor that positively correlated with high reading test scores. When students were given a variety of texts from which to choose, they enjoyed reading more (Ivey & Broaddus, 2001; Kyung & Dong, 2008; Trudel, 2007; Yoon, 2002). Perhaps an underlying message from results presented by researchers of sustained silent reading lies beyond the classroom. When society invests in its children through monetary means or stronger teaching, students thrive.

Chapter IV - Recommendations and Conclusion

Recommendation

Researchers have shown evidence that sustained silent reading is an activity that students find enjoyable and worthwhile (Ivey & Broaddus, 2001; Kyung & Dong, 2008; Trudel, 2007; Yoon, 2002). Researchers have suggested that student motivation is a factor in reading achievement (Yoon, 2002). There is little question that sustained silent reading promotes positive reading attitudes when student choice and variety of texts are present in the classroom. Positive reading attitudes and a drive to read have been linked to reading achievement, so sustained silent reading could possibly be recommended for this reason alone.

A number of researchers have tried to show evidence that sustained silent reading is effective in increasing students’ reading fluency, comprehension, and test scores. The studies in this literature review suggest that sustained silent reading is an effective practice. However, due to the fact that a variety of other practices were implemented into sustained silent reading, it seems difficult to make a definite conclusion that sustained silent reading is effective. Instead, the teaching strategies incorporated into sustained silent reading could be responsible for student success. It is recommended that more studies be conducted about effects of sustained silent reading. One recommendation is to compare reading test scores of students engaged in sustained
silent reading with a wide variety of texts and personal choice available with students engaged in sustained silent reading with little variety of texts and personal choice available. Results would hopefully show stronger evidence than previous studies that the sole practice of sustained silent reading is either beneficial or ineffective.

**Areas for Further Research**

In order to find clearer answers regarding the effects of silent reading among intermediate students, additional research should be conducted. It is recommended that one such study focus solely on sustained silent reading and not implementation of other practices alongside silent reading. While researchers showed evidence that other practices taught with sustained silent reading are beneficial, the addition of other variables seems to cloud results. The only area of reading that didn’t include additional teaching practices was student motivation and attitudes involved in silent reading. Researchers have shown evidence that sustained silent reading can positively affect students’ attitudes and motivation toward reading. Having a variety of texts and selecting books that are personally interesting were factors in positive reading attitudes of students (Ivey & Broaddus, 2001; Kyung & Dong, 2008; Trudel, 2007; Yoon, 2002).

Researchers have argued that students that are motivated to read are better readers than those that are not (Yoon, 2002). To gain more answers about how silent reading affects other areas of reading, researchers should focus on the effects of sustained silent reading among intermediate students’ reading growth by examining reading test scores of students that have a variety of texts and personal choice during silent reading compared to those that do not.

To conduct the experimental study, researchers should randomly select a variety of intermediate students from a wide range of backgrounds and schools. One method in choosing students is to select schools in both rural and urban areas that have mixtures of socioeconomic
and cultural diversity. Then, from those schools, choose several third, fourth, and fifth-grade classrooms to participate in the study. Within classrooms chosen, there should be an even proportion of males and females. Within each grade level, there should be an even distribution of classrooms providing students with sustained silent reading in which there is little variety of texts or student choice and classrooms where there is a lot of variety and opportunities for student choice during sustained silent reading. Teachers should devote the same amount of time toward silent reading each day and each week. Student attendance should be documented. Students in all classrooms should be tested at the beginning of the experiment on reading comprehension and fluency. The R-CBM and MAZE tests could be the assessments administered to students. In classrooms in which there is a wide variety of texts and choice, students should gather interesting books at the beginning of the week, before sustained silent reading, to ensure that reading time is used wisely. If students want to gather more books or abandon old ones, they should do so during a time that is not devoted to silent reading. Students, though, should be able to choose books on their own throughout the week. In classrooms where there is not much variety or choice, students should be restricted to reading books only from the classroom library to ensure that student choices are limited. Libraries in these classrooms should be minimal, consisting of just a couple of genres, perhaps fiction and nonfiction. Students should be able to select books at appropriate times during the day, as long as silent reading is not interrupted. Both groups should engage in sustained silent reading for a set amount of time per day. At the end of six weeks, the R-CBM and MAZE assessments should be administered to each student a second time to measure gains in reading fluency and comprehension. Data should be analyzed quantitatively. Researchers should look for patterns between students that had choice and variety and students that did not in order to make conclusions regarding the study.
Summary and Conclusion

Although the National Reading Panel labeled sustained silent reading as an ineffective practice (National, 2000), researchers have discussed faults of the study (Fisher, 2004; Garan & DeVoogd, 2006; Trudel, 2007; Yoon, 2002;). In addition, members of the panel have admitted research was not done using best methods, (Yatvin, 2002). Reutzel, Fawson, and Smith (2006), looked into the study and found that few articles were used, and of ones that were, many were not accurate. Researchers claim to have found evidence that sustained silent reading along with similar variations can indeed have positive effects on intermediate and middle school students’ reading attitudes and achievement. Student choice is a driving force behind student motivation and positive reading attitudes, a specific component of sustained silent reading (Yoon, 2002). Students rank SSR as an enjoyable activity (Garan & DeVoogd, 2006; Ivey and Broaddus, 2001; Kyung & Dong; Trudel, 2007; Yoon, 2002) and view the practice as a way to increase comprehension (Kyung & Dong, 2008). Increases in reading attitude scores, on-task reading behavior, and reading and language test scores have also been supported by various forms of silent reading (Anderson, 1988; Kelley & Clausen-Grace, 2006; Krashen, 2009; Kyung & Dong, 2008; Reutzel et al., 2008; Trudel, 2007).

Among similar alternatives to sustained silent reading, independent reading, which involves teachers occasionally meeting with students to discuss reading strategies and goals, has given teachers ways to assess student progress during silent reading. Independent reading has also increased listening, word recognition, fluency, vocabulary, and reading comprehension (Trudel, 2007). Scaffolded silent reading has shown to be as effective as guided repeated oral reading, and both are effective in increasing third-grade students’ fluency and comprehension to
extents that test scores are higher than national averages (Reutzel et al., 2008). Lastly, reading books increases reading proficiency (Anderson, 1988). Although the National Reading Panel has not been able to determine if book reading produces good readers or if good readers choose to read books, evidence has been found that book reading increases motivation and attitude, fluency, comprehension, and reading test scores among intermediate students. Perhaps teachers that are confused about keeping sustained silent reading as a classroom reading component may now be able to relax a bit and encourage students to read self-selected texts silently, whatever variation suits student needs.

The National Reading Panel may be right that silent reading alone will not make independent, lifelong learners. However, researchers have shown how silent reading can positively affect students’ motivation and attitudes toward reading (Garan & DeVoogd, 2006; Ivey and Broaddus, 2001; Kyung & Dong; Trudel, 2007; Yoon, 2002), which alone seems worth the effort. Researchers have also shown evidence of positive impacts on students’ fluency, comprehension, and test scores, often when sustained silent reading is modified with better teaching practices. In a changing education system, in which teachers are held more accountable for student test scores, many mandated curriculums have taken over classrooms (Fisher, 2004). Providing time for reading independently from self-chosen books may be one component remaining that gives both teachers and students choice. Some researchers suggest more studies be conducted on the effects of silent reading (Hale, et al, 2007; Ivey & Broaddus, 2001). While further research would likely provide more concrete conclusions about silent reading, the practice is not ineffective, especially when thinking in terms of students’ attitudes. While waiting for clearer answers, professional judgment should be used by educators in order to choose the silent reading practice that best suits a group of current students. Independent reading and
scaffolded silent reading are two suggestions. Positive reading attitudes along with stronger
reading abilities may be the result.
References


Fisher, D. (2004). Setting the “opportunity to read” standard: Resuscitating the SSR program in an urban high school: One urban high school made significant efforts to provide students with the opportunity to read. *Journal of Adolescent & Adult Literacy, 48*, 138-150. doi:10.1598/JAAL.48.2.5


Garan, E., & DeVoogd, G. (2006). The benefits of sustained silent reading: Scientific research and common sense converge: Once teachers unravel the facts from the misinterpretations and opinions, they will find that sustained silent reading is not only intuitively appealing but also is supported by research. *The Reading Teacher, 62*, 336-344. doi:10.1598/RT.62.4.6


Trudel, H. (2007). Making data-driven decisions: Silent reading: Silent reading can become more than a time to practice reading. It can be an opportunity for students to recognize—and celebrate—their skills as readers. The Reading Teacher, 61, 308-315. doi:10.1598/RT.61.4.3
