EFFECTS OF SUSTAINED SILENT READING ON COMPREHENSION

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ABSTRACT

The purpose of this study was to find if there is a significant difference in the end of the year Communication Arts scores of students who participate in Silent Sustained Reading compared to students who did not participate in Silent Sustained Reading. Demands of No Child Left Behind, increases a mandated curriculum, and the National Reading Panel’s statement that silent reading is ineffective has created controversy. This pilot study investigates the impact of independent reading on the reading achievement of a small group of students with special needs. They all received services in Communication Arts and their independent reading levels were below average (lower elementary grade level). The question investigated in this research study was: Does participating in independent reading increase student’s reading achievement? Findings of this study show that in all six students who participated in SSR scored an average score of 79% whereas the other six students who did not participate in SSR obtained an average score of 82%. After collecting and reviewing the findings of this study, it was revealed Silent Sustained Reading did not improve students’ reading achievement. Students who are participating in SSR are not significantly performing any better on end of the year Communication Art informal assessments than students who are not participating in SSR.
INTRODUCTION

Background, issues and concerns

Silent Sustained Reading, most commonly known to school districts as SSR, is a form of school-based recreational reading, or free voluntary reading, where students read silently in a designated time period every day in school. There is underlying assumptions and research studies that imply SSR can improve student learning. One research study conducted on SSR is based on Stephen Krashen, an SSR advocate. She reported 51 of 54 studies based on SSR programs revealed students scored higher in reading comprehension and reported better attitudes than students who did not participate in an SSR program (Krashen, 2011).

Special Education Teachers teach students who are behind one to two years, if not more, academically. Special Education Teachers search for various resources to help meet the needs of their students. The curriculum is generally based on strong phonemic awareness, phonics, fluency, and vocabulary. However, it seems quite difficult to find curriculum that emphasis comprehension too.

In many instances students lose interest in reading because they can’t relate or simply enjoy their required readings. A student who wants to read does it for a reason; interest or simple enjoyment. Special Education Teachers struggle every day to help their students become more engaged in reading and build a desire to want to read more.

The following study showed no noticeable difference in reading academics between students who participated in an SSR program compared to those who did not. This study did not show a noticeable difference between end of the year benchmark comprehension scores compared to students who had prior SSR engagement compared to those who did not have prior
SSR engagement. The study did not show an impact on their end of the year benchmark
comprehension scores either.

Practice under Investigation

Practice under investigation was implementing a SSR program within the classroom to
improve comprehension scores of students. Students were given options about what to read and
15 minutes to practice their reading skills. There was an investigation to see if a correlation
actually exists between attitude and comprehension score of students who were involved in a
SSR program compared to other student’s comprehension scores who were not involved in a
SSR program within the classroom.

School policy to be informed by study

School policy is to project best practices and comprehension strategies to increase
student’s reading engagement to improve our student’s higher order thinking skills. It is the
teacher’s job to keep current on instructional knowledge and seek to explore changes in
classroom instruction to help improve student performance. Currently no classes are engaging in
SSR programs. SSR programs can increase student’s comprehension scores; perhaps more
teachers will implement or align their reading series to include SSR. The amount of time spent
on SSR is based on different opinions, and the data from this study can inform administration
and teachers as to how effective an SSR program can be if placed within the daily classroom.

Conceptual underpinning

Theories exist within the SSR reading based program that students have higher
comprehension ability, but must be implemented daily so students are reading more. Many
teachers feel that higher comprehension test score reflects on how comfortable and positive a
student feels. More exposure to a timed SSR program will help students more than a teacher lecturing day in and day out. More exposure for students to pick books and be given an allotted amount of time to read will give more confidence and allow for students to become engaged with reading. Students claim to do better when exposed to more reading time, and teachers claim that students relate better and comprehend what they read when they are able to choose their reading material. There is not exact data to support this perception but the data through this study is to help administrators and teachers understand if the practice of SSR is actually helpful for the improvement of student’s comprehension scores, or just repetitive approach to get students to read.

Statement of the problem

If there is a marked difference between students who are engaged in SSR and those students who are not, teachers need to implement SSR into their reading curriculum. Additionally, if there is a marked difference in comprehension scores, the administration will need to allow for additional allotted time for SSR programs to be implemented within the classroom.

Purpose of the study

The purpose of this study is to improve student’s reading achievement and attitudes by providing students daily time to read material that is interesting to them. The focus is on providing primary instructional emphasis on comprehension and measure the extent of student’s improvement on end of the year informal comprehension assessment scores.
Research question

Is there a significant difference in Communication Arts End of the Year Benchmark scores based on Silent Sustained Reading?

Null hypothesis

1) There is no significant difference in Communication Arts End of the Year Benchmark scores based on Silent Sustained Reading.

Anticipated benefits of the study

Benefits from this study will help students, teachers, and parents, to understand the important of independent reading programs. This study showed the correlation between academic performance and reading ability among students. Students who engage in free reading program will improve in their comprehension benchmark tests because they are exposed to the relationship between vocabulary development, knowledge of grammar, and personal engagement towards reading.

This study benefited students in a way of understanding that reading leads them to a successful life in terms of understanding how to survive in the world and comprehend the critical information that is needed to know what is going on within their world.

This study provided great information to teachers with the explanation of why children need to become engaged in their reading programs. Students can express who they are through the reading material they pick to read. Children are individuals who need to be inspired, encouraged, and mostly importantly taught individually and the use of SSR program can have a benefiting effect on the academic performance of students.
**Definition of terms**

Reading Attitude- An expression of favor or disfavor toward reading.

Silent Sustained Reading (SSR) - A form of school-based recreational reading, or free voluntary reading, where students read silently in a designated time period every day in school.

Strategy- A plan of action or policy designed to achieve a major or overall aim

**Summary**

A study was conducted to see if there is a significant difference between students reading comprehension when engaged in SSR compared to those who are not engaged in SSR. Silent reading has been a familiar component of many reading programs. Fostering a child’s comprehension ability can have a positive effect on their academic success. Research has been conducted and shows that when students are given a selected choice as to what to read, a student has more motivation to task-read. Teachers need instill the love of reading to students and help them stimulate academic achievement. Since students struggle with many things in life, continued learning on how to understand behavior towards reading can help teachers seek different resources and teaching methods so students can be better readers and succeed in their overall academics. Inspiring students to read is a very difficult and challenging element for teachers.
REVIEW OF LITERATURE

Education in today’s society is becoming more difficult and requiring students to perform at even higher levels. Meeting all the state expectations is a minor issue compared to meeting all our students individual needs. Teachers are pushed to teach from the books and test often. The personal aspect of a classroom is slipping away very quickly. Yoon (2002), encouraged student engagement. Yoon felt that students in today’s classroom need to be engaged with what they are reading in order to learn the vital aspects of the material. Yoon discovered that allowing students to take time and simply sit down with a book for enjoyment created great character traits for students. Yoon stated, “Individual motivation and personal time to read, encourages children to become more self-determined” (p.188).

Silent Sustained Reading (SSR), a form of school-based recreational reading or free voluntary reading, where students read silently during a designated time period every day in school, has been shown to empower and motivate students to become a stronger reader (Karshen, 2011). There have been many studies conducted to reveal that SSR programs allowed students to engage in reading on a daily basis, improvements in reading comprehension and motivation has been shown to carry over to an improvement in all academic areas.

Classroom teachers should be empowered to motivate and manage extensive amounts of in-class reading practice time, monitor student’s performance, and intervene with individualized strategies for students (Marinak & Grambrell, 2006). Many students with special needs and general education students do not want to read. They give all kinds of excuses and behaviors to avoid opening a book. Reading is considered a very complex and difficult subject to teach; it involves many components, including phonic, vocabulary, and written expression (Miller, 2014).
There have been different studies conducted to see how the approach of teaching affects students to read and comprehend the process of learning. One study conducted by Hidi (2001), focused on teaching students to read based on the pleasure and voluntary selection as to what to read. She discovered that students who do not read with ease and enjoyment struggle with comprehension, analyzing, and application. It was determined that student’s deficits in reading comprehension lead to struggling to succeed in school and a life of low functioning.

Studies that have been conducted through the Academic Excellence, a subsidiary of the Advantage Learning that provides research and professional development services, found higher scores in multiple subject areas in majority of schools using Silent Sustained Reading programs (Institute for Academic Excellence, 1999). It was reported that a middle school in Arizona during a one year period, that total population of 282 students, participated in a SSR program where they read for 45 minutes daily. There was a significant improvement in vocabulary and a gain in comprehension in grade equivalent scores. Another research study in 1999 by the Institute for Academic Excellence was conducted on students with learning disabilities. It, too, was based on SSR. Results of the study revealed a positive effect on reading achievement. This study consisted of a group of randomly picked elementary students who were given 60 minutes of SSR on a daily basis. This study took place over a four-month period and followed a pre-test, intervention, and post-test. Students completed a reading comprehension test at the beginning and the end of the study. The group was administered the Estes Reading Attitude Scale at the beginning and end of the study. The results showed gains in attitude; however, the comprehension tests revealed very little change. This study did not prove that the implementation of SSR had a significant effect on student’s comprehension ability.
Studies are not only being conducted in the state of Missouri, but also internationally. An international study based on the effects of *Time to Read* was conducted and consisted of 512 children from 50 primary schools. The study revealed a significant disadvantage to students who did not participate in the *Time to Read* program. Results revealed low comprehension abilities and depleting academic success. The research revealed students leaving their educational environment and having little to no comprehension skills at all and enabling them to carry the adequate qualifications needed to be successful in life (Miller, Connolly, & Maguire 2011).

Studies have shown that reading comprehension skills are essential for success in individual academic, professional, and personal life. If students go through life and never learn how to comprehend any type of text, that means they will be unable to read a simple medicine bottle, a billing statement, or even address. There are many students who grow up not able to live safely and productively because they lack basic reading and comprehension skills.

It is imperative for school schools to find ways to improve literacy. Finding the right program to be successful is not very easy. Research has shown that students are falling further and further behind their peers (Gutherie & Alao, 1997). Engaged reading programs help students to want to become readers and believe in themselves. Teachers need to create the essence of engagement through knowledge of goals, real world connections, and meaningful choices. Gutherie & Alao stated the importance of self-efficacy and it benefit towards facing challenges and the most important challenge was being able to read successfully. A child that is driven to read is a child that will be driven to be successful throughout their life!

Teachers need the resources and education to help improve reading abilities within the classroom. Hidi (2001) acknowledged the fact that the interest a child holds in the text they are reading leads to further thinking. Students could recall more information which led to more
quality in learning. The connection and interest with reading motivates readers to go beyond the surface structure of the texts and focus on the main ideas and their underlying meaning. Interest in the classroom and how it is especially critical as evidence continues to accumulate showing that as children age, their motivation, interests, and attitudes toward school in general deteriorate. Utilizing all forms of interest in the classroom can be a way to achieve more interest and success in the reading programs (Hidi, 2001).
Research Methods

Research design

A collection of data was taken to compare end of the year benchmark comprehension scores comparing students who were participating in SSR and students who were not participating in SSR. If a difference is found between students’ comprehension scores who were participating in the SSR program compared to students who were not participating in the SSR program, teachers will be informed of the outcome and will be suggested that teachers implement SSR into their daily language curriculum. The independent variable in the study was the participation in an SSR program. The dependent variable is Communication Arts End of the Year Benchmark scores.

Study Group Description

A collection of Communication Arts informal end of the year assessment scores were compared amongst 12 special education students with 6 of the students who participated in SSR during the school year and the other 6 students did not participate in SSR during the school year. Demographically, the students consisted of 4 girls and 8 boys. All the students received special education services in communication arts. The students that were surveyed were all in the same grade and on the same reading level. This group of students has had very little exposure to literature from the day they were born. Some of these students are delayed in development, and some of them have no motivation to learn at all. Another factor that plays a role is their emotional state. Many of my students’ state of mind are never constant. These students have low self-esteem and often resort to evasive actions to keep from facing an issue like not being able to read. They simply withdraw and avoid any aspect of reading.
Data collection and instrumentation

Scores retrieved from End of the Year 2013-2014 benchmark unit comprehension tests were collected.

Statistical Analysis Methods

A T-test was conducted to find if there is a significant difference in Communication Arts end of the year assessment based on participating in SSR. The source was broken into two categories: students who participated in SSR and students who did not participate in SSR. The mean, mean D, t-test, df, and p-value were concluded from this test. The Alpha level was set at .25 to test the null hypothesis: There is no significant difference in student Communication Arts End of the Year Benchmark scores based on participating in SSR.
FINDINGS

A t-test was conducted to decipher whether there was a difference in performance on the 2013-2014 Communications Arts end of the year informal assessment. The following tables, graphs, and charts will depict the organized findings based on the statistical raw data found from the end of the year Communication Arts informal assessments. There is only one year of data to look at since SSR was implemented in the beginning of the 2013-2014 school year.

**t-Test Analysis Results for Silent Sustained Reading**

<table>
<thead>
<tr>
<th>Source</th>
<th>Mean</th>
<th>Mean D</th>
<th>t-test</th>
<th>df</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student with SSR (n=6)</td>
<td>82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student w/noSSR (n=6)</td>
<td>77.76</td>
<td>4.33</td>
<td>0.59</td>
<td>10</td>
<td>0.57</td>
</tr>
</tbody>
</table>

Note: Significant when p<=0.25

The independent variable was Silent Sustained Reading. The dependent variable was end of the year Communication Arts test scores. There were 6 special education students who participated in SSR during the 2013-2014 school year and 6 special education students who did not participate in SSR during the 2013-2014 school year. The mean score of the lower SSR percentage group was 82 while the mean score for the higher SSR percentage group was 77.76. The difference of the mean score (Mean D) was 4.33. The t-test was 0.59. The degrees of freedom were 10. The null hypothesis was: There is no significant difference in student comprehension as measured by informal assessments based on participating in SSR. The null is not rejected because the p-value of 0.57 is greater than the alpha level of .25. This means that
there is not a significant difference in student comprehension test scores based on participating in Silent Sustained Reading.

Silent Sustained Reading Score vs. No Silent Sustained Reading Scores

<table>
<thead>
<tr>
<th>Source</th>
<th>YR 13-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>No SSR</td>
<td>100.00%</td>
</tr>
<tr>
<td>No SSR</td>
<td>100.00%</td>
</tr>
<tr>
<td>No SSR</td>
<td>57.00%</td>
</tr>
<tr>
<td>No SSR</td>
<td>83.00%</td>
</tr>
<tr>
<td>No SSR</td>
<td>72.00%</td>
</tr>
<tr>
<td>No SSR</td>
<td>80.00%</td>
</tr>
<tr>
<td>SSR</td>
<td>79.00%</td>
</tr>
<tr>
<td>SSR</td>
<td>80.00%</td>
</tr>
<tr>
<td>SSR</td>
<td>87.00%</td>
</tr>
<tr>
<td>SSR</td>
<td>70.00%</td>
</tr>
<tr>
<td>SSR</td>
<td>80.00%</td>
</tr>
<tr>
<td>SSR</td>
<td>70.00%</td>
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</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>79.83%</td>
</tr>
<tr>
<td>Median</td>
<td>80.00%</td>
</tr>
<tr>
<td>Max</td>
<td>100.00%</td>
</tr>
<tr>
<td>Min</td>
<td>57.00%</td>
</tr>
<tr>
<td>Standard Dev.</td>
<td>0.1225363</td>
</tr>
</tbody>
</table>
The above data displays the scores for both students who participated in SSR and students who did not participate in SSR. The results show that the highest scores were obtained by two students who were in the nonparticipating SSR group with a score of 100%. The lowest score also came from the nonparticipating SSR group with a score of 53%.

This line graph demonstrates the maximum scores, minimum scores, average scores and standard deviation among both SSR and no SSR grouped students. The average and median were very
close with a score of 80%. This demonstrates that both groups did perform above average when compared as a whole group.

This line graph demonstrates that the students who did not participate in SSR scored an average score of 82%. This is above average and therefore demonstrates that these students who did not have Silent Sustained Reading performed well as a group. The highest and lowest score did come from this group.
This line graph demonstrates that students who did participate in SSR scored an average of 79%. This group was almost 3% lower with its average score. This group as a whole did not do as well on the end of the year informal Communications Arts assessment. The maximum score from the participating SSR group was 87% demonstrating 13% lower than the highest score from the group of students who did not participate in SSR.

When looking at the overall charts and data from collected scores of students who did receive SSR and students who did not receive SSR it can be revealed that the average score for both groups was 79.83% which is almost 20% above average. The highest scores of 100% were achieved by students who did not participate in SSR and the lowest score of 57% was also achieved by a student who did not participate in SSR. The students who did not participate in SSR had an average score of 82%. The students who did participate in SSR had an average score of 78%. Therefore the students who did not participate in SSR scored better as a group than those students who did participate in SSR.
CONCLUSIONS AND RECOMMENDATIONS

The outcomes reported from this study show that students who did not participate in Silent Sustained Reading performed better on the end of the year Communication Arts informal assessment than students who did participate in Silent Sustained Reading. The findings show there is no significant difference in the end of the year Communication Arts performance scores between students who did participate in SSR and students who did not participate in SSR. The t-test results from 2013-2014 testing year indicated that the p-value was 0.57, higher than the alpha level set at .25; therefore the null hypothesis tested is not rejected.

The National Reading Panel strongly supports the findings from this study. The panel expresses how recent studies in literature review have little to no supportive findings on the effects of SSR. The National Reading Panel argues that many altering factors are implemented during SSR and makes it very difficult to draw conclusions that support the positive effects that are revealed from SSR. A few of the factors are; teaching style, material, location, and adequate time for SSR. A golden concern is why use SSR when it does not prioritize instruction to focus on the instructional strategies that both experimental design and correlation studies support? The National Reading Panel strongly supports that we teach what we know for sure works and achieves better results through obvious studies based on the board of education.

After concluding this study there are some further studies that could be conducted. In order to find clearer answers regarding the effects of silent sustained reading a study should be conducted for several years. The subjects should also be of a larger population and from both a rural and urban area. The study of general education students could have a tremendous change in results. The subjects in this study were special education students and many altering factors could have played a role that created the results in such a manner.
This research could provide a broad spectrum. Schools that have students who participate in SSR are being offered a difference in learning style and teaching approach. It is imperative for school personnel to work together to improve literacy. Finding the right program to do that is not easy and research has shown that students are falling further and further behind their peers (Harris & Hedge, 1996). Students need to become interested in what they are reading or choose for themselves what they want to read; they experience more positive cognitive and affective functioning.

Silent Sustained Reading cannot replace any current language arts or literacy curriculum; it can only bring variety and different approaches to the learning aspects. Research has shown that reading can positively affect student’s motivation and academic success. Teachers are being held more and more accountable for student test scores, and mandated curriculum. It is in the best interest of students to use professional judgment and continued education to choose the silent sustained reading practice that best suits the group of students being taught.
REFERENCES


Miller, S., Connolly, P. & Maguire, L.K. (2011). *A Follow-Up Randomized Controlled Trial Evaluation of the Effects of Business in the Community’s Time to Read mentoring program, Belfast*: Center for Effective Education, Queen’s University Belfast.

