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A STUDY OF THE EFFECTIVENESS OF SAXON PHONICS  
ON PHONEMIC AWARENESS

By  
DawnMarie Bach

A Thesis

Submitted in partial fulfillment of the requirements of the  
Masters of Arts Degree  
of  
The Graduate School  
At  
Rowan University  
Spring 2003

Approved by \_\_\_\_\_

Date Approved May 9, 2003

## ABSTRACT

DawnMarie Bach

A Study of the Effectiveness of Saxon Phonics on Phonemic Awareness  
2002/2003

Dr. Stanley Urban  
Masters in Learning Disabilities

The purpose of this study was to determine the effectiveness of a structured, systematic phonics program such as the Saxon Phonics 1 program in improving the phonemic awareness of first grade students. The effectiveness of this program was measured by a pre and post assessment using The Test of Phonological Awareness (TOPA).

The subjects for this study consisted of two groups of first grade students (ages six and seven). Group one consisted of twelve students: seven girls and five boys. Group two consisted of nine students: six girls and three boys. Teachers that are experienced in the use of the program provided both groups phonics instruction using the Saxon Program. All of the students attend the same elementary school that has a total enrollment of 263 students. The students that participated in the Saxon Phonics program were heterogeneously grouped. There are only two first grade classes in this school.

The results of this study indicate positive gains with both groups as measured by the pre and post assessment. The average gain by Group one and Group two were equal and meaningful.

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## Chapter I

### Statement of the Problem

#### Background

The No Child Left Behind Act of 2001(Department of Education, 2001) is the latest statement of goals for teachers and school districts across the United States formulated by the federal government. The range of early literacy skills that children possess can range from minimal to well developed. While many children enter school able to read, others come to school unable to recognize letters and their corresponding sounds. The responsibility of educators is to make sure that all children progress through the sequence of early reading skills. In order for children to read, research has suggested that there are five areas of instruction that children need to become successful readers: phonemic awareness, phonics, fluency, vocabulary, and text comprehension. These areas of instruction are hierarchical in nature with acquisition of phonemic awareness as a prerequisite to become successful in the subsequent areas of reading instruction.

Phonemic awareness instruction should provide children with experiences to build their knowledge of letters and sounds and their correspondence with each other. These experiences provide the children with the ability to think about the individual sounds within the spoken word. With the need for good phonemic instruction comes the need for an effective instructional tool that will reach all children.

The Saxon Publishers (Norman, Oklahoma, 1998) have developed a phonics program that they believe is an effective instructional tool. Saxon Phonics 1 (Simmons, 1996) is a program that enables most students to develop a solid foundation in phonics. It is a program that is built on prior knowledge and is presented sequentially with opportunities for review throughout the school year. The Saxon Phonics 1 program provides the children with extensive practice in phonemic awareness.

Many school districts focus their reading programs on the Whole Language philosophy. This philosophy is based on the idea that children could read successfully through memorizing and experiencing words through sight recognition. This philosophy almost eliminates the use of phonemic awareness. Current research indicates that children learn to read more successfully through the knowledge and use of phonemes. The Riverton, New Jersey school district focused their reading program on the whole language philosophy with the use of the Spotlight on Literacy series (Macmillan, 1997). In 1999, the district decided that good phonemic instruction was an important part of acquiring initial reading skills. The district investigated and purchased the Saxon Phonics 1 program to implement in the first grade classrooms. The district has used this program since that time and has now extended the program in the second grade as well.

### Theory

The underlying theory is that an effective phonemic awareness program, such as Saxon Phonics 1, will provide a solid grounding for children to become successful in reading. The Saxon Phonics 1 program will provide children with the self-confidence needed to read independently. Children who learn through a systematic phonics program



will be provided with the basic foundations on which to build their future reading skills. Phonemic awareness and phonological awareness will provide a firm base in their learning to read. Children who become more phonemically aware will become more successful readers as well as more successful spellers.

### Need for the Study

Efforts to improve reading achievement have taken on many forms throughout the years. Research has suggested that phonemic instruction has been successful. Saxon Publishers has provided a program to build phonemic awareness instruction. However, the effectiveness of the program has not been thoroughly researched. The first grade teachers in the Riverton school district believe that the program has become a successful part of the reading program. This study will attempt to provide information on the effectiveness of the Saxon Phonics 1 program on the phonemic awareness achievement of the first grade student in the Riverton school district.

### Value of the Study

This study will evaluate the effectiveness of the Saxon Phonics 1 program in improving the phonemic awareness of first grade students in the Riverton school district. The results will contribute to future data needed to validate the effectiveness of the Saxon Phonics Program overall.

### Research Question

To accomplish the general purposes of this study, the data obtained will be used to answer the following research question.

1. Will first grade students demonstrate improved phonemic awareness through the use of a structured, systematic phonics program such as Saxon Phonics 1 as measured by a pre and post test assessment using The Test of Phonological Awareness?

### Limitations

The following limitations must be noted when generalizing the results of this study. The study will be conducted in two classrooms (one classroom of twelve and one classroom of nine) each which represents a small sample; therefore, the findings should be interpreted cautiously. The sample was not selected randomly but represented a convenience group and may not be a true representation of the majority of children learning to read through phonemic awareness instruction. Finally, although the ability levels of those studied are varied, the group may not be representative of other demographic groups. Of the subjects studied, a few are reading above the first grade, whereas others are still learning the basics of phonemic awareness.

### Definition of Terms

The following terms have a specialized definition within the context of this study:

*Saxon Phonics 1* – This is a success-oriented program that enables most students to develop a solid foundation in phonics which leads them to become better readers. It is a series that is built on prior learning and is presented in increments that is reviewed throughout the year (Saxon Publishers, 1998).

*Phonemic Awareness* – This is where a child focuses on the word's form. It is the ability to see, think, hear, and manipulate the individual sounds within spoken words, not in written words. It is considered a noisy form of instruction where children are experiencing the sounds within the spoken word (National Reading Panel, 2000).

*Structured, systematic phonics* – This form of phonics allows children to learn the individual letters, the sounds those letters make, and the rules governing the use of those letters (Saxon Publishers, 1998).

## Chapter II

### Review of Current Literature

#### Introduction

Phonemic awareness instruction and the part it plays in the acquisition of reading have become highly debated topics. Many phonemic awareness programs have been developed to increase reading ability in the children in our schools. This paper questions the effectiveness of one program, Saxon Phonics, on phonemic awareness. In order to address this question and to fully comprehend its content, this chapter will address:

- The importance of effective reading instruction
- Whole Language versus Phonemic Awareness
- The meaning of phonemic awareness
- The importance of explicit, systematic phonemic instruction
- Saxon Phonics and its similarities to the Orton-Gillingham Approach
- The benefits of Saxon Phonics

#### Effective Reading Instruction

Effective reading instruction has become a highly debated topic, especially in recent years. Finding the most effective way to get our children to read has been researched by many in the field of education. Now our government is attempting to

address the problem of illiteracy in our country. The Reading Deficit Elimination Act (H.R. 4307) provides grants to public schools in order to eliminate the nation's reading deficit. According to the National Institute of Child Health and Human Development, more than half of students that have been placed in the specific learning disability category of Special Education are there because they have not learned to read. Reading deficits affect over 41 million Americans, and 69 percent of all fourth graders are reading below the proficient level (NRRF, 2001). This problem has partly encouraged President Bush and his administration to develop an educational reform plan.

The No Child Left Behind Act of 2001 makes dramatic changes to the Elementary and Secondary Education Act (ESEA). This reform asks that schools describe their success in terms of what each student accomplishes. The four basic reform principles outlined in this act include:

1. Stronger accountability for results.
2. Increased flexibility and local control.
3. Expanded options for parents.
4. Emphasis on teaching methods that has been proven to work.

The No Child Left Behind Act will provide education money to research based programs that teach children to read. One such program is the President's *Reading First* program. This program has been developed to ensure that every student can read at grade level or above by the end of third grade.

*Reading First* identifies the essential components of reading instruction. This means that there will be “explicit and systematic instruction in” phonemic awareness, phonics, vocabulary development, reading fluency, and reading comprehension strategies (NCLB, 2001). Of the five essential components of reading instruction, “phonemic awareness and letter knowledge are the best two indicators of how children learn to read during the first two years of instruction” (NRP, 2000).

Grossen (1996) and the National Institute of Child Health and Human Development (NICHD) has identified seven specific principles of effective reading instruction that can prevent reading problems:

- Teach phonemic awareness directly beginning at an early age
- Teach sound-spelling correspondences explicitly
- Teach frequent, highly regular sound-spelling relationships systematically
- Show children exactly how to sound out words
- Use connected, decodable texts that lets children practice sound-spelling relationships
- Balance but don’t mix comprehension and decoding instruction
- Provide interesting stories to develop language comprehension

### Whole Language versus Phonemic Instruction

The effectiveness of phonics instruction on reading has been questioned by many researchers. A number of researchers believe that whole language is the successful method of teaching reading skills. Other researchers are still insistent upon the phonics

method. Chall, in *Learning to Read: The Great Debate* (1967) came to the conclusion that phonics is the preferred mode of instruction. She found that children learn to become better readers when given direct instruction in phonics. Since the publication of Chall's book, many other researchers have come to the conclusion that phonics is the best method of acquiring reading skills. In the research of Kleius, Griffith, and Zielonka (1991), whole language classrooms were compared to traditional classrooms in terms of achievement in reading comprehension, vocabulary, phonemic awareness, decoding, spelling and writing. They found that neither program was more likely to close the gaps between children with high or low skills in any of the variables. It also found that phoneme-grapheme relationships which are taught through direct or traditional instruction can also be learned indirectly through reading and writing experiences in the whole language setting (Kleius, Griffith, Zielonka, 1991).

In continuing with the research comparisons between the two methods, Griffith, Klesius, and Kromery (1992) studied the effect of phonemic awareness on literacy development of first grade children. The whole language group received shared book experiences and extensive writing. The Traditional group received explicit phonics instruction with little writing. For the whole language group, Griffith et al. concluded that children who entered first grade with some phonemic awareness did well in achievement. Those children that started first grade low in phonemic awareness achieved at a significantly lower level. It was also found that the children's spelling made less gain than that of the children in the traditional group. The children in the traditional group that were low in phonemic awareness in the beginning did achieve at a better rate than those that were low in the whole language group.

## Phonemic Awareness

The National Reading Panel conducted a meta-analysis that evaluated the effects of phonemic awareness instruction on learning to read and spell. Phonemic awareness is the awareness that words are made up of individual speech sounds, each which are represented by one or more letters (Mastropieri and Scruggs, 2000). Individual speech sounds are also known as phonemes. Phonemes are “the smallest units comprising spoken language” (Ehri, 2001). In the National Reading Panel (2000) study, researchers used a variety of tasks to assess children’s phonemic awareness and use them to improve instruction. These tasks include:

1. Phoneme isolation: recognizing individual sounds in words (ex. “What is the initial sound in *paste*?”)
2. Phoneme identity: recognizing common sounds in different words (ex. “What sound is the same in *ball*, *bike*, *boy*?”)
3. Phoneme categorization: recognizing a word that has a different sound than the rest of the words (ex. “Which word does not belong: *bus*, *bun*, *rug*?”)
4. Phoneme blending: listening to a sequence of individual spoken sounds and combining them to make a recognizable word (ex. “What is /s/ /k/ /u/ /l/?”)
5. Phoneme segmentation: breaking words into sounds by counting each sound (ex. “How many sounds in *skip*?”)
6. Phoneme deletion: recognizing what word remains when a certain phoneme is removed (ex: “What is *smile* without /s/?”)



The National Reading Panel (2000) stated that many correlational studies have reported strong relationships between phonemic awareness and learning to read. Phonemic awareness instruction has its greatest impact in preschool, kindergarten and first grade. Its effectiveness on reading achievement is minimal after first grade. The effect size of phonemic instruction on the acquisition of phonemic awareness was,  $d=0.86$ . Effect size measures how much the mean of the phonemic awareness group exceeded the mean of the control group. The study found that phonemic awareness instruction is more effective than alternative forms of instruction or no instruction. It also facilitates the transfer of phonemic awareness skills to reading and spelling. The panel also found that disabled readers exhibited smaller effect sizes due to their age. Phonemic awareness instruction also helped at-risk students more than it helped “normals or disabled readers.” The effect sizes on preschoolers was large ( $d=2.37$ ) and kindergartners ( $d=0.95$ ). This indicates that phonemic awareness training is more effective in preschool and kindergarten. It is still effective in first grade with an effect size of  $d= 0.48$ .

In the study completed by Share et al. (1984), phonemic awareness was found to be one of the best predictors of how well children learn to read. They used some of the tasks mentioned above as well as letter name knowledge and memory for sentences. Results showed that phonemic awareness correlated with reading achievement ( $r=0.66$  in kindergarten;  $r=0.62$  in first grade) (Share et al., 1984)

Phonemic awareness is thought to contribute to reading ability because of the structure of the English language. Our writing system is alphabetic and is difficult to understand (Ehri, 2001). Phonemic awareness contributes to the ability children have to

read words in a variety of ways including the ability to read, write, store words to memory, spell, and comprehend. Lie (1991) found that children who completed first grade that received phoneme segmentation scored significantly higher than those first graders that received phoneme isolation. However, this changed by the time these children completed grade two. Lie (1991) also found that systematic phonemic instruction had a positive effect on reading outcomes of the first and second grade students studied. There was evidence that training in sequential phoneme segmentation was more effective on phonemic awareness and reading achievement than training in positional (phoneme isolation) analysis.

Phonemic awareness instruction is beneficial to all children including those that are at risk for reading failure (Foorman et al., 1998). Vellutino and Scanlon (1987) stated that the lack of phonemic awareness predicts which children will have trouble to read. Research indicates that systematic and explicit phonemic instruction will enhance children's success in learning to read (NRP, 2000).

Systematic and explicit phonemic instruction should build phonemic awareness as well as phonemic decoding skills. There is evidence that more systematic and explicit phonemic instruction is extremely beneficial to those children who demonstrated weak phonemic knowledge and skills (Foorman et al., 1998; and Juel and Minden-Cupp, 2000).

In a study by Weiner (1994), it was found that phonemic awareness training for low and middle achieving beginning readers may not be beneficial. Weiner used tests of *segmentation, deletion, deletion and substitution*, as well as informal and formalized methods. The study revealed that there were no differences with the experimental or the control group in all areas of phonemic awareness except for segmentation. However, it

was found that children who received more letter-sound training improved more than the group that received less letter-sound training. Weiner states the information should be used to provide further explicit instruction in phonemic awareness.

Snider (1997) found that there should be early identification of children who lack phonemic awareness in order to provide appropriate instruction. It is noted that there are still many areas of phonemic awareness instruction that are still not fully understood. Therefore we should not use information from tests of phonemic awareness to make placement decisions. Snider found that children who are trained in phonemic segmentation, Strip Initial Consonant and Substitute Initial Consonant beginning in kindergarten had a higher reading achievement by the end of second grade.

Cunningham (1990) studied the difference in instruction between “explicit” and “implicit” instruction in phonemic awareness. Implicit phonics is a whole to part instruction where instruction is based primarily on sight word attack. Explicit phonics is a part to whole instruction. This instruction starts with letter sound recognition eventually moving to identifying, building and recombining those letters and sounds (Hiskes, 1998). Cunningham’s study supported the growing evidence that phonemic awareness is causally related to reading achievement at the beginning stages of reading development. It was found that when children were taught in an explicit manner they tended to have a better transfer rate to reading skills. Cunningham also found that the type of instruction children received in phonemic awareness was an important factor for the first grade children. Segmentation of phonemes was the most effective skill children learned in the acquisition of phonemic awareness. The study proved that “explicit instruction in how segmentation and blending are involved in the reading process helps

children to transfer and apply” skills of phonemic awareness to the activity of reading. Furthermore, skill and drill programs of instruction in phonemic awareness were found to be more effective for teaching component skills. However, the “utilization of these component skills” depends upon how explicit and systematic the instruction.

Ehri and Robbins (1992) wrote that children need to learn individual sound-symbol correspondences before they can learn to chunk. Ehri et al. (2001) also purported that phonemic awareness helps build a better understanding of the alphabetic system. By learning explicitly (with simple sounds and letters) and eventually building upon those sounds/letters children are learning in a systematic fashion that will help them learn, comprehend, and apply (Ehri et al., 2001). This supports the No Child Left Behind Act that phonemic instruction should be explicit and systematic. Hiskes (1998) stated that children couldn’t focus on letter-sound relationship at the same time as trying to understand what is being read. “As phonics skills develop and become automatic”, children can begin to comprehend for meaning. Research has shown that unlocking, decoding and then comprehending is the effective process toward reading (Ehri et al., 2001).

Ball and Blachman (1991) completed a study on the importance of training in phoneme segmentation and instruction of letter names on the learning of phonemic awareness. In this study, there were three groups: a phonemic awareness group, language activities group, and a control group. The results found that the phonemic awareness group, which received phonemic awareness intervention as well as phoneme segmentation, significantly improved in their early reading skills. Those in the language activity group, which received instruction in letter names and letter sounds, did not

improve in their ability to use phoneme segmentation in comparison to the control group. Ball and Blanchman stated that it is “important to emphasize the significance of early phonemic instruction” beyond early reading and spelling skills. They cited Stanovich (1988) stating that we may be initializing “a causal chain of escalating negative side effects” if we do not provide phonemic awareness training with children who have low or no phoneme segmentation skills.

### Saxon versus Orton-Gillingham

Children without good phonemic awareness have to rely on visual memory, context clues and picture clues. These skills provides information for children to “guess” what the unfamiliar word is (Mastropieri and Scruggs, 2000). There is no one right method of teaching phonemic awareness. The National Reading Panel (2000) suggests a number of synthetic approaches to phonics and phonemic awareness. Some of those approaches include “traditional” phonics, Orton-Gillingham, Open Court, Reading Mastery, and Saxon Phonics. The Saxon Phonics program is based on the Orton-Gillingham approach to reading. Both approaches are systematic and explicit. In each, the student moves step by step from simple to more complex material in a sequential and logical manner. According to the National Reading Panel (2000), both approaches begin with individual letters and sounds and move to blending to make words. The National Reading Panel report states that the similarities of each program include:

- Focusing on structure of language, starting from the smaller units and working towards the larger units

- Gradually moves towards reading
- Provides immediate feedback on learning
- Provides predictable sequences that integrates writing and spelling
- Students move step by step from simple to more complex material in sequential, logical manner (explicit and systematic)
- Use letter training as well as phonemic awareness instruction
- Provide instruction in each of the tasks as discovered by the National Reading Panel: phoneme isolation; phoneme identity; phoneme categorization; phoneme blending; phoneme segmentation; and phoneme deletion

### Saxon Phonics

The Saxon Phonics Program is a new program that has not been the focus of any one research study to date. Therefore to prove the effectiveness of such a program on phonemic awareness, spelling, or reading by means of previous research is difficult to say the least. Although data has not been compiled by outside researchers, Saxon Publishers Research Department has been able to compile test-result data and testimonials from schools across the country. *Saxon Phonics Results* (2000) was published by Saxon Publishers to chronicle the effectiveness of the Phonics Program. The information provided, however, does not describe in detail the effectiveness of the program on phonemic awareness. It does state that the program was effective on reading achievement over a three-year period. The research department used the results from the *Iowa Tests of Basic Skills* results of each school. The results were gathered prior to the Saxon instruction. Then data was collected for two years after Saxon instruction was

introduced. The data concluded that reading scores increased gradually and steadily over the course of two years.

Mastropieri and Scruggs (2000) describe Saxon Phonics as a systematic instruction tool that begins with auditory discrimination and sound blending activities for reading and reading comprehension activities. *Saxon Phonics K-2* (Simmons, 1996) is an explicit, systematic program that complements any reading program. The components of the program include:

- An Alphabet Activity
- Phonemic Awareness Activity
- Review of Past Learning
- Spelling Activity
- New Learning
- Practice Games with Kid Cards and Letter Tiles

Simmons (1996) states that the Saxon Program does not have a literature component, but can complement other reading programs such as *Open Court* by SRA. However, one of the primary focuses of the program is to get the children to read independently. As stated by the National Reading Panel (2000), phonemic awareness provides children with “the essential foundation of the alphabetic system”. They state that it is one instructional component that is necessary to reading. Simmons describes Saxon as a program that is research based that allows students to learn the sound first, then the letter that makes that sound, and finally how and why these letters come together

to make a word. The program places emphasis on instruction in phonemic awareness. It includes skills instruction in the six phonemic tasks as mentioned by the National Reading Panel.

Simmons (1996) identifies the benefits of the Saxon Phonics Program. They include:

- Use of teaching principles of daily review and incremental development
- Incorporates reading, spelling, and handwriting
- Supplemental to other reading programs
- Builds on prior learning
- Introduces children to language in small increments
- Used “coding” to identify sounds
- Spelling rules are taught along with lists of irregular words
- Controlled vocabulary
- Success oriented program that enables most students in a heterogeneous class to develop a solid foundation in phonics and thus become successful readers

### Summary

Juel and Minden-Cupp (1999) stated that children will be expected to recognize and know over 80,000 words by the end of first grade. Therefore it is important that children acquire strategies to help them learn these words. Instruction in phonemic awareness is one such strategy. They stated that even the most comprehensive phonics program couldn’t provide direct instruction for more than 90 phonics “rules”. There are at least 500 different spelling-sound rules needed to read successfully. The study



completed by Juel and Minden-Cupp (1999), children who were weak in the knowledge of the alphabet and phonemic awareness were on grade level by the end of first grade. This was due to an explicit and systematic instructional approach in phonemic awareness.

The Saxon Program uses a variety of techniques in phonemic instruction and word reading. The National Reading Panel (2000) states that a systematic phonics instruction will increase accuracy in decoding and word recognition. The Saxon Publishers state that in view of the literature and research on the importance of explicit and systematic phonics program, *Saxon Phonics K-2* is an effective instructional tool in the road to reading achievement (Simmons, 1996).

### Chapter III

#### Design of the Study

##### Population

The population for the study consisted of two groups of first grade students (ages six and seven). Group one consists of twelve students, seven girls and five boys. Group two consists of nine students, six girls and three boys. Teachers that are experienced in the use of the program provide both groups phonics instruction with the Saxon Program. All of the students attend an elementary school in Riverton, a rural southern New Jersey town with an enrollment of 263 students. The students that participate in the Saxon Phonics program are heterogeneously grouped. There are only two first grades in the district.

##### Method of Sample Selection

The sample used in this study came from the two first grade classrooms within Riverton Public School. Each of the two first grade classrooms implements the Saxon Phonics 1 program. The children have been mainstreamed into the two first grade classrooms. There are two first grade students who receive instruction within the resource room setting due to lower reading abilities. They do not implement the Saxon Phonics program within that setting. Therefore those children were not included in this study. Their instruction is based on the Benchmark Program. Parents of the students in

groups one and two were given a letter to inform them of this study. They were informed that no names would be used while reporting the results.

The sample for each group consisted of children of varying reading abilities. While a majority of the subjects could correctly identify letters upon sight, some still struggle with that skill. The sample groups also consisted of subjects of diverse backgrounds. Group one consisted of eleven White students and one Asian. Group two consisted of eight White students, one African-American student, and one Bosnian student. In all, there were thirteen girls (ten White, one Bosnian) and nine boys (seven White, one Asian, and one African American). Each Group was provided Saxon Phonics 1 instruction thirty-five to forty-five minutes each day for five days a week.

### Instrumentation

The instrument used in this study was The Test of Phonological Awareness (TOPA)- The Early Elementary Version published by PRO-ED (1994). The Test of Phonological Awareness consisted of two subtests – “Ending Sound (Same)” and “Ending Sound (Different)”. The students were scored on their ability to identify sounds at the end of simple words. In the “Ending Sound (Same)”, the subjects were given four pictures: one as a stimulus and three to choose from. They were to place their finger on the stimulus picture as the test administrator verbally identified the picture. The administrator identified the other pictures and then instructions were given. The subject was to place a line on the picture that had the same ending sound as the stimulus picture. In the Ending Sound (Different)”, the subjects were given four stimulus pictures. The test administrator verbally identified each of the stimulus pictures. Then, the subjects

were to place a line on the picture that had a different ending sound than the other three pictures.

### Collection and Analysis of Data

Data for the research was gathered by administering pre and post assessment tests. The children in Group one and Group two were administered the test by their classroom teacher. The test was administered once at the beginning of the school year by the end of September, and again in the middle of the school year by the end of March. The tests were scored blindly. The teacher of Group two scored the pre and post assessment tests of Group one. The teacher of Group one scored the pre and post assessment tests of Group two. The pre and post assessment tests were also scored at the same time in March. Percentage gains were recorded by finding the difference between the pre and post assessment test scores. The analysis provided a comparison of the students' phonemic awareness prior to receiving instruction in the Saxon Phonics 1 program and phonemic awareness after receiving instruction after six months.

### Research Design and Analysis of Data

Pre and post assessment test results for The Test of Phonological Awareness will be presented. Through the use of tables, the data will be presented to measure percentage gains of phonemic awareness of each student. Tables three through six will provide information regarding the student's raw score, the student's standard score, the student's percentile, and the percent gain or loss from the pre test to the post test. These Tables

will also provide information on the total percentage gain or loss as well as the average percentage of gain or loss.

Table 1

Student	Raw Score		Stan. Score		Percentile		% Gain/Loss
	Pre	Post	Pre	Post	Pre	Post	
#1							
#2							
#3							
#4							
#5							
#6							
#7							
TOTAL							
AVERAGE GAIN/LOSS							

Table seven will provide information on the total and average percentage gain or loss for Group One and Group Two.

Table 2

	Total Gain	Average Gain
Group One		
Group Two		
<i>Total</i>		

## Chapter IV

### Analysis of Results

#### Interpretation of Assessment Results

The purpose of this study was to evaluate the effectiveness of the Saxon Phonics 1 program in improving the phonemic awareness of first grade students. The data to test the program's effectiveness was gathered from a pre and post assessment through the use of The Test of Phonological Awareness: Elementary Version (TOPA).

This information was used to answer the following research question:

Will first grade students demonstrate improved phonemic awareness through the use of a structured, systematic phonics program such as Saxon Phonics 1 as measured by a pre and post test assessment using The Test of Phonological Awareness?

A sample of 21 first grade students was studied. Group one consisted of twelve students each of who are fully mainstreamed in the first grade classroom. Group two consisted of nine fully mainstreamed students. The results are recorded on four separate tables. Results for Group One are presented in Table 1 and Table 2. Results for Group Two are presented in Table 3 and Table 4. The results for each group were divided into two tables in order to separate the differences in age over the six month period. In each group, some children turned seven years of age and required score interpretation from a second chart within the testing manual. This is important to note since some scores show

that although a child received the same score on the post test and the pre test, the standard scores and percentiles were lower on the post test.

An inspection of Table 3 shows that the subjects in Group One were given the pre test at the age of six and remained six years of age at the administration of the post test. The table shows the raw scores, standard scores, and percentiles for pre assessment and post assessment as well as the percentage of success on the phonics awareness inventory.

Table 3

Group One: Age Six for Pre and Post Tests

Student	Raw Score		Stan. Score		Percentile		% Gain/Loss
	Pre	Post	Pre	Post	Pre	Post	
#1	13	19	86	110	18	75	+57 %
#2	17	19	100	110	50	75	+25 %
#3	15	16	91	94	27	35	+8 %
#4	17	19	100	110	50	75	+25 %
#5	19	20	110	116	75	86	+11 %
#6	19	20	110	116	75	86	+11 %
#7	7	14	74	88	4	21	+17 %
TOTAL							+154 %
AVERAGE GAIN/LOSS							+22 %

Table 4 presents the same information for children in Group One that turned seven years of age by the post assessment administration.

Table 4

Group One: Age Six for Pre Test/ Age Seven for Post Test

Student	Raw Score		Stan. Score		Percentile		% Gain/Loss
	Pre	Post	Pre	Post	Pre	Post	
#8	18	18	105	100	63	50	-13 %
#9	20	20	116	114	86	82	-4 %
#10	16	20	94	114	35	82	+41 %
#11	8	15	76	91	5	27	+22 %
#12	13	20	86	114	18	82	+64 %
TOTAL							+136 %
AVERAGE GAIN/LOSS							+27.2 %

The average gain of Group One (age six for pre and post test) was 22% and Group One (age six for pre test/age seven for post test) was 27.2%. The overall average gain for Group One was 24.17%. Therefore, the subjects in Group One have shown phonemic awareness gains over a six month period.

Table 5 shows the subjects in Group Two who were six years of age during the pre test and post test administration. The table presents raw scores, standard scores, and



percentiles for the pre and post test administrations. It also shows the percentage of gains and losses for each subject.

Table 5

Group Two: Age Six for Pre and Post Tests

Student	Raw Score		Stan. Score		Percentile		% Gain/Loss
	Pre	Post	Pre	Post	Pre	Post	
#1	19	19	110	110	75	75	-----
#2	17	20	100	116	50	86	+36 %
#3	19	20	110	116	75	86	+11 %
#4	20	20	116	116	86	86	-----
#5	17	20	100	116	50	86	+36 %
#6	11	20	82	116	12	86	+74 %
TOTAL							+157 %
AVERAGE GAIN/LOSS							+26.17 %

Table 6 presents the same information as Table 5 for Group Two. The information differs in that it shows subjects who turned seven years of age by the post test administration.

Table 6

Group Two: Age Six for Pre Test/Age Seven for Post Test

Student	Raw Score		Stan. Score		Percentile		% Gain/Loss
	Pre	Post	Pre	Post	Pre	Post	
#7	18	20	105	114	63	82	+19 %
#8	5	17	69	94	2	35	+33 %
#9	20	20	116	114	86	82	-4 %
TOTAL							+48 %
AVERAGE GAIN/LOSS							+16 %

The average gain of Group Two (age six for pre and post tests) was 26.17% and Group Two (age six for pre test/age seven for post test) was 16%. The overall average gain for Group Two was 22.78%. Therefore, the subjects in Group Two have shown gains in phonemic awareness over a six month period.

Table 7 shows the overall comparison in gains for Group One and Group Two.

Table 7

Gains for Groups One and Two

	Total Gain	Average Gain
Group One	290 %	24.17 %
Group Two	205 %	22.78 %
<i>Total</i>	495 %	23.48 %

Table 7 shows the average percentage gain for Group One was 24.17% and Group Two was 22.78%. Overall, the first grade subjects demonstrated a total average gain of 23.48% as measured by The Test of Phonological Awareness: Elementary Version (TOPA).

## Chapter V

### Summary, Conclusion, and Discussion

#### Summary

The purpose of this study was to determine the effectiveness of a structured, systematic phonics program such as the Saxon Phonics 1 program in improving the phonemic awareness of first grade students. The effectiveness of this program was measured by a pre and post assessment using The Test of Phonological Awareness (TOPA).

The subjects for this study consisted of two groups of first grade students (ages six and seven). Group one consisted of twelve students: seven girls and five boys. Group two consisted of nine students: six girls and three boys. Teachers that are experienced in the use of the program provided both groups phonics instruction using the Saxon Program. All of the students attend the same elementary school that has a total enrollment of 263 students. The students that participated in the Saxon Phonics program were heterogeneously grouped. There are only two first grade classes in this school.

The results of this study indicate positive gains with both groups as measured by the pre and post assessment. The average gain by Group one and Group two were equal and meaningful.

## Conclusions

In this study, data concluded that the students made meaningful gains in phonemic awareness through the use of the Saxon Phonics 1 program. Both groups made approximately the same average gain. Many factors must be considered when taking these results into account. First, the results should be interpreted cautiously since the groups were small in size. The sample was randomly selected and may not be a true representation of the majority of children learning to read through phonemic awareness instruction. It must also be noted that the ability levels of the students selected may not be representative of other demographic groups.

Although there were certain limitations, both groups have shown improvement in phonemic awareness. This study, with its few limitations, has shown that an effective phonics program can improve phonemic awareness. Through the course of this study, several parents of students in the study have noted the marked improvement in phonemic awareness and interest the students' raised interest in reading. Some parents have also compared reading growth of the first grade student with older siblings. The few parents are pleased with the systematic and structured program.

## Discussion

The information gathered in this study that students who participated in a structured, systematic phonics program made meaningful gains in their phonemic awareness as measured by a pre and post assessment using The Test of Phonological Awareness (TOPA). Research has suggested that phonemic instruction has been

successful. Phonemic awareness instruction should provide children with experiences to build their knowledge of letters and sounds and their correspondence with each other. These experiences should provide the children with the ability to think about the individual sounds within the spoken word. With the need for good phonemic instruction comes the need for an effective instructional tool that will reach all children. Within this study, the Saxon Phonics 1 program has proven to be an effective instructional tool. Both groups made meaningful improvements in the phonemic awareness, regardless of the minute teaching differences between the two teachers.

#### Suggestions for Further Studies

A larger sample would offer the opportunity to obtain more reliable results. A larger group would allow for a wider range of abilities at the onset of the study providing more information in the growth of the subjects over the study period. This larger sample should also include a control group and a treatment group. This would provide a more valid assessment of phonemic growth.

It may also be beneficial to have a larger study period. This study was completed over a five and a half-month period. This brief period did not allow for the subjects to benefit from a full phonics program that is meant for 140 school days. Further study of the program should be completed to support the findings here.

## REFERENCES

- Arnold, V., Webb, A., Hoffman, J., Flood, J., Wood, K., Lapp, D., Priestley, M., Aoki, E., Villamil-Tinajero, J., Martinez, M., Smith, C., Sullivan-Palincsar, A., & Teale, W. (1997). *Spotlight on literacy*. New York, New York: Macmillan/McGraw-Hill.
- Ball, Eileen W., & Blachman, Benita A. (1991). Does phonemic awareness training in kindergarten make a difference in early word recognition and developmental spelling? *Reading Research Quarterly*, 26 (1), 49-66.
- Chall, J.S. (1967). *Learning to read: The great debate*. New York: McGraw-Hill.
- Cunningham, Anne Elizabeth (1990). Explicit versus implicit instruction in phonemic awareness. *Journal of Experimental Child Psychology*, 50, 429-444.
- Ehri, Linnea C., & Robbins, C. (1992). Beginners need some decoding skills to read words by analogy. *Reading Research Quarterly*, 27, 12-26.
- Ehri, Linnea C., Nunes, Simone R., Willows, Dale M., Schuster, Barbara Valeska, Yaghoub-Zadeh, Zohreh, & Shanahan, Timothy (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. *Reading Research Quarterly*, 36 (3), 250-287.
- Foorman, Barbara R., Francis, D.J., Fletcher, J.M., Schatschneider, C., & Mehta, P. (1998). The role of instruction in learning to read: Preventing reading failure in at-risk children. *Journal of Educational Psychology*, 90, 37-55.
- Griffith, Priscilla L., Klesius, Janell P., & Kromrey, Jeffrey D. (1992). The effect of phonemic awareness on the literacy development of first grade children in a traditional or a whole language classroom. *Journal of Research in Childhood Education*, 6 (2), 85-92.
- Grossen, B. (1996). 30 years of research: What we know about how children learn to read. Washington, DC: National Institute of Child Health and Human Development.
- Hiskes, Dolores (1998, February). Explicit or implicit phonics: "Therein lies the rub" [On-line]. Available: [http://www.nrrf.org/essay\\_Explicit\\_or\\_Implicit\\_Phonics.html](http://www.nrrf.org/essay_Explicit_or_Implicit_Phonics.html).

Juel, Connie, & Minden-Cupp, Cecilia (1999). One down and 80,000 to go: Word recognition instruction in the primary grades [On-line]. Available: <http://www.ciera.org/library/archive/1999-02/art-online-99-02.html>.

Juel, Connie, & Minden-Cupp, Cecilia (2000). Learning to read words: Linguistic units and instructional strategies. *Reading Research Quarterly*, 35, 458-492.

Klesius, Janell P., Griffith, Priscilla L., & Zielonka, Paula (1991). A whole language and traditional instruction comparison: Overall effectiveness and development of the alphabetic principle. *Reading Research and Instruction*, 30 (2), 47-61.

Lie, Alfred (1991). Effects of a training program for stimulating skills in word analysis in first grade children. *Reading Research Quarterly*, 26 (3), 234-251.

Mastropieri, Margo A., & Scruggs, Thomas E. (2000). *The inclusive classroom: Strategies for effective instruction*. Upper Saddle River, New Jersey: Prentice-Hall.

National Reading Panel (2000). Teaching children to read: An evidenced-based assessment of the scientific research literature on reading and its implications for reading instruction. Washington, DC: National Institute of Child Health and Human Development.

National Right to Read Foundation (2001). *The Reading Deficit Elimination Act (H.R. 4307)* [On-line]. Available: <http://www.nrrf.org/rdea.htm>.

Saxon Publishers Product Research Department (2000). *Saxon Phonics Results*. Norman, Oklahoma: Saxon Publishers.

Share, D., Jorm, A., MacLean, R., & Matthews, R. (1984). Sources of individual differences in reading acquisition. *Journal of Educational Psychology*, 76, 1309-1324.

Simmons, Lorna (1996). *Saxon Phonics K-2: An incremental development*. Norman, OK: Saxon Publishers.

Snider, Vicki E. (1997, March/April). The relationship between phonemic awareness and later reading achievement. *The Journal of Educational Research*, 90 (4), 203-211.

Stanovich, K.E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly*, 21, 360-407.

Torgensen, Joseph K. & Bryant, Brian R. (1994). *The Test of Phonological Awareness*. Austin, Texas: Pro-Ed.



U.S. Department of Education (2001). *No Child Left Behind Act* [On-line]. Available: <http://www.nochildleftbehind.gov>.

Velluntino, F., & Scanlon, D. (1987). Phonological coding, phonological awareness, and reading ability: Evidence from a longitudinal and experimental study. *Merrill-Palmer Quarterly*, 33 (3), 321-363

Weiner, Sue (1994). Effects of phonemic awareness training on low- and middle-achieving first graders' phonemic awareness and reading ability. *Journal of Reading Behavior*, 26 (3), 277-299.