The Effects of Sustained Silent Reading on Fourth Grade Students' Reading Attitudes

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THE EFFECTS OF SUSTAINED SILENT READING ON FOURTH GRADE STUDENTS' READING ATTITUDES

THESIS

Submitted to the Graduate Committee of the Department of Education and Human Development State University of New York College at Brockport in Partial Fulfillment of the Requirements for the Degree of Master of Science in Education

by

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May, 1988
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# Table of Contents

**List of Tables** .......................................................... iv

## Chapter

I. Statement of the Problem ............................................. 1

- Purpose ................................................................. 1
- Question ............................................................... 1
- Need for the Study ................................................... 2
- Definitions of Terms ................................................ 3
- Limitations of the Study .......................................... 3
- Summary ............................................................... 3

II. Review of the Literature ........................................... 5

- Purpose ................................................................. 5
- Reading Attitudes .................................................... 5
- Strategies for Improving Reading Attitudes .................... 6
- Sustained Silent Reading .......................................... 10
- Components of Successful SSR Programs ......................... 12
- Benefits of SSR ....................................................... 15
- Criticisms of SSR .................................................... 18
- Summary ............................................................... 19

III. The Research Design ................................................ 20

- Introduction .......................................................... 20
- Hypothesis ............................................................ 20
- Methodology .......................................................... 20
- Summary ............................................................... 23

IV. Analysis of Data ..................................................... 24

- Purpose ................................................................. 24
- Findings and Interpretations .................................... 24
- Summary ............................................................... 26

V. Conclusions and Implications .................................... 27

- Purpose ................................................................. 27
- Conclusions ........................................................... 27
- Implications for Research ........................................ 28
- Classroom Implications ............................................ 29
- Summary ............................................................... 29
Table of Contents (Continued)

References .................................................. 31

Appendix

A. Estes Reading Attitude Scale Scores:
   Control Group ........................................ 38

B. Estes Reading Attitude Scale Scores:
   Treatment Group ..................................... 39

C. Estes Reading Attitude Scale ......................... 41
List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A $t$ test for Independent Measures of Significant Difference on a Pretest</td>
<td>24</td>
</tr>
<tr>
<td>2. A $t$ test for Independent Measures of Significant Difference on a Posttest</td>
<td>25</td>
</tr>
</tbody>
</table>
Chapter I

Statement of the Problem

Purpose

The purpose of this study was to initiate a Sustained Silent Reading (SSR) program into two fourth grade classrooms in order to determine whether the use of quiet reading time in the classroom changes attitudes about reading.

Question

Is there a significant difference in the mean posttest scores of the Estes Attitude Scale given to fourth grade students who participated in an SSR program and those who did not participate?

Need for the Study

During the course of a school day, teachers have many responsibilities. Teachers feel pressure from their administrators and from the community to not only teach the required amount of material, but to create a positive classroom environment and to instill a love for learning in their students. Time is at a premium, and teachers are often required to justify any extra time they spend on other activities they do, as being relevant and important to the students' school program.
While SSR is a part of some schools' reading programs, it is not the case in every school. Since SSR takes up valuable instructional time, it supplants some part of the students' existing school program. Often when a parent hears of the SSR program in his child's classroom, he makes the assumption that this time is wasted instructional time, and that the teacher is shirking her duties. It may also be assumed that there is no value in allowing the students to "waste their classroom time" reading such materials as comic books or magazines. If in fact this time set aside for SSR is effective in improving attitudes toward reading, the teacher is aided in meeting his/her objective of creating that positive reading and learning environment.

Since 1970 when it was first introduced by L. C. Hunt, SSR programs have received a lot of attention and discussion but little research. It is important to conduct further research into this area so that it may be determined whether SSR is a worthwhile part of the reading curriculum.

Definitions of Terms

Sustained Silent Reading (SSR): The practice of involving the students and teacher in daily periods of silent reading using self-selected materials (trade books, texts, magazines, comic books, newspapers, etc.). Formal evaluation is excluded from this process.
Limitations of the Study

The following are variables that could have limited the results of the study:

1. This study was conducted on four fourth grade classes in a suburban school district. It is possible that the teachers in the school did other things in addition to the SSR periods during the duration of the study that may have changed students' attitudes toward reading.

2. An even greater limitation of the study was the time factor. Ten weeks is a relatively short time for attitudes to change. It is also possible that a student's reading habits may change before he or she is aware that his/her attitude has changed.

3. A final limitation of the study was the attitude scale used. There have been very few reliable reading attitude scales developed, the Estes Reading Attitude Scale being the most prevalent. It is questionable whether the Estes Scale really does, in fact, accurately measure reading attitudes.

Summary

The purpose of this study was to investigate whether the use of Sustained Silent Reading in the classroom improves attitudes toward reading.

Since SSR takes up valuable classroom instructional time, it was important to conduct the study to determine whether this time is well spent, and does in fact improve reading attitudes. The
fact that very little research has been conducted in the area of SSR further supports the need for this study.

Limitations of this investigation included the limited time factor and the problem that reading behaviors often change before reading attitudes do. The researcher was unable to monitor other daily activities that may have influenced reading attitudes. Finally, the Estes Attitude Scale may not have accurately measured reading attitudes.
Chapter II

Review of the Literature

Purpose

The purpose of this study was to initiate a Sustained Silent Reading program into two fourth grade classrooms in order to determine whether the use of quiet reading time changes attitudes about reading. This chapter will examine the literature concerning reading attitudes and Sustained Silent Reading.

Reading Attitudes

There are two issues to consider when evaluating the effectiveness of a reading program: students' achievement and attitudes. Achievement is relatively easy to measure, and there are many tests developed for that purpose. Attitudes are much harder to assess; in fact some authorities and practitioners believe that they are not measurable. Yet, student attitude toward reading does exist. While it cannot be observed directly, inferences can be made by student behavior. It is important to deal with this affective aspect of reading since the student's attitude will remain long after he or she leaves the classroom. Estes (1975) feels that by their nature, attitudes tend to act as determinants of subsequent behavior and training. In this case, the desired behavior is the habit of lifelong reading.
Strategies for Improving Reading Attitudes

Improving attitudes toward reading is a challenge for educators, and teachers are always looking for new strategies to improve their students' motivation to read. One way to help foster a greater enjoyment of reading is to provide an abundance of materials. Students need familiarity with and access to a great deal of materials to make reading convenient and enticing (Beckman, 1984; Betchkal, 1985; Marshall, 1984). Each person possesses a unique blend of personal experiences, interests, abilities, values, needs and expectations. The literature available should be as diverse as the student who reads it. If the teacher provides a variety of eclectic literature, it makes reading more enticing. Among the great variety of materials teachers find motivating to read are such materials as newspapers, magazines, predictable books, and other high-interest literature.

Many schools are using newspapers in the classroom as a teaching tool. In 1980 a study was conducted by the Newspaper Advertising Bureau. They found that children who used the newspaper in the classroom had more positive feelings about the use of the newspaper in school programs and about reading in general than those students who did not use the newspaper. Anderson (1982) conducted research on this strategy, using three groups who received varying amounts of exposure to the newspaper in the classroom. He found a positive correlation between the amount of exposure to newspapers
in the school program and those students' attitudes toward the newspaper and reading.

Predictable books for older students can be defined as books in which the reader can predict what may happen next, or how the story might turn out. These books are usually a specific genre, such as science fiction, or books from a series like Hardy Boy mysteries. The predictability reflects the students' developed interests and language (Atwell, 1985).

Beckman (1984) states that some students always choose the same type of book to read. This is all right he feels, and while a student may spend an inordinate amount of time reading what one might consider "less than worthwhile" literary works, one must be patient. The reader is making progress, and devising ways to enrich the reading diet should be no problem once the habit of reading for pleasure is firmly established.

Bachner (1984) suggests the use of sports literature in the classroom. Sports literature may consist of biographies, rule books, fiction or non-fiction books dealing with any sport. Bachner feels that sports literature is an untapped resource. As an area of study, it meets all the requirements: it has breadth, levels of difficulty, and something for every student. The student identifies with what he or she is reading, and this high interest provides motivation to read.

Providing motivation to read should not fall only on the reading or English teacher. Content area teachers can also provide
opportunities to read for pleasure. Sanacore (1983) suggests a program in which the content area teacher incorporates reading into lessons when a class is studying a specific topic. The teacher can create a temporary "mini-library" consisting of supplemental texts, articles, biographies and fictional works about the topic. Students can spend a given amount of class time or free time reading from this selection.

Another strategy for improving students' reading attitudes is reading aloud to them. Stahlschmidt and Schulte-Johnson (1984) state that many students are aliterate, that is, they can read but do not. Reading aloud appears to be a grass-roots reaction to this phenomenon. As teachers read to their classes, they demonstrate that reading is an appropriate adult behavior, thus serving as a good role model (Bartlett & Porter, 1980; Fricke, 1986; Trelease, 1982). Bartlett and Porter (1980) report that reading aloud to children generally has a positive effect on attitudes toward reading, which in turn results in an increase in the amount of voluntary reading done by students. This is true regardless of the grade level of the elementary child. Mendoza (1985) agreed with this after initiating a reading attitude survey to 520 students. Mendoza found that 94% of primary and 74% of intermediate students liked being read to, and 93% of primary and 69% of intermediate students would like to have a chance to look at or read a book that has been read aloud to them. One student stated that he enjoyed being read to because "if your eyes aren't busy, your imagination is free to roam." Bruckerhoff
(1977) found similar results when he surveyed 101 high school students. He suggests that all teachers read to their students, as being read to is an absolute pleasurable experience for all, no matter what the variance in intelligence in the classroom.

Reading aloud should not only be done by teachers, but also by parents. Betchkal (1985) suggests that time should be set aside every day for parents and children to read together, either silently or aloud. This can and should be done for children of all ages. Loving (1984) reports that one principal boosted reading scores and attitudes by initiating a school-wide program called the "Million Minute Reading Contest." Students were challenged to read twenty minutes every night at home until the million minutes was reached by the entire school. Reinforcements and rewards were given out periodically, and both teachers and parents reported positive feedback concerning reading, as well as school spirit. Lautenschlager and Hertz (1984) set up a program in which parents were instructed on how to read aloud to their children, and materials were provided for them. They suggested that twenty minutes per night should be spent reading together. An overwhelming majority of the parents participating in the program felt it was a worthwhile activity and should be continued. Many felt that their child's attitude toward reading had improved due to the reading together. Similar results were reported in a study that was set up by Lengyel and Bashban (1979). Parents were encouraged to read to their children fifteen minutes a day for nine weeks. In addition
to the children's increased interest in reading, many parents felt that the program brought them closer to their child.

A strategy that goes hand in hand with reading aloud is the "shared book approach." This approach consists of the teacher or parent reading the story aloud, while pointing to the words. Big Books are often used, with the children making predictions and joining in reading repetitive frames. The books are read several times, much like a bedtime story experience (Cullinan, 1986). This approach may be adapted to fit the needs of any teacher. Butler (1984) suggests the use of an opaque projector with regular sized books to create the illusion of a big book. He calls this his "book theatre."

There are countless other strategies and gimmicks educators and parents use to promote positive feelings about reading. These strategies are as important as teaching children to read, as they teach children to want to read.

**Sustained Silent Reading**

Sustained Silent Reading, or SSR, was introduced in 1970 by L. C. Hunt. It was then referred to as "Uninterrupted Sustained Silent Reading," or USSR. In 1971, obvious negative publicity concerning the acronym caused R. McCracken to delete the "uninterrupted" part of the name. Since that time, SSR programs have taken on a number of names including "High Intensity Program" (HIP) (Oliver, 1970; Minton, 1980), "Reading Breaks" (Petre, 1977),
and "Some Quiet Uninterrupted Reading Time" (SQUIRT) (Benedict, 1982). Whatever the name, the ideas and practices behind these programs are very similar, all being based on the theory that silent reading is the key to students becoming better and happier readers. In the past two decades SSR has gained attention as a component in a school's reading program. SSR is not a method of reading instruction, but a planned program of reading practice.

An attitude survey conducted by Heathington (1979) reported that students with poor attitudes had a number of reasons why they did not like reading. Lack of time to read, interruptions, not enough material on topics of interest, not being allowed to select their own materials, and their feeling that reading was too hard were concerns of the fifth through eighth grade students.

SSR programs attempt to address these concerns, and are based on five simple rules developed by McCracken in 1971. The rules are as follows:

1. Each student must read silently.
2. The teacher also reads to set an example.
3. Each student selects a single book (or magazine or newspaper). No book changing is permitted.
4. A timer is used.
5. There are absolutely no reports or records of any kind.

As long as the primary objective of quiet time while everyone is reading is met, these rules can be modified to suit any given classroom situation.
Components of Successful SSR Programs

The SSR program can be adapted to any grade level, and may be implemented on any scale: in one classroom, in one school, or in an entire school district. While SSR programs are flexible and responsive to the uniqueness of each school situation, McCracken's guidelines provide a simple and effective management system.

Research shows that the importance of each student reading silently is essential for a number of reasons. In many situations, school is the only place children have the opportunity to read. Arahana (1983) found that when reading is not a significant part of the home environment, there is little incentive to form the habit or to read for pleasure. Moore, Jones, and Miller (1980) tell us that many young people lack a quiet place to read or have no adult role model to foster a desire to read. SSR attempts to provide both. Allington (1977) states that at the heart of the SSR concept is the fact that despite teacher encouragement, many students do not read outside of school. He also found that children who participated in remedial instruction did very little reading during the course of instruction. Unfortunately, it is often the poor reader who is given the least amount of time for SSR. The basal reader approach often prescribes extra skill instruction for poor readers, while good readers are allowed to engage in SSR. While independent silent reading is recommended as part of the basal reader approach, unfortunately it has often been placed in the category of "enrichment if extra time is available" (Mork, 1972). Reading skills are
over-taught and under-practiced, especially by low achieving students (Levine, 1984; Noland, 1976; Schaudt, 1983). How ironic that these poor readers are given the least amount of opportunities to practice. It is no wonder that research has shown that poor readers often have the poorest attitudes toward reading (Levine, 1984; Mork, 1972; Swanson, 1984). Hunt (1970) states that oral reading is harmful to low-powered readers because too much perfection is demanded in oral reading before students know what the whole reading process is about. Johns (1982) agrees, stressing that meaningful oral reading should occur only after silent reading has taken place. SSR programs afford the time, setting, and opportunity for all students to read. It provides the means to build power in silent reading through practice. Sadoski (1980) defines a reader as not merely a person who can read, but a person who does read.

McCracken's second rule, dealing with teacher modeling, is considered by some to be a significant factor in children's view of reading being a valued activity (Bergland & Johns, 1983; Farrell, 1982). If a student sees his teacher enjoying reading, it can produce a more positive attitude toward the importance of reading. In situations where SSR did not work, two problems were usually the cause of the failure. These were poor selection of materials, and teachers who were not serious readers (McCracken, 1978; Minton, 1980). The researchers found that some teachers spent the SSR time doing managerial tasks such as correcting papers or preparing
lesson plans, which not only distracted the class with movement and noise, but also showed the students that reading was not the teacher's priority at the time. Some students felt that reading was not important to the teacher, and they reflected this attitude. Teachers may also provide the impetus for follow-up discussions by commenting on their own reading. Students can be encouraged, but not required, to share brief summaries, figurative language, and draw parallels to personal experiences.

Self-selection of books is a component of the SSR program that often motivates students to become more independent and enthusiastic readers. Levine (1984) said that poor readers are motivated to read because they choose books that interest them. Once they become so engrossed in a book above their instructional level, due to the high interest in the subject matter, they persist in their reading. Strong interest can frequently cause the reader to transcend not only his independent level, but also his instructional level; such is the power of self-motivation. When the classroom atmosphere encourages self-selection, usual reading performances as measured by achievement tests, become less meaningful.

Each student is to read silently for a fixed period of time. A timer should be used to measure that time so that the teacher and students may concentrate on their reading instead of on the clock. Ganz and Theofield (1974) and Mork (1973) recommend beginning with short periods of SSR and then extending the periods until as much as 40 minutes is given over to silent reading.
Perhaps the most important aspect of the SSR program is the fact that there are absolutely no reports of any kind given by the student. Berglund and Johns (1983) believe that SSR by its very nature releases students from the pressure of reading every word perfectly and remembering every detail. It frees their minds to enjoy reading on their own terms in materials they have selected. The SSR reader is an independent reader and does not depend on the outside direction and correction of the teacher. No poor reader will be caught making pronunciation errors or be embarrassed, shamed or ridiculed for failing to demonstrate comprehension during SSR. According to McCracken (1971), poor readers respond that since no one watches them, they can make mistakes without worrying. Able readers say they’re relieved because they don’t have to prove they are bright every time they read something.

**Benefits of SSR**

Advocates of SSR reason that the more one reads, the more proficient at reading one will become. The outcomes that one is led to expect from SSR are numerous. Oliver (1970) suggests the positive effects that SSR may have on readers include increased attention span, improved self-discipline, increased sophistication in the self-selection of reading materials, improved acceptance and enjoyment of reading, and refined and extended reading skills.

While endorsing the program, Huck (1976) reminds educators that "one of the best kept secrets in education is that children learn to
read by reading" (p. 600). McCracken (1969) emphasizes that teachers are responsible for promoting a willingness to read as well as teaching reading skills. Gage (1971) assumes an even stronger stand when considering independent reading. He states, "We have turned off students, sacrificing our long-range goals of having students finding reading satisfying, for a short-term profit of increased scores on posttests" (p. 2). Gage advises that we put aside the overemphasis on diagnosis, prescription, and testing in favor of encouraging reading as an affective process.

Proponents of SSR claim that the program improves students' attitudes toward reading. Through SSR, extensive exploratory reading is developed. Without SSR, some students never obtain independence and self-direction (Mork, 1970). In a study involving eighth graders, Farrell (1982) found that the preeminent value of the SSR program was the growing interest the students exhibited in reading itself. They became more involved in their books, showing a reluctance to lay them down when the bell rang. These students also spent time reading in study halls and homeroom. These positive attitudes are often likely to cause a ripple-effect within a school. According to Petre (1977), Reading Breaks lowered the number of disciplinary cases sent to the office, encouraged an exchange of books, magazines and materials, increased the number of students who read, began new student-teacher relationships built around reading tasks, and increased the use of basic self-selection skills. Book-sharing often becomes a popular way for students to choose new books,
especially when the teacher sets an example (McCracken & McCracken, 1978). Farrell (1982) and Aranha (1983) found that students' book choices indicated a growing sophistication in choice, and SSR groups displayed a wider range in selecting books than that of control groups.

McCracken (1971) surveyed students concerning their attitudes toward reading, following six months of reading practice. Students responded that they learned to like reading, as well as enjoy the daily quiet period. Even poor readers experienced success and did not suffer embarrassment from their errors. Coley (1981) received similar responses from junior high school students who participated in a six-month study of SSR. Responses to the question of what they would do to change the program included making SSR time longer and providing more books. In this study, students in the experimental group had significantly better attitudes toward reading and books. These students' positive attitudes toward independent reading were in agreement with other reports that noted students' enthusiasm for a sustained silent reading program (Allington, 1977; Burkhart, 1980; Coombs & Van Dusseldorf, 1980; Sadowski, 1980; Wilmot, 1975).

Will this enthusiasm lead to lifelong reading habits? In a six-year study of junior high students, Cline (1980) found significant statistical difference in positive attitudes toward reading. Anderson and Filler (1976) attest that attitudes will improve when students witness the value placed on reading time and participate with other students who read. Duffy (1967) and Oliver (1970) found a bolstering
of self-concept as a result of their recreational reading programs. The confident reader is well on his or her way to becoming an adult reader.

Unlike other reading programs that can only be evaluated after months or years in operation, McCracken feels that educators will notice immediate results in silent reading performance and reading habits. SSR can be adapted to any grade level. McCracken and McCracken (1972) outline a program for kindergarten students where teachers give brief presentations of several books and then subsequently allow self-selection of books. The children are urged to spend SSR time looking at pictures and words. In contrast, high school students display similar enthusiasm for SSR, according to studies by Petre (1971) and Coughlin (1977).

Criticisms of SSR

Not all educators agree with SSR's alleged benefits. While Huck (1976) favors the use of SSR, the "artificial aspects" created by the stipulation that all children must read at the same time makes her wary. She suggests that perhaps self-selection of reading time should accompany self-selection of reading materials. Spache (1978) advocates the use of more teacher guidance in choosing reading materials as he is not certain that free choice of materials would meet the needs and interests of students.

While many of the researchers believe that SSR creates a positive attitude in readers, not all research has concluded that SSR is
effective. Manning and Manning (1984) conducted a study which examined attitudes of students participating in three different models of recreational reading, SSR being one of the models. They discovered that the students participating in the peer-interaction model and the teacher-student conference model showed significantly greater gains in reading attitudes than those in the SSR group. Studies by Einhorn (1979), Langford and Allen (1984), Reed (1977) and Summers (1980) concluded that there was no significant relationship between the SSR treatments and students' attitudes toward reading.

Summary

Student attitudes toward reading do exist. Some strategies for improving attitudes toward reading include providing a variety of high-interest materials for the students, parents and teachers reading aloud to them, and Sustained Silent Reading.

SSR is a planned program of reading practice, based on McCracken's framework of five rules. A number of research studies report positive effects on reading attitudes due to SSR, while others report finding no significant changes in attitude.
Chapter III

The Research Design

Introduction

The purpose of this study was to initiate a Sustained Silent Reading Program into two fourth grade classrooms in order to determine whether the use of quiet reading time in the classroom changes attitudes about reading.

Hypothesis

The following null hypothesis was investigated in this study:

There is no significant difference between the mean posttest scores of the control group and the SSR treatment group, as measured by the Estes Reading Attitude Scale.

Methodology

Subjects

Eighty-eight fourth grade students from a suburban elementary school district were the subjects for this investigation. Forty-four students from two different classrooms were placed into a treatment program and 44 students from two other classrooms acted as the control group. The treatment group participated in SSR daily for fifteen minutes, for a period of ten weeks. The control group did not participate in SSR, and used that fifteen minute period of time to work on homework or other teacher-assigned tasks.
**Instrument**

A modified version of the Estes Reading Attitude Scale: Elementary Form was used to determine pre and post-treatment reading attitudes. The Scale was modified so that the student was only able to answer that he/she agreed or disagreed with the statement. The middle column, which had been a question mark, was removed.

**Procedure**

The students in all four fourth grade classes were given a pretest of the Estes Reading Attitude Scale prior to the treatment period. When giving the attitude survey, the examiner explained that there were no right or wrong answers to the survey and the students should just be as truthful as possible. Each of the fourteen statements was read aloud to the class and students were given time to check off whether they agreed or disagreed with the statement.

The following day the treatment program began. The researcher explained to the students in the treatment group that every day they would be given time for "free reading." During this time they would be allowed to silently read something of their own choice. A discussion followed, with students listing possible reading materials, including basal reading texts, library books, books from home, comic books, magazines and newspapers.
The students were given the following rules for SSR time:

1. Each student must select a single book to read. (No book changing is permitted during the SSR time.)

2. Each student must find a spot in the room where he/she can sit and read without disturbing anyone else.

3. Each student must read silently during the SSR time.

The teachers were also given some guidelines:

1. The teacher must also read during the SSR time in order to set an example for the students.

2. A timer should be used to determine the beginning and end of SSR time.

3. There are to be absolutely no reports, records or evaluations assigned concerning what the students read during the SSR time. The teacher may, however, generate an informal discussion about what she read during the period, at which time students may or may not talk about what they read.

The treatment period lasted for ten weeks. Students in the control group spent fifteen minutes daily either working on their homework or doing another teacher-assigned task.

At the end of the ten weeks the classes were again given the Estes Reading Attitude Scale. The following week the Estes Scale was given once more, to determine test-retest reliability.
Summary

Students in four fourth grade classrooms participated in this study. Half of the students acted as a control group, the other half were the treatment group.

The null hypothesis investigated was that there is no significant difference between the mean posttest scores of the control group and the treatment group, as measured by the Estes Reading Attitude Scale.

The scale was administered to all students, then for ten weeks the treatment group participated in SSR. At the end of the ten weeks, the Estes Reading Attitude Scale was again given, then it was administered once more the following week.
Chapter IV

Analysis of Data

Purpose

The purpose of this study was to initiate a SSR program into two fourth grade classrooms in order to determine whether the use of quiet reading time in the classroom changes attitudes toward reading.

Findings and Interpretations

The following null hypothesis was investigated: There is no statistically significant difference between the mean posttest scores of the control group and the SSR treatment group, as measured by the Estes Reading Attitude Scale.

In order to establish equivalency between the control and treatment groups, a pretest of the Estes Reading Attitude Scale was administered. The results are summarized in Table 1.

Table 1

<table>
<thead>
<tr>
<th>Group</th>
<th>d.f.</th>
<th>$\bar{x}$</th>
<th>s</th>
<th>t</th>
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<tbody>
<tr>
<td>Control</td>
<td>43</td>
<td>14.86</td>
<td>6.56</td>
<td>0.28</td>
</tr>
<tr>
<td>Treatment</td>
<td>43</td>
<td>15.27</td>
<td>7.27</td>
<td>0.28</td>
</tr>
</tbody>
</table>

24
The calculated $t$ value between the pretest scores for the two groups (see Appendix) was 0.28. For a $t$ test of independent measures at the .05 level of significance, the critical value for 86 degrees of freedom is 1.97. Since the calculated $t$ value (0.28) was less than the critical $t$ value (1.97), the probability ($p = <.05$) was more than a 5% chance that the difference of means occurred by chance.

The analysis of data indicate that there was not a significant difference in favor of one group over the other in reading attitudes as measured by a pretest of the Estes Reading Attitude Scale.

The hypothesis states that there is no statistically significant difference in the Estes Reading Attitude Scale posttest scores of the control and treatment groups. A two-tailed $t$ test for independent measures was used to test the hypothesis at the .05 level of significance. Table provides data from the statistical analysis.

Table 2
A $t$ test for Independent Measures of Significant Difference on a Posttest

<table>
<thead>
<tr>
<th>Group</th>
<th>d.f.</th>
<th>$\bar{x}$</th>
<th>$s$</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>43</td>
<td>15.55</td>
<td>7.19</td>
<td>2.80</td>
</tr>
<tr>
<td>Treatment</td>
<td>43</td>
<td>19.64</td>
<td>6.43</td>
<td>2.80</td>
</tr>
</tbody>
</table>
The calculated $t$ value for the posttest scores between the two groups (see Appendix 2) was 2.80. For a two-tailed test for independent measures at the .05 level of significance, the critical value for 86 degrees of freedom is 1.97. In addition, the critical $t$ value at the .01 level of significance is 2.64. Since the calculated $t$ value (2.80) is greater than the critical $t$ value (1.97 or 2.64), the null hypothesis is rejected.

In order to determine the reliability and stability of the posttest scores, the posttest was readministered the following week. A correlation coefficient was used to determine the strength of the relationship between the two scores. The $r$ value attained by the control group was .98 and the $r$ value attained by the treatment group was .99. This indicates that there was a strong relationship between the test and retest administrations for both groups.

**Summary**

The results of this analysis indicate that there was a statistically significant difference in the mean posttest scores of the control and treatment groups in favor of the treatment group, as measured by the Estes Reading Attitude Scale.
Chapter V

Conclusions and Implications

Purpose

The purpose of this study was to initiate a Sustained Silent Reading program into two fourth grade classrooms in order to determine whether the use of quiet reading time changes attitudes toward reading.

Conclusions

The results of this study indicate that there was a statistically significant difference between the mean posttest scores of the control and treatment groups, as measured by the Estes Reading Attitude Scale.

The Estes Reading Attitude Scale consists of fourteen questions with each positive answer being worth two points, therefore it takes a small number of answers to constitute a change in attitude. Estes (1976) states that an average score would be anywhere between 14 and 27 points. Both groups had pretest scores in the lower-average range.

The control group's mean scores increased, going from a mean pretest score of 14.86 to a mean posttest score of 15.55. On the Estes Scale this increase represents one point, or half of one answer. This gain may be attributed to any number of factors
including maturation or new classroom activities that may have created more positive reading attitudes.

The treatment group's scores, on the other hand, increased over four points, going from a mean pretest score of 15.27 to a mean posttest score of 19.64. This can be interpreted as a gain of four points or two test questions. Since the Estes test is only 14 questions, an increase of two positive answers may increase a score considerably.

In conclusion, the results of this study seem to indicate that the use of SSR time in the classroom does in fact foster more positive attitudes toward reading, as measured by the Estes Reading Attitude Scale.

**Implications for Research**

In future research, a larger or different population could be utilized that include a variety of ages, reading levels and pre-treatment reading attitudes, to determine the effectiveness of SSR on various types of students.

There are many variations of the guidelines for SSR. Some of these include types of reading materials available, length of the SSR periods, and the physical setting for the students (for instance, whether they are sitting at their desks or laying on the floor). Any of these variables may change the students' attitudes about SSR and/or reading.
Often students' behaviors changes before their attitudes change (Heathington, 1979). A behavior checklist could be included for the teacher to note additional positive reading behaviors.

An item analysis could determine on what areas of the Estes Reading Attitude Scale SSR has the greatest effects.

Classroom Implications

This study supports the use of SSR time in the classroom to facilitate more positive attitudes toward reading. While the data indicate that the results of the study are statistically significant, one must consider whether they are also educationally important. There is no cost in implementing this program, other than that of time and supplying adequate reading materials. If setting fifteen minutes aside every day for SSR time will increase a student's love of reading, this indeed is time well spent. On the basis of the findings of this investigation, it is recommended that SSR periods become incorporated into the daily classroom schedule.

Summary

The goal of this study was to determine if the use of SSR periods increased students' attitudes toward reading. The data indicated that the use of SSR time did in fact increase students' attitudes about reading, and it is recommended that SSR be incorporated into daily classroom schedules.
It is also recommended that further research be conducted using different ages, ability and attitude levels of students, and variations of SSR rules and guidelines.
References


Burkhart, D. A sustained silent reading program designed for second grade to foster a positive reading attitude and develop the reading habit. 1980. (ERIC Document Reproduction Service No. ED 257 037)


Heathington, B. S. (1979). What to do about reading motivation in the middle school. *Journal of Reading, 22*(8), 709-713.


McCracken, R. A., & McCracken, M. J. (1972). *Reading is only the tiger's tail*. San Rafael, Calif: Lewing Communications.


APPENDIX A

Estes Reading Attitude Scale Scores:

Control Group
Estes Reading Attitude Scale Scores: Control Group

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APPENDIX B

Estes Reading Attitude Scale Scores:

Treatment Group
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APPENDIX C

Estes Reading Attitude Scale
If you agree, mark A
If you disagree, mark D

1. Reading is fun for me.          
2. Books are boring.              
3. Reading is a good way to spend spare time.  
4. Reading turns me on.           
5. Books do not make good presents. 
6. Reading is rewarding to me.    
7. Reading becomes boring after about a half hour.  
8. Free reading teaches me something.  
9. There should be time for free reading during the school day.  
10. There are many books I hope to read. 
11. Reading is something I can do without.    
12. A certain amount of time during summer should be set aside for reading. 
13. Books usually are good enough to finish.  
14. Reading is not exciting.