Effect of whole language instruction in reading comprehension scores of first grade students

Jeffrey A. Shone
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EFFECT OF WHOLE LANGUAGE INSTRUCTION IN READING
COMPREHENSION SCORES OF FIRST GRADE STUDENTS

by
Jeffrey A. Shone

A Thesis
Submitted in partial fulfillment of the requirements of the
Master of Science in Teaching Degree
of
The Graduate School
at
Rowan University
July 3, 2002

Approved by
Professor
Date Approved: July 3, 2002
The purpose of this study was to determine whether any significant difference in the reading comprehension scores of first grade students utilizing a whole language method of instruction as opposed to phonics-based method of instruction existed. An experimental and control group of first grade students, with 20 children in each group, were administered the Silver Burdett Ginn Reading Comprehension test. Both groups were pre-tested to ascertain their level of reading comprehension before a treatment was administered. Next, the experimental group received the whole language method of reading instruction. Through repeated readings, students were exposed to reading and phonics at the same time. Beginning with familiar texts, the teacher drew attention to the concepts of print, specific words, letter/sound patterns (phonics), and reading strategies. Reading skills and strategies were taught and also assessed directly. This method employed the use of meaningful stories, poems, and opportunities to engage in varied activities (reading, reciting, writing, performing) to enhance the reading experience. One of its goals was making reading more enjoyable, thus increasing the student’s desire to read as opposed to the rote memorization procedures of phonics-based method. At the end of the study, the experimental and control groups were post-tested to determine whether one group scored significantly higher on Silver Burdett Ginn Reading Comprehension test. It was hypothesized students the first grade students
receiving reading instruction through the whole language method would score significantly higher than the first grade students receiving reading instruction through the phonics-based method. The researcher concluded there was no significant difference in reading comprehension test scores between the experimental and control groups. Under these circumstances, the conclusions drawn support the need for more research in this area.
MINI-ABSTRACT

Jeffrey A. Shone
Effects of Whole Language Instruction in Reading Comprehension Scores of First Grade Students
2002
Advisor: Dr. Randall Robinson
Master of Science in Teaching

The purpose of this study was to determine whether there was any significant difference in the reading comprehension scores of first grade students utilizing a whole language method of instruction as opposed to phonics-based method of instruction. The researcher concluded there was no significant difference in reading comprehension test scores between the experimental and control groups. Under these circumstances, the conclusions drawn support the need for more research in this area.
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Lastly, I’d like to acknowledge my family. Kathy and Horace, my parents, and my siblings, Karie and Michael, for their support and love no matter what endeavor I have undertaken. Success or disappointment, their love and encouragement was always present and it meant the world to me.
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Chapter I

SCOPE OF STUDY

Introduction

A debate among educators today is what approach is best utilized in order to achieve competency in reading comprehension skills amongst today’s students. Two strategies at the heart of this debate are phonics-based instruction approach and the whole language instruction approach (Denton, 1998). Research has been conducted over time and details the strengths and weaknesses of phonics-based instruction which has been the traditional alternative chosen by educators for teaching reading and writing skills. Methods for the instruction of phonics are discussion and activities surrounding texts the students have read and reread with the teacher, and through writing the sounds they hear audibly. Memorization of key sounds and words are a cornerstone in the phonics based instructional approach (Ediger, 2000). However, recently research has been conducted concerning whole language instruction. Research provides evidence that a whole language instruction approach to reading comprehension is more effective in not only enhancing a student’s reading and writing skills, it also has shown to teach phonics itself (Diegemuller, 1996). Through repeated readings, students are exposed to reading and phonics at the same time. Beginning with familiar texts, the teacher draws attention on concepts of print, specific words, letter/sound patterns (phonics), and reading strategies. Reading skills and strategies are taught and also assessed directly.
The teacher assesses if more instruction is necessary. Assessment is achieved through personal journals, projects, teacher moderated discussions, and student led discussions on the reading. Throughout the whole language process, the student enhances their ability through these exercises which teach reading and writing as complimentary processes (Diegemueller, 1996). Both the phonics-based approach and the whole language approach to reading comprehension are being incorporated in classrooms across America. There is research on both sides of the debate which supports each strategy as being superior to the other (Manzo, 1998).

Statement of the Problem

Debate exists over which of the two reading comprehension methods of instruction is better suited for the classroom. Is the whole language method or the phonics-based method of instruction better? There is no decisive answer to this question. Since reading comprehension skills is paramount to success throughout life here in America, shouldn’t an answer to the question be investigated? Don’t educators owe it to themselves and their students to find out if one method is superior in regard to the instruction of reading?

Statement of the Hypothesis

First grade students participating in a study utilizing a whole language instructional approach for reading will score significantly higher in reading comprehension test scores than first grade students receiving a phonics-based instructional approach for reading.
Limitations of the Study

The findings of this study need to be considered in light of some limitations. There are two separate teachers instructing both the control group and the experimental group. Personal instructional styles pose a threat to internal validity of the study. Also a threat to internal validity is the presence of a different teacher to the experimental group at the midway point of the study. Lack of experience and mastery of content, and teaching style all serve as internal validity threats. Support from home or lack thereof, are both factors that affecting internal validity. Finally, the uneven ratio of boys to girls in the control group and the presence of English as a Second Language (ESL) students in comparison to the experimental group are a threat to internal validity. This threat involves a student’s maturation factor.

Operational Definition of Terms

The following are definitions for terms used throughout this paper in conjunction to the study.

**Analysis of covariance**: A statistical method of equating groups on one or more variables and for increasing the power of a statistical test; adjusts scores on a dependent variable for initial differences on some variable such as pre-test performance (Gay & Airasian, 2000, p.621).

**Phonics-based instruction**: Traditional approach used in teaching children reading and writing. It teaches children to sound out letters to make words (Ediger, 2000).

**Reading comprehension**: Ability to construct meaning from text, using personal background knowledge in addition to text information.

**Whole language instruction**: Approach to used in teaching children reading and writing. Children learn to recognize words based on their context through multiple activities to be completed independently and in groups (Diegemuller, 1996).
Chapter II

REVIEW OF LITERATURE

Introduction

There has been a decade long debate over what instructional approach is best for teaching children reading and writing skills (Ponce, 1998). The debate surrounds two approaches: the first is phonics-based, which is the traditional way to instruct students. Phonics teaches students to sound out letters to make words. The alternative approach is whole language instruction, which is the newer of the two approaches. Through this approach students learn reading by identifying words based on their context (Ponce, 1998). What approach is best to utilize is of paramount importance as it’s during a child’s early elementary years when reading and writing skill acquisition is most critical (Diegmueller, 1996). There is strong support and evidence that trumpets each approach as superior to the other. The National Research Council even recommends an amalgam of both approaches as being ideal for instruction (Ponce, 1998). The debate rages across the country, some states have even passed legislation mandating a certain approach be taught in classrooms. States such as California, Arizona, Washington, and Maryland all have passed laws requiring phonics-based instruction (Ponce, 1998). There is such widespread debate as to which approach is best, therefore more research needs to be conducted to attempt the gain some significant answers (Diegemueller, 1996). Shouldn’t the question as to which method, whole language or phonics-based, is better
suited for instruction of reading need to be answered? Reading comprehension skills are paramount to success throughout life here in America, therefore the question must be answered.

The purpose of this study was to determine that First grade students participating in a study utilizing a whole language instructional approach for reading will score significantly higher in reading comprehension test scores than first grade students receiving a phonics-based instructional approach for reading.

Importance of Reading

Reading comprehension is one of the most vital ingredients making up the very foundation for the future of our society here in the United States. Our future is in the hands of our children. These children will grow up to be our future politicians, doctors, scientists, economists, police officers, lawyers, and teachers. In order to fill these societal roles, children will need the best educational experience educators can provide. The first and most important step in the educational experience is reading comprehension (NCTE, 1999). It is paramount educators determine which method of reading instruction is better suited for ensuring the children are able to fit these needed roles. This is a decision that needs to be made swiftly. Many children across the nation are struggling with basic reading comprehension, which goes onto affect their entire academic career as well as their life when not adjusted (Manzo, 1998). While there is no one culprit largely responsible for this alarming trend, it can be said the absence of a universally agreed upon reading instruction method is near the top of the list (Diegemueller, 1996). Without the best educational experience provided, the future of
our society could be built on shaky foundation. Ultimately, we all pay the price if this is the case.

Reading Fundamentals

Inferring meaning from the printed word is what reading is all about. We read in order to understand the world around us, as well as those people who inhabit the world, and even ourselves. Reading is also used as a tool to help change the very world we live in (NCTE, 1999). It is encouraged almost from birth, parents begin to read to and teach their children reading fundamentals (Honig, 2000). Readers construct meaning from words and strings of words (passages). This is a definition of reading comprehension itself (Honig, 2000).

The most crucial stage, for a child’s reading comprehension skills to develop, is during kindergarten and first grade. The process of converting the printed word into spoken words is termed decoding. This involves looking at a word and connecting sounds and letters. The sounds and letters are blended to form a spoken word. When a reader connects the spoken word to its meaning, word recognition has taken place (Honig, 2000). For a reader it is during the first grade, decoding and word recognition of vocabulary accurately correlates to a higher reading comprehension rate than at any other time in their life span (Honig, 2000). Therefore, it is of vital importance reading comprehension skills are learned during a child’s first year. When a child experiences difficulties in learning the reading skills in this time period, the child faces a rough time ahead in catching up (Diegemueller, 1996).

According to research, the brain reads by breaking words into sounds. After the eye notices printed letters in a word, the letter identification processing portion of the
brain connects the letters to sounds found in the phonological portion of the brain (Honig, 2000). The bundle of blended sounds and letters are then sent to the brain’s meaning processing center. This is where the concept of a word is identified (Honig, 2000). Below is an illustration of the brain’s three processing areas, which make up the reading comprehension process.

**figure 1. The Brain’s Processing Centers**

Every child needs to be provided with basic tools and services in order to making reading comprehension successful. The National Council of Teacher of English (NCTE) put together a list of what they believe children must have for reading comprehension to be successful (NCTE, 1999):

1) Wide array of texts that are student age/level appropriate and reflect their interests;

2) Appropriate time to take advantage of the wide array of texts;
3) The best teachers who will provide students the necessary reading skills;
4) Opportunity to learn and demonstrate reading, writing, speaking, and listening skills;
5) Access to skills necessary for the ever-changing technology based world.

The above items are important starting points for a child to be successful in terms of acquiring and maintaining adequate reading comprehension skills. Unfortunately we do not reside in a perfect world, so each item on the list faces its own set of issues and problems. All of the items on the list should be considered as vital for any success in teaching reading instruction. Making sure a child understands what is being taught is the next step (Engines, 2002) and this is where those aforementioned problems rise to the surface. What needs to be adopted is a universally accepted approach to reading instruction (Diegemueller, 1996). The two most publicized methods are the phonics-based and the whole language approaches. Debate and disagreement as to which method is best suited affects every single item on the NCTE list (NCTE, 1999). In order to eliminate any roadblocks affecting children from accessing the items on the list, one reading instruction approach needs to be adopted (NCTE, 1999).

**Phonics-Based Approach**

The phonics-based approach is the traditional method for reading instruction, with a history dating back to the 19th century (Curtis, 2002). Phonics draws on the concept that reading needs to be broken into its small pieces (letters) before one can move onto larger components (sounds, words, sentences). Phonics teaches a student to break about unfamiliar words into pieces and then pull the pieces back together in order to make it whole, thus forming a word. Students learn letter-sound relationships in order to
help them break down and identify unfamiliar words (Curtis, 2002). Phonics-based reading instruction relies heavily on rote memorization of the letter-sound relationships, simple texts, and word lists (Education Week on the Web, 2002). Proponents of this approach trumpet its research proven claims of building better pronunciation, word recognition, and spelling in its students (Curtis, 2002). Supporters also feel the fact correct spelling is important will prevent instilling an air of laxity within a student. This air of laxity often goes onto affect the student’s learning behavior in years to come (Education Week on the Web, 2002). Phonics-based has also been noted as being the less threatening method of reading instruction for bilingual students. Bilingual students are not as overwhelmed with learning English as compared to the whole language approach, mainly due to the fact it focuses more on mechanics opposed to context. Whole language instruction, which emphasizes context, may confuse bilingual students since context can vary from culture to culture (Kucer, 1999). Finally, proponents of phonics-based instruction site the accepted fact every student is different and thus has different needs. The way each student learns is also a directly connected to their biological make-up, how the brain processes information (Honig, 2000). There are students who stronger visual learners and some are auditory learners. The phonics-based approach is more geared toward auditory learning, as a result of utilizing letter-sound relationships to identify words. A student possessing a strong aptitude for auditory learning may benefit much greater in a phonics-based reading program (Curtis, 2000).

Whole Language Approach

Whole language is a child-centered approach toward literature. It defines language as being a natural process and literacy is promoted by the function of language
being meaningful. It views language development as constructive and a process that must be meaningful to the learner. In order to make the process meaningful, it must be seen as genuine, complete with real-world experiences. The medium to achieve this is through reading and writing (Diegemueller, 1996). It promotes reading and writing as complimentary processes and also promotes real communication amongst not only the teacher and the student, but between students themselves (Weaver, 1995). The whole language approach offers many activities by working either independently, through teacher led or student led discussions. This approach promotes creative and critical thinking with various activities to compliment reading material. Social interaction compliments the learning process according to Vygotsky’s social constructivist theory (Wilkinson and Silliman, 2000). According to Vygotsky’s theory strong interrelationships are evident between the written word and oral expression. Engaging students across a wide spectrum of activities will help to fully achieve the best literacy results (Wilkinson and Silliman, 2000). This supports the view that the rote memorization tactics of the phonics-based instruction will cause the learner to have a stagnant attitude toward reading (Diegemueller, 1996). Instruction is not limited to reading word lists. Poems, more advanced literature, performing plays based on reading, discussion groups, reading circles, as well as journal writing and writing "sequels" to the readings are all incorporated into the whole language approach (Diegmueller, 1996). Supporters of the whole language approach criticize phonics-based instruction since it discourages invention, discovery, and creativity. By halting what they consider "natural" developmental processes, phonics-based instruction will only hinder a child (Holdren, 1995) and feel phonics-based instruction will only serve to lessen any child’s desire to
read (Diegmueller, 1996) and (Holdren, 1995). Whole language is thought to provide a better understanding of the text. Also, it benefits those students with a stronger visual aptitude for learning than an auditory aptitude (Curtis, 2000). This is extremely advantageous for someone who has a hearing impairment (LaSasso and Mobley, 1997). Finally, while phonics-based supporters cite this approach as being too intense for bilingual education students, whole language supporters disagree. They believe exposure to culture through as many mediums as possible will only heighten their interest and academic success (Kucer, 1999).

The Great Debate

Research studies conducted may shed a different opinion. Comparative studies conducted in the 1980s, when the debate was first sparked, seem to favor a whole language instruction approach (Diegmueller, 1996). However, a 1995 study conducted by researchers at the Georgia Southern University concluded that there was no evidence that a whole language instruction approach compared to phonics-based approach motivated children to read or want to learn more (Diegmueller, 1996). Similar studies conducted, one with second-grade students, showed there was no significant difference in a whole language based approach compared with phonics-based approach to teaching reading and writing (Wilson and Norman, 1998). Another publicized study utilizing comparative analysis with second-grade students as subjects, also showed no significant differences in approaches, except for a slight significant difference toward whole language instruction involving word analysis (Keating, 1998). In order to combat the turning tide of research study results, whole language supporters have begun to concentrate on results gathered
from descriptive research-case studies as well as ethnographies to support their cause (Diegmüller, 1996).

Conclusion

In conclusion, phonics-based approach and whole language instruction approach supporters have an abundance of facts and figures touting their method as superior for teaching reading. There is sufficient literature and research available for examination to determine which approach is best, however more research clearly needs to be done in this arena.
Chapter III

METHOD

Introduction

A debate among educators today is “what approach is best utilized in order to achieve competency in reading comprehension skills amongst today’s students?” Two strategies at the heart of this debate are phonics-based instruction approach and the whole language instruction approach. Research details strengths and weaknesses in both approaches. Historically, there has been no definitive consensus on which approach is more effective (Denton, 1998). The question remains unanswered as to which instructional method is best for teaching reading. Is the whole language or the phonics-based approach to reading instruction more effective? This study was designed to answer the question. First grade students participating in a study utilizing a whole language instructional approach for reading will score significantly higher in reading comprehension test scores than first grade students receiving a phonics-based instructional approach for reading.

Description of Sample

The school that participated in the study was a public school in southern New Jersey. It had been a traditional rural area, however this trait was on the verge of changing due to the area’s population and economic anticipated expansion. The population was pre-dominantly white Caucasian, at over 90%, however there was a 6%
African-American minority, as well as a 2% Hispanic presence. The annual median household income in was $49,000. It was projected that over 78% of the students come from a household with two parents/guardians. The remaining 22% of students came from either a single parent household or another arrangement. (U.S. Census Bureau, 2000).

Before the start of the 2001-2002 school year, forty of the 200 first-grade students were randomly selected and randomly assigned to two groups of 20 each. The average first-grade class size was twenty students for the district; each group became a first-grade class. The average age of the students in both the experimental and control group was 6.5 years of age. The control group consisted of 12 boys and 8 girls. In this sample, sixteen of the 20 students were Caucasian, with the four students being designated as English as a Second Language (ESL) students. There were no special needs or learning disabled students in the control group. The experimental group consists of 11 boys and 9 girls. In this sample, 15 of the 20 students are white Caucasian, with three of the other students being Hispanic, and the remaining two students being African-American. There was one special need or learning disabled students in the experimental group. Two different teachers instructed each class in the study. Both teachers were recognized among their peers and employers as highly competent in both reading and writing content instruction. Both teachers possessed a superlative classroom relationship with their students. One class was chosen to receive reading instruction through a whole language approach. The other class was chosen to receive reading instruction through a phonics-based approach.
Description of Study

The study was designed as a quasi-experimental in nature, more specifically with an equivalent control group design. In this design, random assignment of an intact group was chosen to receive the treatment (whole language instruction approach) and a random assignment of an intact group was chosen to be utilized as the control group (phonics-based approach). Baseline data was compiled from a pre-test to assess reading competency before any treatment was administered. Data was compiled using a post-test to reassess reading competency. The data was used for comparative purposes between the two groups. Any significant difference in post-test scores were interpreted as being due to one group receiving the treatment through the study.

Procedure

The study was designed to last the entire academic school year, forty weeks. Both the experimental group and the control group were administered the Silver Burdett Ginn Reading Comprehension test (see appendix A). This standardized test was administered to assess the reading competency level of each group. The test was administered in order to compare the reading competency of each group before any treatment was administered.

Beginning the second week of class, the control group was taught using the phonics-based approach to reading and writing. Phonics instruction consisted of letter-sound correspondences for letters and letter clusters. The correspondence was demonstrated, blended, practiced in words, word lists, word families, and practiced initially in text. Phonics instruction encouraged the student to identify all the letters of each word, left to right. Through linking speech sounds to the letters, students were able
to utilize oral knowledge of a word to remember the word's spelling. Methods for the instruction of phonics (see lesson plans, appendix B) were discussion and activities. These were based on text students read and reread with the teacher, and through writing the sounds they heard in words. Memorization of key sounds and words were a cornerstone in the phonics based instructional approach.

At the beginning on the second week of class, the experimental group also received whole language instruction. Whole language instruction consisted of reading whole texts to words and then to parts of words. Through repeated readings, students learned to read many of the words and learned phonics at the same time. Beginning with familiar texts, the teacher drew attention on concepts of print, specific words, letter/sound patterns (phonics), and reading strategies. Reading skills and strategies were taught and also assessed directly (see lesson plans, appendix C). The teacher assessed if more instruction was necessary. Assessment was achieved through personal journals, projects, teacher moderated discussions, and student led discussions on the reading. Throughout the whole language process, the student enhanced their ability through these exercises, which teach reading and writing as complimentary processes.

Throughout the study the same subject matter was covered and the groups used the same text. Students in the experimental group also worked independently to learn the material. Students in the experimental group also worked collaboratively to examine and learn the material. Students receiving phonics-based instruction worked primarily independently to learn the material. Students in the experimental group also had more group and personal activities associated with the instruction of the material. This is
characteristic of the whole language approach to instruction opposed to phonics based instruction.

The experimental group was instructed using the whole language approach to reading daily from 10:15 to 11:15 A.M. The control group was instructed using the phonics-based approach daily from 10:15 to 11:15 A.M. The experimental group and the control group shared lunchtime daily from 11:20 to 12:00 P.M.

Both groups were given homework reading assignments. The teacher would review assignments the following day. The academic objectives for each group were identical, as were the tests administered to measure student success rate of the subject matter.

At the beginning of the final month of the school year, the final week of the study, the experimental group and the control group were once again administered the Silver Burdett Ginn Reading Comprehension test. The test was administered in order to compare the reading competency skills of each group after the treatment was administered.

Description of Instrument

The Silver Burdett Ginn Reading Comprehension test was chosen as the instrument for measurement of reading comprehension due to its acceptance by the school district as a valid instrument to gauge reading competency level (see appendix A). The test was also regarded for its high degree of reliability. The test consistently measured and accurately identified the test taker’s reading competency level based on their age (Diegemueller, 1996).
The test gauged a student’s competency level in four specific areas of reading comprehension: 1) main idea of passage; 2) predicting outcomes; 3) specific details; and 4) classification of information. Students were asked a series of four questions for each specific area and scored accordingly. A total of four points could be obtained for each section, with a maximum of sixteen points for the entire test. The suggested passing score was correctly answering twelve of sixteen questions. Any student obtaining the suggested passing score was identified as possessing competent reading comprehension skills. Above the suggested passing score, a student was identified as possessing above average reading comprehension skills. A student falling below the suggested passing score was identified as lacking in competent reading comprehension skills. Test scores falling above and/or below the suggested passing score were identified for competency level on a sliding scale imposed by the instructor.
Chapter IV

ANALYSIS OF FINDINGS

Introduction

For a forty-week period lasting one academic school year, first grade students were tested to determine whether there was a significant difference in reading comprehension scores as a result of varied instructional methods. The experimental group was taught reading following a whole language approach to instruction. The control group was taught reading following a phonics-based approach to instruction.

Tabulation of Raw Scores

Prior to any reading instruction given, students in both the experimental and control groups were administered a pre-test to ascertain their current reading comprehension level.

Table 1 displays the pre-test results of the experimental group. The total sum of scores was 164 points with a mean score of 8.20 and a standard deviation of 4.81. All data was run through the statistical computer program, Windows Statpak to Accompany Educational Research: Competencies for Analysis and Application, 6th Ed., by L.R. Gay and Peter Airasian.
Table 1

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<th>Mean</th>
<th>Standard Deviation</th>
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<td></td>
<td>164</td>
<td>8.20</td>
<td>4.81</td>
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</table>

Table 2 shows the pre-test results of the control group. The sum of scores was 170 points with a mean of 8.50 and a standard deviation of 4.05.

Table 2

<table>
<thead>
<tr>
<th>Control Group Pre-test Reading Competency Raw Scores</th>
<th>Sum of Scores</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>170</td>
<td>8.50</td>
<td>4.05</td>
</tr>
</tbody>
</table>

Table 3 exhibits post-test results from the experimental group. This time the sum of scores was 245 points with a mean of 12.25 and a standard deviation of 2.53.

Table 3

<table>
<thead>
<tr>
<th>Experimental Group Post-test Reading Competency Raw Scores</th>
<th>Sum of Scores</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>245</td>
<td>12.25</td>
<td>2.53</td>
</tr>
</tbody>
</table>
Table 4 exhibits post-test results from the control group. This time the sum of scores was 212 points with a mean of 10.60 and a standard deviation of 3.08.

<table>
<thead>
<tr>
<th>Control Group Post-test Reading Competency Raw Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum of Scores</td>
</tr>
<tr>
<td>212</td>
</tr>
</tbody>
</table>

Analysis of Data

The pre-test showed the experimental group scored lower in reading competency than the control group. This must have been attributed to a number of factors (see Limitations of Study) affecting each student entering the first grade academic school year in both groups. A t-test for independent samples was employed to determine if the lower scoring translated to the groups beginning the study at a different reading competency level. The level of significant difference was set at .05 with 38 degrees of freedom and thus the probability level was established at 2.021 or 2.02. For a significant difference to exist the t value would have had to been greater than the 2.02 p value. Utilizing the statistical computer program for analysis of data, the program computed a t value of -0.21. Thus, the t value calculated is less than the 2.02 p value established, therefore no significant difference exists. Essentially, for the purpose of the study, both
the experimental and control group were at the same reading competency level based on results of a pre-test.

Post-test scoring revealed both the experimental and control groups made gains in total sum of scores. Table 1 shows a beginning sum of scores for the experimental group as 164 points. Table 3 shows an ending sum of scores for the experimental group as 245 points, an increase of 81 points. Similarly, the control group began with a sum of scores as 170 points as shown in Table 1. Table 3 shows an ending sum of scores for the control group as 212 points, an increase of 42 points.

A t-test for independent samples was employed to determine if there was a significant difference in reading competency level between the experimental and control groups based upon post-test scoring. The level of significant difference was set at .05 with 38 degrees of freedom and thus the probability level was established at 2.021 or 2.02. For a significant difference to exist the t value would have to be greater than the 2.02 p value. Utilizing the previous statistical computer program for analysis of data, the program computed a t value of 1.85. Thus the t value calculated is less than the 2.02 p value established, therefore no significant difference exists. Therefore, after receiving a treatment for the duration of the survey, the experimental group displayed no significant difference in reading competency level when compared to the control group.
Chapter V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This study was employed to help provide some answers to the question, which was causing debate in the educational field. Which instructional method is better suited for teaching students reading? The experimental group received the whole language method for instruction of reading. A control group was utilized for comparison purposes and received the phonics-based method for instruction of reading.

Summary of the Problem

Reading is a fundamental part of life and thus it is paramount educators determine the best method for its instruction. Both the phonics-based and the whole language methods for instruction of reading exist. Ongoing debate continues to which method is superior in regard to reading instruction, with no decisive answer. Which method should schools employ? Should they employ the whole language method or the phonics-based method for instruction of reading?

Summary of the Hypothesis

First grade students participating in a study utilizing a whole language instructional approach for reading will score significantly higher in reading
comprehension test scores than first grade students receiving a phonics-based instructional approach for reading.

Summary of Procedure

The study was designed to last the entire school year beginning during the first week of class. Both the experimental group and the control group were administered the Silver Burdett Ginn Reading Comprehension test (see appendix A). This standardized test was administered to assess the reading competency level of each group. The test was administered in order to compare the reading competency of each group before and after the treatment was administered.

Both the experimental and control group consisted of randomly selected first grade students at a public school in southern New Jersey. Each group consisted of 20 students. The experimental group received the treatment, the whole language approach to reading instruction. A control group, established for comparative purposes, received a phonics-based approach to reading instruction.

At the conclusion of the study students in both experimental and control groups were re-administered the Silver Burdett Ginn Reading Comprehension test. Scoring results determined whether a significant difference existed in reading competency as a result of the instructional approaches used by the two groups.

Summary of Findings

It can be derived the whole language approach to instruction of reading is not more or not as effective as a phonics-based approach to instruction of reading.

Comparison of the pre and post-testing results showed there is no significant difference
in the reading competency skill levels of either the experimental group or the control group.

Conclusions

In conclusion the researcher determined post-test scoring revealed no significant difference between instructional approaches affecting reading competency skills. Despite his finding a difference exists between the approaches.

Judging from the increases from pre to post-test scoring into total sum of scores between the two groups, the researcher identifies this is a sign, albeit not statistically significant, the whole language approach to reading is more effective. The philosophy behind the whole language approach is making reading more meaningful to the student through varied real life applications. This is starkly different to the phonics-based approach where repetition and rote-memorization are key ingredients. By making reading more meaningful, and as a result more enjoyable, students will achieve superior reading competency scores as opposed to students receiving phonics-based instruction.

Visual observation of the experimental group, with which the researcher interacted, demonstrated in his opinion a more enjoyable attitude toward reading than what was observed in the control group. Perhaps the researcher should have designed a study that did not only gauge the reading competency skill levels of the students, but one that gauged their personal attitudes toward reading as well.

Implications and Recommendations

Post-test analysis provided no significant difference between the experimental and the control group. Despite this fact, the researcher's belief is the whole language approach to reading instruction is superior to the phonics-based approach. This is due to
the more comprehensive and less stifling nature of the whole language approach in comparison to the phonics-based approach. The whole language approach should be examined again to determine whether it is the superior method for reading instruction. Since the study found no significant difference existing between the experimental and control groups, it the researcher’s recommendation more research be done in this arena to determine which reading instruction approach is best.
REFERENCES


APPENDIX A

SILVER BURDETT GINN READING COMPREHENSION TEST
A Bee on My Nose

What do you suppose?
A bee sat on my nose.

Then what do you think?
That bee gave me a wink.

He said, "I beg your pardon.
I thought you were a flower garden."
Name __________________________________________

19. What is this story mostly about?
   A) flowers       B) bugs       C) a girl and a bee

20. The picture shows the bee _____.
   A) in a flower garden
   B) with other bees
   C) talking to a girl

21. What does the bee do?
   A) wink          B) sting       C) yell

22. What will the bee probably do next?
   A) dance with the girl
   B) fly away      
   C) eat cake

Grade 1 Skills Assessment
Name ____________________________

Sample

*  

- A boat
- B fruit
- C bear

23. (A) flower  
    (B) ice cream  
    (C) hat

24. (A) cookie  
    (B) basket  
    (C) airplane

25. (A) goat  
    (B) bone  
    (C) sun

26. (A) book  
    (B) quarters  
    (C) fish
Sample

![Image of a star and a turtle]

A l  B t  C v

27. ![Image of a face with a hat]
   A n  B k  C m

28. ![Image of a fish]
   A p  B s  C b

29. ![Image of a deer]
   A d  B g  C b

30. ![Image of a door]
   A r  B l  C w
Name ________________________________

31.  A t  B h  C k

32.  A v  B n  C b

33.  A c  B j  C p

34.  A d  B h  C f
APPENDIX B

PHONICS-BASED INSTRUCTION READING LESSON PLAN
OBJECTIVES
Students will practice the cl consonant blend.

MATERIALS
Chalk, dry erase board, notebook, pencils, Friendship song, tape recorder.

TEACHING ACTIVITIES

Introduction/Anticipatory Set: Students will be reminded to complete their Morning Things To Do list.

Word of the Day: clock

Body/Development: Students will review consonant blends with words beginning with the letter correspondence cl. (e.g. clock, click, clean, clear, cloudy). Students will be asked to offer any more words that have the same consonant blend in them. Students will copy words from the board into their notebook.

Closing: Students will review all of the words they have listed with the consonant blend cl and sahe them with the class.

ASSESSMENT/EVALUATION

Students will be assessed through collection of their notebooks and through effectively answering questions based on their skill lesson.
APPENDIX C

WHOLE LANGUAGE INSTRUCTION READING LESSON PLAN
LESSON: Warm Up Exercises/Skill Lesson
TOPIC: Language Arts
GRADE: First
NJ CCCS# Standard 3.3

OBJECTIVES
Students will practice their reading and writing skills.

MATERIALS
Chalk, dry erase board, personal journals, fix-up notebook, pencils, Friendship song, tape recorder.

TEACHING ACTIVITIES
Introduction/Anticipatory Set: Students will be reminded to complete their Morning Things To Do list.

Word of the Day: blew

Fix Up Sentences: My hat blew off my head. (me hat blue off my hed?) Does the wind make a kite fly? (does tha wind make a kte fli.)

Journal: Write about a time the windy weather caused trouble?

Body/Development: Students will build their vocabulary associated with windy weather. Students will brainstorm to come up with weather words associated with the wind. Students will work on word web about things that move in the wind.

Closing: Students will be asked to share their personal journal (time permitting) and class will participate in an "around the world" style review of the day's skill lesson.

ASSESSMENT/EVALUATION
Students will be assessed through the correcting of their fix-up assignment, the completion of their word web and through effectively answering questions based on their skill lesson.
VITA

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