SIGHT-WORD STUDY AND IMPROVING THE READING ABILITY OF CHILDREN IN THE PRIMARY GRADES

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ABSTRACT

This study was completed to determine if there was a significant correlation between sight-word recognition growth and reading level growth for struggling readers working through a sight-word study. The research was conducted in a private elementary school in Missouri. The focus groups were made up of low level readers within the grades of kindergarten, first and second grade. First, reading levels of all students were determined, and the bottom three readers from each grade were chosen for the study. The study lasted a period of four weeks, which included sight-word instruction five days a week. The findings showed a strong positive relationship between sight-word recognition growth and reading level growth. The struggling readers included in this study did not recognize as many commonly used words as the better readers. As a result, the student rate of reading slowed – resulting in lower achievement. Through sight-word study students learn common words and student reading levels increase. This practice is highly recommended for implementation in elementary schools.
INTRODUCTION

Background, Issues and Concerns

Reading problems are complex and abundant in elementary schools throughout the United States. The reading crisis started several years ago and has only become more rampant for students in America. As a result of an inadequate education regarding the development of proper reading abilities, adults in the U.S. are suffering from numerous devastating consequences. Professional educators have taken the challenge to improve student reading head on.

Several researchers and theorists have developed and studied a variety of instructional practices and strategies in order to come up with the answer. As the reading crisis has grown, experts have come to realize major reading problems in the primary grades are having lasting effects on student lives. This major concern has led to the targeting of reading intervention during primary grades (k-2). In order to prevent academic delay and the development of unsuccessful students, there needs to be a concentrated effort to come up with a strategy that improves the reading of young elementary students.

Practice under Investigation

The practice under investigation is Sight-Word Study.

School Policy to be informed by the Study

The results of this study will inform the English Language Arts (ELA) teachers and their practice. Following the findings of this research, ELA teachers and programs will be able to determine if student recognition of sight-words helps improve the student reading level; especially for those students in the primary grades (k-2).
Conceptual Underpinning

In recent decades a concern for student reading skills has evolved. Many researchers and educators across the country are determined to fix the problem of inadequate reading instruction and development of student reading skills. One proposal - suggested to help improve the reading level of our younger students - is the practice of sight-word study. This possible solution implies that when beginning or low level readers begin to recognize sight-words - through instruction - reading skills will improve.

Statement of the Problem

As a result of students in the primary grades (k-2) struggling to learn to read adequately, future learning and academic achievement is affected and delayed. Also, the reading crisis in the United States has developed adults who lack the necessary reading skills pivotal to success in the real world.

Purpose of the Study

The purpose of this study is to determine if there is a correlation between the sight-word recognition growth, and the Fountas and Pinnell reading level growth of students using “sight-word study”.

Research Question

RQ: Is there a correlation between the sight-word recognition growth, and the Fountas and Pinnell reading level growth of students using “sight-word study”?

Null Hypothesis

There is no significant correlation between the sight-word recognition growth, and the Fountas and Pinnell reading level growth of students using “sight-word study”.
Anticipated Benefits of the Study

If the null hypothesis is rejected, the anticipated benefits of this study include: teachers will be able to develop a plan to improve the reading levels of low readers through sight-word study, an increase in student achievement, and a decrease of students falling behind.

Definition of Terms

Literacy – The ability to read and write.

The National Research Council (NRC) – A group of experts convened to examine reading research and address the serious national problem of reading failure.

Individual Education Plan (IEP) – Specific instruction for individual student needs.

Response to Intervention (RTI) – RTI is a three tiered model that is used as a process that schools can use to help children who are struggling academically or behaviorally.

Sight words – Common words that a reader should recognize on sight. Sight words may also be referred to as “high frequency” and/or “instant” words.

Sight-Word Study (SWS) – SWS is the instructional practice that focuses on improving student ability to recognize commonly used words.

Fountas and Pinnell – A system of reading levels (A – Z) that are aligned to grade levels (K – 8th and above).

Fluency – The ability to read with speed, accuracy, and proper expression.

Automaticity - The fast, effortless word recognition that comes with quick and effortless identification of letter sounds.

A Statistical Package – Software used to calculate statistics.
Summary

The introduction section of this research paper explained the reading crisis taking place in America. In effort to improve student reading abilities, a Sight-Word Study program was carried out with struggling readers. The study was conducted to see if reading levels can improve from SWS. In order for this study to truly be a success, the research data will show that SWS alleviates reading struggles in young learners, and creates better readers.
REVIEW OF LITERATURE

The reason for learning how to read, and educating children in general, is to develop individual citizens who are able to succeed in life after schooling. Although the cliché is “learning is a lifelong process”, without the fundamental framework a person is doomed in society. Fundamental framework begins with learning how to read; and the United States has a literacy crisis.

James Wendorf, the executive director of the National Center for Learning Disabilities states, “There is a reading crisis in the United States – it is undeniable. Thirty-nine percent, almost forty percent of fourth graders do not read even at the basic level.” (Children of the Code, 2012)

With understanding the claim from Mr. Wendorf, Dr. Rick Lavoie, the learning disabilities specialist and visiting professor at Simmons College – located in Boston, Massachusetts – elaborates by stating, “What people forget is the adult; the adult who is unable to read. The government keeps playing with the definition of literacy, but generally, a person is illiterate if they can’t read to at least the eighth grade level.” (Children of the Code, 2012)

In order to understand the reading crisis an assessment of adult reading abilities was taken in 1992 and again in 2003 – the results portrayed disturbing evidence for the concern. American schools – as a whole – are making no progress, and in fact, reading skills are declining. Ninety-three million adults out of a total adult population of around two-hundred and twenty-one million are at or below basic reading levels. The adults who perform at below basic reading levels may not be able to carry out the everyday functions that would normally be pursued in American society; functions such as: reading bus schedules, using self-service automated teller machines (ATM’s), filling out the average job application, obtaining a driver’s
license. Furthermore, math skills are affected – like those that are required to read a graph. Dr. Lavoie explains that, “Medicare forms and certain newspapers and magazine require a fourteenth grade reading level”; meaning the comprehension level for these materials to be read requires the skills of a sophomore in college. This information has great implications on what needs to be accomplished in child literacy (Children of the Code, 2013).

Proper reading instruction at the beginning of an education has shown to have lasting effects, such as: academic achievement throughout education, higher graduation rate, and enhanced productivity in adult life (Strickland & Riley-Ayers, 2006). Furthermore, the National Research Council, a panel of experts gathered to examine the reading crisis, concluded that “most reading problems can be prevented by providing effective instruction and intervention in preschool and in the primary grades” (Denton, n.d.); thus the reason that Response to Intervention (RTI) is such a critical tool that needs to be implemented in schools.

Response to Intervention is the revolutionized product that developed after President Gerald Ford signing the Education for All Handicapped Children's Act, in 1975 (Prasse, n.d.). Educators recognized that handicapped children can and need to learn, and fought for their rights to be taught in the public school system. Following this process, public school professionals paid more attention to all student achievement. When students in the regular classrooms failed to meet the set learning expectations, teachers began to ask the question, “Why aren’t students learning?”; which led to the desire to fix the problem through exploration. States and local school districts sought out to find the children that were not learning – this action was given the title of “Child Find”. Once the children that were targeted for low achievement were found, special education erupted and Individual Education Plans (IEP) were created. RTI was the answer. (Prasse, n.d.)
Response to Intervention is a three tiered model that is used as a program that schools can use to help children who are struggling academically or behaviorally. Tier 1 is: High-Quality Classroom Instruction, Screening, and Group Interventions. The first tier makes sure that the difficulties that students are having are not a result of inadequate teacher instruction. Tier two is: Targeting Interventions. The second tier makes sure that struggling students are delivered instruction that is based on needs which gradually increases rigor. Tier three is: Intensive Interventions and Comprehensive Evaluation. The third tier is best described through the following quote found in an article written by Joseph F. Kovaleski, Megan Roble and Michelle Agne:

> At this level, students receive individualized, intensive interventions that target the students’ skill deficits. Students who do not achieve the desired level of progress in response to these targeted interventions are then referred for a comprehensive evaluation and considered for eligibility for special education services (Kovaleski, Roble, & Agne, 2012).

The essence of RTI calls for Sight-Word Study as a practice. RTI is the evaluation process that refers to whether students require special education or not. Johnna Monroe and Jeannine Staunton collaborated on a research report focused on student reading struggles in a primary self-contained special education class. The school was located in a large metropolitan city, and the problem of poor sight-word recognition was documented with student surveys, behavioral checklists, and pretests and posttests of basic sight words. Analysis of probable cause indicated that there were poor sight-word recognition skills among elementary students. This negatively affected student reading skills (Monroe & Staunton, 2000). Furthermore, had the
students received SWS in every classrooms, there is reason to believe that special education and regular students might have developed suitable reading skills and met goals.

Overcoming reading struggles is an important goal to meet while in elementary school. As a student progresses through the grade levels and into adult life poor reading skills become more detrimental to the success of an individual. It is important to understand that a kindergartener is expected to read at a Fountas and Pinnell reading level ‘C’ at the end of the school year; a first-grader is expected to read at a Fountas and Pinnell reading level ‘C’ at the beginning of the school year and an ‘I’ at the end; and a second-grader is expected to read at a Fountas and Pinnell reading level ‘I’ at the beginning of the school year and a ‘M’ at the end (Fountas & Pinnell, 2013).

One major factor related to developing readers is fluency, and fluency is a key component in the focus of SWS. Fluency is defined as the ability to read with speed, accuracy, and proper expression. In order for students to understand the material read, children must be able to read fluently whether the reading is aloud or silent. Dr. Linnea C. Ehri, a distinguished professor of educational psychology, wrote an article – which emphasized the importance of SWS – for the Scientific Study of Reading. Dr. Ehri discussed the science behind reading, and the process of learning how to read. Ehri reiterated the fact that the struggles beginning readers encounter make readers fall behind. The article elaborated on the importance of fluency by simply stating, “Good readers build reading automaticity” (Ehri, 2005, p. 168).

Researchers provide data that reading fluency and automaticity are crucial to the student learning how to read. Theorists do not disagree with the claim. Sight-Word Study is meant to develop reading fluency and automaticity, which provides powerful suggestion for the benefits of Sight-Word Study.
RESEARCH METHODS

Research Design

This was an experimental study. Three groups were used for this study – one group from each of the following grades: kindergarten, first, and second. The entire study was based off of the focus group results. Each focus group consisted of three students, with a grand total of nine students examined. The study was conducted over a four week (five school days a week) period; and the SWS consisted of: having the 225 most common sight-words orally read to students daily, students individually reading the 225 most common sight-words out loud to an adult daily (the adult documented what sight-words the student struggled with), weekly spelling and vocabulary tests over the 225 most common sight-words, and weekly running records.

Among the groups there were commonalities: same size focus groups for each grade (three students per grade), same list of 225 sight-words, same teacher every time, work was carried out at the same time every day (2:00 pm – 3:00 pm), same timeline (four weeks/five days a week), and every students reading level was based off of the Fountas and Pinnell reading inventory. The independent variable is the number of sight-words a student identifies. The dependent variable is the Fountas and Pinnell reading level.

Study Group Description

The study was conducted within one elementary school in the Midwest, and looked at three struggling readers from each of the following grades: kindergarten, first, and second. The elementary school was private; and considered rural. The focus groups were formed by determining the Fountas and Pinnell reading level of each child in the three grades – and choosing the three bottom readers in each grade. Further demographics to be looked at include student gender and free or reduced lunch percentage.
Data Collection and Instrumentation

The data for the study was collected through real time investigation, while some research for activities was collected over the internet. Anecdotal records were recorded in order to collect document observations, progress, and/or regression. The instrumentation included several resources, such as: weekly running records, collaboration with classroom teacher, sight-word lists.

Statistical Analysis Methods

A Statistical Package (ASP) was used to analyze the results and challenge the null hypothesis: “There is no significant correlation between the sight-word recognition growth, and the Fountas and Pinnell reading level growth of students using ‘sight-word study’”; through the use of a Spearman Rank Order correlation analysis.

A Spearman Rank Order correlation analysis was used because there were less than twenty-five subjects examined. The Fountas and Pinnell reading levels are labeled by the letters A through Z. In order to carry out the correlation, each letter was assigned a numeric value; A = 1, B = 2, all the way to Z = 26. The numeric value of the letter assigned to the student reading level was then divided by twenty-six in order to give each student a reading level that was articulated as a percent; for instance if a student reading level was A or 1, their reading level was recorded as 3.8 – which is 3.8 percent of the Z or 26 (100 percent) reading level. The student reading level was determined at the beginning of the study, and again at the end – the two reading level percentages were then subtracted from each other to show the Fountas and Pinnell reading level growth percentage. In order for the two variables to be compared, the sight-word growth had to be translated into percent. The number of sight-words students mastered was
recorded at the beginning of the study, and again at the end. The two numbers were subtracted from each other and the sum was then divided by 225, which is the number of total sight-words studied. Following the formula, sight-word recognition growth was recorded as a percent increase.
FINDINGS

A Spearman Rank Order Correlation Analysis was conducted in order to determine if there was a correlation between the sight-word recognition growth, and the Fountas and Pinnell reading level growth of students using “sight-word study”. The figures incorporated in the findings section below were used to organize, represent and display the raw data gathered over the course of the experimental research. Furthermore, the narrative section following each figure elaborates on what the numbers mean.

Table 1: Correlation Sight-Word Study vs. Fountas & Pinnell

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>r</th>
<th>R²</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sight Word Recognitions Growth</td>
<td>9</td>
<td>22.556</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fountas &amp; Pinnell Reading Level Growth</td>
<td>9</td>
<td>11.111</td>
<td>0.764</td>
<td>58.370</td>
<td>0.016</td>
</tr>
</tbody>
</table>

Note significance = or < .25

The Spearman Rank Order Correlation Analysis was used to examine the relationship between the two measurements of student achievement, because there were less than twenty-five participants. The “N” column in the table above shows the number of participants; for each variable there were nine participants studied.

For this table, the Mean column represents the average increase in percent for the two variables. The Sight-Words Recognition Growth mean was 22.556 percent, which means that the average number of sight-words recognized grew by about fifty-one words over the course of the study. The Fountas & Pinnell Reading Level Growth mean was 11.111 percent. This means that the average reading level increased by three to four reading levels over the course of the study.

The correlation coefficient is represented by the symbol “r”, and “r” represents the strength of the relationship. The correlation may be either positive or negative. A perfect positive relationship is represented by the number “1”, and a perfect negative relationship is represented
by the number “-1”; while “0” shows no relationship. The data shows that the relationship
between Sight-Word Recognition Growth Percentage and Fountas & Pinnell Reading Level
Growth Percentage has a high positive relationship of .764. This is important because the higher
the relationship, the better. This means that the two variables are closely correlated.

The “r” value also represents the direction of the relationship. As stated in the previous
paragraph the two variables have a strong positive relationship. The relationship can also
describe the variables as “going together” in the same direction. This means that as the number
of sight-words recognized increases, the reading level also increases.

The “R²” column represents the practicality of the correlation. The value is obtained by squaring
the “r” value. R² values greater than ten percent are recommended for practicality. The R² value, or the
degree of practicality, for this study was 58.370 percent, which signifies that the study was practical.

The p-value represents the significance of the relationship, and determines the possibility
of a Type I error. A Type I error is the probability that rejecting the null hypothesis was an
incorrect decision. Furthermore, if a p-value is less than or equal to 0.25, then that means that
there is at least a seventy-five percent chance that the hypothesis is correct. The hypothesis for
the research paper was, “There is a correlation between student Sight-Word Recognition Growth
and student Fountas & Pinnell Reading Level Growth.” The p-value was 0.016, which means
that there is more than a ninety-eight percent chance that there will be a correlation between
student Sight-Word Recognition Growth and student Fountas & Pinnell Reading Level Growth.
CONCLUSIONS AND RECOMMENDATIONS

The conceptual underpinning explained that, “In recent decades a concern for student reading skills has evolved. Many researchers and educators – such as those of the likes of Linnea Ehri – across the country are determined to fix the problem of inadequate reading instruction and development of student reading skills. One proposal - suggested to help improve the reading level of our younger students - is the practice of sight-word study. This possible solution implies that when beginning or low level readers begin to recognize sight-words - through instruction - reading skills will improve.”

The finding section supports the conceptual underpinning. According to the data results, the sight-word recognition and the Fauntas and Pinnell reading level growth correlate in a strong positive relationship. Furthermore, examining the p-value displayed that there was more than a ninety-eight percent chance that rejecting the null hypothesis was appropriate; and the R² value deemed the study practical.

The experimental research carried out for the study has led to the following recommendations in order to be proactive in the efforts to reduce reading struggles for students. School districts should implement a sight-word study into the curriculum in order to help readers in the primary grades: kindergarten, first and second. If a sight-word study is not implemented into the primary grade curriculum, the sight-word study has proven to be a valid practice that aides the purpose of Response to Intervention. The data results recommend that schools, with the intention of building strong readers, and developing the reading skills of those who are behind, implement a sight-word study into the curricular practices. Professional development opportunities for educators to learn how to instruct SWS lessons would be beneficial. Preparing
readers for the real world is another strong recommendation of the research. With so many adults struggling due to inadequate reading skills, opportunities for early childhood students to experience reading applied to the outside world would be motivating.

The goal of the research was to determine if there was a correlation between the sight-word recognition growth and the Fountas and Pinnell reading level growth of students using sight-word study. All the while, the null hypothesis stated, “There is no significant correlation between the sight-word recognition growth and the Fountas and Pinnell reading level growth of students using “sight-word study.” The data that was collected and examined revealed that the null hypothesis was rejected.
REFERENCES


http://www.readingrockets.org/article/11375/.