4-20-2000

Incorporating the Wilson Reading System into a first grade reading curriculum

Barbara Colton
Rowan University

INCORPORATING THE WILSON READING SYSTEM INTO A FIRST GRADE READING CURRICULUM

by
Barbara Colton

A Thesis

Submitted in partial fulfillment of the requirements of the
Master of Arts Degree in the Graduate Division
of
The Graduate School
at
Rowan University
May 2000

Approved by_____
Dr. Kuder

Date Approved 4/20/00

ABSTRACT

Barbara K. Colton

Incorporating the Wilson Reading System into a First Grade Reading Curriculum

2000

S. Jay Kuder, Ed. D.

Special Education

The purpose of this study is to examine the ability of the Wilson Reading System, when incorporated into a regular education inclusion classroom curriculum, to support the reading needs of all learners, particularly special needs students. Subjects for this study were first grade students from two regular education classrooms. The experimental classroom was an inclusion setting containing two students eligible for special education and related services, and two students supported with basic skills for reading. The control classroom had one student supported in basic skills for reading. Results reveal that students in the inclusion or experimental classroom provided with supplemental Wilson instruction, performed slightly better than the control classroom in phonemic awareness and advanced enough to perform similarly to the non-inclusive or control group subjects.

MINI-ABSTRACT

Barbara K. Colton

Incorporating the Wilson Reading System into a First Grade Reading Curriculum

2000

S. Jay Kuder, Ed. D.

Special Education

The purpose of this study is to examine the ability of Wilson Reading System, when incorporated into a regular education inclusion classroom curriculum, to support the reading needs of all learners, particularly special needs students. The study reflects the Wilson Reading system as advancing phonemic awareness, particularly in special needs students.

ACKNOWLEDGMENTS

The author wishes to first thank the individuals whose assistance provided them with no personal gain, but was rather an unselfish action of support for a colleague. First, I wish to thank Chris Nolan, our school special education teacher, who offered patient support and mentoring in the Wilson Reading System. This study would not have taken place without her. Next, I offer great gratitude to my grade partner, MaryAnn Cottone, who provided kindhearted support as well as her classroom as the control group in this study. To Phyllis Trachtenburg, our reading specialist, who offered her expertise, her educational resources, her time, and most precious of all, her wit. To our school nurse, Bonnie, for laughter, chocolate, and friendship, all great healers.

Additionally, I wish to thank Dr. Bucko, my principal, for always believing in his teachers. To Dr. Germinario, our superintendent, and Dr. Keefe, our assistant superintendent, who both support educational research.

I wish to thank my children, Erica and Brandon, who encourage mom with their love. To my parents for their constant love and support. To my friend Linda for her gift of friendship.

To Dr. Kuder, for his capable leadership in this project.

And to the One who is always first and last in my life, Jesus Christ. He is my God and my friend.

TABLE OF CONTENTS

LIST OF TABLES

Table

Chapter 1

Title: Incorporating Wilson Language Training into a First Grade Reading Curriculum

Introduction

To teach first grade is to teach reading. Reading is an educational competence a literate individual is expected to posses. Without this skill, all other learning is hindered. For some, learning to read was so remarkably incidental, that any attempt to recall the process becomes an exercise in futility. For others, memories of first grade and learning to read incite feelings of painful inadequacy and frustration.

As a first grade classroom teacher, the majority of my students have fallen somewhere between the two above extremes. Most are not reading yet, but come well equipped with readiness skills from time spent in a kindergarten program. A few young students walk in fluent readers easily comprehending challenging reading material, while others are severely at-risk for leaving first grade non-readers save significant intervention. Although no wise teacher would take for granted the mastery of any skill, it is expected that incoming first grade students be equipped with the basics taught in the school's kindergarten program. A typical reading program in kindergarten might teach the alphabet and the corresponding consonant sounds with exposure to vowels; high frequency sight words; rhyme and basic concepts of print. *High frequency sight words* are words a student would come across more frequently and learn to recognize by sight,

as opposed to decoding. *Concepts of print would refer to* print conventions such as left to right progression, spacing between words, capitalization and grammar rules etc. With most new first grade students not reading yet, and a few more significantly at-risk for remaining that way without intervention techniques beyond the scope of most regular education, it makes good sense to incorporate into any traditional reading curriculum special needs interventions. While one-on-one intervention must remain an option for students requiring individual support out of the distractions of a busy classroom, borrowing from a strong remediation program may avoid the need for remediation in the first place for some students, and decrease the number of pull-outs for others.

Purpose of the Study

The purpose of this study is to determine whether the supplemental instructional support of the Wilson Reading System by the regular and special education teachers, in an inclusive first grade classroom, affords a significant change in all learners read ability, particularly special needs students. Does the incorporation of the Wilson Reading System in the regular education classroom allow special needs students to make significant strides and compete statistically with student of the same age in another regular education classroom? Students will be assessed in October, December, and March for growth in phonemic awareness, vocabulary and decoding ability

It is my hypothesis that the integration of the Wilson Reading System into a regular education first grade classroom, will support the special educational reading needs of all students, particularly those students "at-risk" for reading failure. I expect to find a significant improvement in the reading ability of all students, particularly students who

began the school year at risk for reading failure, as a result of yearlong instruction in strategies offered by the Wilson Reading System.

The possible implications or value to demonstrating a statistically significant increase in student reading abilities, as a result of using Wilson as a supplement to the reading program, may be a permanent modification in the district first grade reading program. Few, if any, teachers and parents favor having a student pulled away from the regular education classroom in order to receive support in reading. If a program lended itself to providing support for at-risk students in the regular education classroom *by* the regular education classroom teacher, then it follows the need for pull-outs for borderline or even possibly severely at-risk students, should decrease. The goal of this research is to minimize the need to pull-out special education students by inviting the special education teacher to teach with the regular education teacher and share whole group Wilson strategies. With a regular education teacher using the special education strategies of Wilson within the regular education curriculum, all students will benefit and special needs students are provided with continual support for strategies learned throughout the day, not just in the traditionally scheduled pull-out time.

Chapter 2

Review of Literature

The inherent value in learning to read is rarely, if ever, the subject of debate in America. What has provoked significant discord within the current generation is how best to engage school-age children in this process.

Early proponents of a more natural, environmental approach encouraged surrounding students with opportunities to interact with print that was *authentic*. Print that was found in the "real world" such as the environmental print of a traffic sign or on a grocery store shelf, or perhaps in a story in an unadulterated trade book, would be the print of the classroom as opposed to a contrived and controlled systematic print found in a basal or spelling list. Learning language in context and as a whole, as opposed to fragmentation into detached and irrelevant *skills,* is at the heart of this holistic philosophy. The integration of language art skills such as listening, speaking, reading and writing were encouraged (Heald-Taylor, 1989). The concept of whole language was, and is, a philosophy of teaching. In the book, "Understanding Whole Language," Constance Weaver rejects the teaching of reading through a fragmentation into *skills* and encourages the concept of teaching reading in the way it is presented to the child naturally, (Weaver, C., 1990).

According to the holistic language philosophy, reading is developmental and intended to be a natural progressive experience. Teachers take the role of facilitators,

generating authentic literacy experiences, as opposed to being the director in charge of teaching subskills enabling future literacy. As one author stated, "Learning letter names and sounds from a workbook is not particularly interesting. I prefer to choose a good book that uses a letter or sound quite often and have the children *discover* the information," (Blake, R., 1990). Phonics and vocabulary are dealt with in the context of reading and writing, rather than isolated as independent skills. The literature in a holistic environment is not contrived and basic, structured to teach a particular subskill. Rather, it is language rich vocabulary and of interest to the child (Heald-Taylor, G., 1989) always driven by class relevance.

In a holistic language environment, schools support shared educational experiences by providing the scaffolding to bridge the gap between home and school. Each child's unique experiences outside of school become part of the class experience and vocabulary. Often "experience stories," generated from student experience and transcribed onto a large easel for class reading, will provide the vocabulary lesson for the day. A compelling philosophical argument in favor of this philosophy is that, in theory, no child is culturally disadvantaged since shared experiences (and thus vocabulary) are a respected and valued part of the curriculum (Goodman, 1986).

It is clear that the philosophy of whole language, in the strongest sense of the term, seeks to protect the student from engaging in "meaningless" skill-based activity which ignores authentic literature and the student's developmental level. It is all inclusive and politically thought-provoking. Many classroom teachers and administrators, supported in theory by their school boards, embraced this new thinking and "fun,"

(possibly exhausting) way to teach. Organizations like TAWL or Teachers Applying Whole Language, supported teachers in after school meetings with ideas for implementation in this transition to a new philosophy. Trade books and authentic literature replaced the basal on school shelves (with experienced teachers simply hiding the basal muttering, "This too shall pass...") along with its controlled and often colorless vocabulary.

While the respite from the traditional phonics-based reading programs appeared to be a consistent change, current research continued to show a positive relationship between phonemic awareness and reading ability; particularly for students at-risk for reading failure (McBride-Chang, C., Chang, L., & Wagner, R.K., 1997). Phonemic awareness, refers to the metalinguistic ability to reflect on or manipulate phonemic segments of spoken language (Kozminsky, L., & Kozminsky, E., 1995). In other words, a child with phonological awareness has internalized, or connected, the relationship between letters of the alphabet and the corresponding sounds. Other research suggesting a possible use of morphological awareness (a morpheme as the smallest meaningful unit of sound such as an affix or base) as a possible additional indicator for future reading strength, defaulted as well to phonetic awareness as the greater indicator (Carlisle, J., & Nomanbhoy, D., 1993). The noble theory of whole language, while appearing to be philosophically sound, began to lose the support of educational research.

In its most orthodox form, the whole language approach appeared to assume students would be capable of internalizing the symbol sound relationship and word structure given the proper environment. The philosophy of *supporting nature* through a

more holistic approach surrounds the child with authentic, environmentally intact, print. It is shared with the child in the same condition in which it exists in the "real world." Assisting what nature may have left out, or what a child may be choosing to ignore, is a more skill-based approach. It is an understanding that not all children will learn to read apart from direct skill instruction, and an approach educational research seemed to continue to support. "Research evidence does not support the idea that most children will learn to read naturally if only they have enough exposure to literacy experiences," (Spear-Sterling, & Sternberg, 1998). Clearly, research supports direct instruction in phonological awareness to be included not only for language-impaired children, but for those who have not acquired phonological awareness during the preschool years (Ericson, L., & Juliebo, M., 1998). There were enough contradictions and students for whom the symbol sound relationship was not inherently evident, to rethink the educational shift once again and seek educational researchers for solutions.

David Majsterek and Audrey Ellenwood point out that there is a reciprocal relationship between phonological awareness and beginning reading. Phonological awareness does influence early reading, but it is quite possible that beginning reading influences phonological or linguistic awareness . In other words, the act of learning to read actually supports reading. Early literature experiences do promote phonological experiences (Majsterek & Ellenwood, 1995).

While it appears that there is a new causal link being suggested between practice in reading and reading well, it is not a new thing at all to have all teachers singing the praises of parents reading nightly with their child to support reading growth. For many

educators, the issue of leaving what may be a developmental process alone to develop supported by the natural reading environment (whole language), versus *assisting* nature with phonics instruction, became a critical educational decision. It was not quite the nature versus nurture debate, but did reflect teacher decision making about the acceptability of phonics instruction in the curriculum.

In a 1995 study in Israel, the reading ability, as measured by decoding ability and comprehension, of a phonologically trained group of children (experimental group) was contrasted with a group not having received phonics instruction (control group). This four year longitudinal study was conducted involving four groups of elementary school kindergarten students in a lower middle class region in Israel. They were followed from kindergarten through third grade. The researchers, Lea Kozminsky and Ely Kozminsky, were attempting to repeat a Danish investigation that supported the positive effect of phonological training on comprehension.

In the Israeli investigation, two groups of kindergarten children, approximately 28-29 students in each group, received intensive phonological training. Two additional groups of children, with similar numbers in each group and from a neighboring school, were taught in a whole language environment that did not incorporate a systematic teaching of phonics into the curriculum. Results indicated a positive correlation between higher reading comprehension scores of students in first and third grade who received phonological training, as compared to students in the control group who did not, the whole language group. The primary difference noted by the researcher was that students in the experimental groups, those receiving systematic phonics instruction, were able to

decode and read new information more fluently. Students from the control group, the whole language classrooms, were not efficient decoders and had an over-reliance on context in attempting to comprehend (Kozminsky, L., & Kominsky, E., 1995).

If the educator accepts the position of intervention and direct instruction in promoting phonemic awareness, particularly for at-risk students (Behrmann, M., 1995), an appropriate type of phonemic intervention becomes the issue. If a regular education classroom is already using a basal as well as trade books with an integrated approach to reading, (i.e. specific skill instruction as well as exposure to enriching and engaging literature) is including a systematic reading system like Wilson beneficial or even necessary? While current research does suggest additional intervention is appropriate for at-risk students, one very real concern is actually locating all students in trouble in time. Would exposing *all* students to a phonemic intervention technique be recommended to avoid missing any at-risk students? Would it be useful or necessary to borrow a more intensive program like Wilson from the special education department?

One powerful study by Joseph K. Torgesen et al., (1994) sought to examine not only the relationship between phonological skills and reading, but also provide an insight into causality and beneficial remediation techniques. In this longitudinal study, 244 students (remaining from 288 initially) were followed and researched from kindergarten through second grade. Initial research on incoming phonological abilities was taken. Students were assessed for analytic awareness, *identifying the sounds within words presented as wholes*; synthetic awareness, *the ability to blend separately presented phonological segments into whole words*; phonological memory, *verbatim retention of*

nonmeaningful sequences verbally presented; serial naming, *naming as rapidly as possible a series of digits or letters presented on a card*; and isolated naming, *naming digits or letters as rapidly as possible when presented one at a time on a computer screen*. Data was collected in kindergarten from October through December, prior to grade one and prior to grade two. Collection of data represented the readministering of the same tasks.

While the sample of students represented randomly selected students, a screening device did remove students who had severe articulation difficulties. The male and female population in this study were nearly equally represented (53% female), and seventy five percent of the student population was white with the remaining population largely African American. English was the major language of the home. Although the district represented reflected a whole language philosophy, individual teachers varied a bit in the type of phonological instruction used in the classroom, with some involved in explicit phonological instruction, with others embracing a more holistic approach.

With the purpose of the study to fill research gaps in knowledge with reference to reading and phonological skills, the longitudinal study allowed researchers to track students from the prereading age (just prior to kindergarten) through second grade, and thereby draw some conclusions about the relationship between phonological skills and reading; and the possible causal relationship between the two. The authors of this study (Torgesen et al., 1994) utilized a longitudinal study to shore up weaknesses of previous studies and claims. The research was designed to include measures of reading and phonological processes, at all assessment points in the project, including an assessment of

verbal ability as well. Using the assessment strategies stated earlier and prior to kindergarten, grade one and grade two, distinct implications for future educational practices could then be made.

Poor readers in first grade have a greater probability to remain poor readers in subsequent grades. Phonological awareness remains the most strongly related to subsequent reading skills. As a result the researchers suggest phonological variables be included in any kindergarten test battery. The use of speech and language pathologists in this screening to locate at-risk students would be a natural and wise endeavor (Swank, L., & Catts, H., 1994).

The natural assumption then is a recommendation for a program in phonological awareness once at-risk children are located. However, in an earlier study by the same researchers, it was noted that the exposure of an at-risk group of students to an 8-week phonological awareness training program, and later another group to a 12 week training program, revealed 30% of the group still showed no growth (Wagner, R.K, Torgesen, J.K., Laughon, P., Simmons, K., & Rochette, C.A., 1993). The real downside of this stability of phonological processing is that, "gains through training are likely to be hard won rather than easily obtained," (Wagner, R., Torgesen, J., Laughon, P., Simmons, K., & Rashotte, C., 1993). Citing a study by Ball and Blachman, 1991; and Bradley & Bryant, 1985, Torgesen et al., noted that the interventions that produced the most powerful effects on subsequent growth in reading skills were those that combined training in phonological awareness with explicit training in application to reading (Torgesen, J. K., et. al., 1994). It is entirely possible that the use of an intensive phonological training

system, early on, tied to the regular education curriculum of a first grade classroom might well be a useful and necessary intervention.

One such skill-based approach is the *Wilson Reading System*, created by former special educator, Barbara Wilson. The Wilson Reading System (WRS) is based on a multisensory language technique by Dr. Samuel Orton in 1937, and Anna Gillingham and Bessie Stillman in 1977. The Orton and Gillingham approach uses a direct, systematic method to retrain a child in the teaching of individual letters and phonemes. It involved clarifying the visual and auditory patterns, linking them clearly to speech and writing (Orton, J., 1966). Information is presented in a cohesive sequence allowing for practice, review and individualized instruction (Rooney, K. J., 1995).

It is noteworthy that Samual Orton's views on direct instruction in letter training and phonemic segmentation were reiterated by the research observations of Susan Brady et al., in a 1994 study involving phonological training on inner-city youth. As a result of the investigation revealing a significant impact on reading ability as a direct result of instruction in phonemic awareness, it was further suggested that lessons in letter training with phonemic segmentation work was warranted (Brady, S., Fowler, A., Stone, B., and Winbury, N., 1994).

After working for five years with students diagnosed with dyslexia at Massachusetts General (1983-1988) in the Language Disorders Unit, Barbara Wilson published WRS in 1988. The intention of Wilson is to assist students who have not internalize sounds and word structure. It emphasizes "total word construction" which includes encoding (spelling) as well as decoding and fluency in reading. Wilson teaches

the structure of words in the English language presenting it in a systematic cumulative manner. Reading "scientist" notebooks are created by the students and to be used as a reference tool. Students are repeatedly turned back syllabication rules to break any guessing habits since "scientists do not guess". Reading and spelling strategies are taught in coordination with automaticy an expected goal. Spelling difficulty, originates from language weaknesses (Moats, L., 1998) and as a result is a necessary part of the reading program. Finally, Wilson contends that automatic recognition or reading fluency in decoding is fundamental to competent reading comprehension (Wilson, 1989; Gilbertson, M., & Bramlett, R.K., 1998).

In a 1995 study by Barbara Wilson, the effectiveness of multisensory structured language teaching (Wilson) in public schools with students grades 3-12 was analyzed. Wilson was known largely as a system supporting dyslexic adults in learning to read. In this study, 220 students grades 3-12, primarily from Massachusetts, but also New Jersey and Maine, with language-based learning disabilities were used. Special education assessments identified students to be used in the study, and all had a total reading score on the Woodcock Reading Mastery Test of at least 2 years below the current grade placement. Pre and post tests were conducted to provide used data. In addition, several students met the criteria for attention-deficit/hyperactivity disorder from the Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised. All students had a history of reading and spelling difficulties and IQ scores ranged from low to high average. Of all the students used in this sample group, only 8% remained in the general education classroom all day. Most were pulled out for at least a third or more of the school day.

The average number of lessons completed before the second testing was 62. All students were making no significant progress in any previous pullout instruction.

The results revealed word attack (decoding) gains of 4.6 grade levels, comprehension of 1.6 grade levels, and 1.9 in total reading (word attack, word identification, word comprehension, and passage comprehension). With research supporting the use of an intensive program of direct instruction for children lacking phonemic awareness, the Wilson reading System does appear to be a program capable of supporting this need in at-risk learners (Wilson, B., 1995).

Conclusion

The most current research supports unequivocally the need for phonemic awareness instruction early, certainly by kindergarten. Of grave concern is the relative stability of the at-risk status for students who come to school without having internalized the symbol sound relationship. With the need for direct instruction in phonological awareness a given for many young students, of startling concern is the challenge in affecting a real change in the at-risk status of the special needs learner.

In the district in which I work, I witnessed first hand the inability of wonderful program like Project Read, a program designed to deliver systematic phonics instruction to at-risk students, to make any significant change in the reading ability of a severely disabled student, *and* the ability of Wilson to teach this student to read. Since both programs are multisensory, the major differences in the programs are Wilson's exposure to extreme drill and practice in using key words and a notebook created by the student to

refer to when reading, as well as using the "scientific" (proper) names for all reading terms such as breve, digraph, blends, welded sounds, schwa and so on, thereby *demystifying* (Levine, M., 1994) the language of reading. Students are directly taught what reading is, then engage in the practice of doing what good readers do, read *fluently* and visualize to comprehend.

With educational research clearly indicating a definitive need to properly locate a student at-risk for reading failure early in order to begin intervention, the goal then becomes using an intervention such as Wilson to directly instruct the learner with this missing phonological base. While many students are assisted from a variety of phonologically based reading programs, not all severely at-risk students will be. Wilson is one method that does assist even the most severely reading disabled student learn to read. The incorporation of this method into a whole group setting would take the extra step to insure all at-risk students were reached.

The role of a holistic language program, however, is not to be dismissed and discharged simply due to newer information about phonics instruction. There are many components of the whole language program one would be wise to salvage. Whole language reminded teachers to consider their audience when introducing new information to a child. Student schema, or current frame of reference, was to be used and respected, not dismissed and challenged. Finally, while a program strong in teaching skills is of inherent value to a weak or nonreader, doing so in the context of something meaningful to children, utilizing rich literature whenever possible, is also simply good teaching and a gift from the whole language philosophy.

Chapter 3

Design of the Study

Introduction

This purpose of this between group study is to determine whether or not a statistically significant outcome will occur when the Wilson Reading System, incorporated into a first grade reading curriculum which includes four at-risk students, *classroom A*, is compared to a group with one at risk student that has not been exposed to the Wilson Reading System, *classroom B*.

Subjects of the Study

All subjects involved in this study attend first grade in a middle to upper middle class K-4 neighborhood elementary school of approximately 420 students. Students at this school are predominately Caucasian with students of African American heritage representing approximately 20 percent of the population and lesser representations of additional ethnic backgrounds. Classroom A (the experimental group) consists of 20 students, and students in classroom B (the control group) consist of 17 students. However, due to populational changes or prolonged student absence, students reflected in the study results are students present for testing in each of the three seasonal assessments; fall, winter, and spring.

The subjects of classroom A (the experimental group or students receiving Wilson instruction) in this between group study include fourteen members a first grade classroom, 5 boys and 9 girls, between the ages of six and seven. The subjects are members of a regular education inclusion classroom belonging to the experimenter. Two students are classified as eligible for special education due to a specific learning disability, four receive pull-out support for speech and language, and two students are receiving basic skills support for reading. Two students in this group are living in single parent households. One student is of Asian descent and two are African American.

The subjects in classroom B (the control group or students not receiving Wilson instruction) include thirteen students between the ages of six and seven. Four students receive pull-out support for speech and language, and one is pulled out for basic skills instruction.

Research Design

In this between group study, the researcher's first grade classroom (A), as well as that of the control group (B), both receive first grade instruction in an environment that may be characterized as an integrated learning environment. This is to say both teachers utilize a basal but teach skills in the context of meaningful literature (it relates to the skill being taught, but is strong literature in its own right) as well as borrow from whole language in the more authentic practices of writing from experience with experience stories or in a writing workshop context. Since both teachers in this study are grade partners and friends, sharing curriculum ideas and instructional techniques are common.

This indirectly serves the study in reducing (not eliminating) the experimental outcomes to the treatment applied (Wilson) as opposed to curriculum differences.

In both classrooms (A & B) the core reading curriculum consists of a basal reading program, workbooks, small flexible groups for reading instruction, incommon reading books as well as a language arts reading supplement, sustained silent reading, poetry journals, "read to me," reading clubs, journal writing, writing portfolios, a high frequency word spelling curriculum, and writing workshop.

The **basal reading program** publisher is Silver Burdett and Ginn and consists of three preprimers (level 1-3) with level 5 reflecting the last phase of the first grade basal reading program. The basal series is a spiraling reading program (skills are revisited several times) using phonics instruction and sight word vocabulary taught in context of a basal story with a controlled vocabulary. **Workbooks** complementing the reading basal are used by both teachers, but the experimental group tends to use the books only on occasion. In addition to whole group instruction, both teachers use **flexible reading groups** for individual instruction. However, the control group prefers teacher led grouping matching students with similar reading abilities whereas the experimental group teacher prefers groups based on reading areas of interest and student self selection, in the second part of the year. (Students with similar interests and ability tend to group themselves.)

Incommon books are books selected by a committee of teachers that are intended to enrichment the reading program and broaden student background and vocabulary. There is a list of "must reads" for every grade level, as well as optional reads. Multiple

copies of the incommons are available and shared by grade partners. In addition, a **literature series** from HBJ is shared by the first grade teachers and used as a supplement to the basal. Sustained silent reading (**S.S.R.**) in both classrooms is used as a D.E.A.R., or drop everything and read time that may last for approximately 10-15 minutes. All students are expected to keep one D.E.A.R. book in his or her desk at all times.

Poetry journals are poems selected by the teacher to paste into poetry journals to read and discuss in class and send home with students to read to a parent using decoding skills taught in class. **Read to me** is a program that involves parents reading to children. In both groups progress is recorded. In the experimental group, a reading certificate is given for every ten books read, and in both groups a teacher created certificate is awarded to a student who has read 100 books by the school principal. **Reading clubs** begin in January and are conducted in the Media center with grouping based on book interest.

Journal writing is done in teacher distributed, grade appropriate (spacing of lines), notebooks that are dated and often on a student selected topic but may be teacher chosen as well. No teacher corrections are made in the journal, a positive comment, however, may be made. This is an administrative mandate. **Writing portfolios** represent an unedited work sample that is written by the student on a specific topic and scored by two teachers using a district rubric. **The spelling program**, Rebecca Sitton, begins in January and is composed of 30 high frequency spelling words. Students are expected to master the words following instruction and use the correct spelling in all written work. **Writing Workshop** takes students through the writing process into the production of

published books. Trained parent volunteers assist with student conferencing in the writing process.

While both classrooms receive a variation of the above curricula, the experimental group (A) receives training in applying Wilson's strategies in reading.

In the experimental classroom (A), the classroom receiving instruction in the Wilson Reading System, all students receive instruction in Wilson twice per week for 45 minutes. Students eligible for special education services remain in the room during the time the special education teacher instructs whole group, but leave the room for individual support on the other three days. During the time the special education comes into the regular education classroom to teach, the role of the classroom teacher changes.

The classroom teacher becomes a support to the special education teacher. The classroom teacher may provide advance preparation the class needs to do to prepare for the lesson such as add new information into a "reading scientist notebook," finish a previous lesson, or engage in an activity to lay background for new information to be shared. **The Reading Scientist Notebook is a reference tool each student creates to refer to when decoding, since scientists do not "guess" if they have a tool available to use in order to be accurate.* The most common type of support is during and after instruction. During instruction, while the special education teacher presents a new Wilson strategy, the classroom teacher takes on a more facilitative role. There are three distinctive roles the classroom teacher plays. One is simply to monitor and assist students in providing on-task behavior. Another is to interject, as needed, to supply the class with language clarity and scaffolding opportunities since the classroom teacher is exposed to

similar class experiences and may assist in the bridging of new information. And, the final role is for the classroom teacher during instruction is to think as the student thinks and provide consistent feedback to the instructor over any confusing or apparent conflicts in information. Much of the language of Wilson is scientific, and teacher assistance in helping to create connections will aide the student in acquiring and using this new information more efficiently. Often a special educator will work in a small group setting with most of the students a bit older than first grade. It is up to the classroom teacher to intervene if information becomes too abstract. Assisting the special educator to become familiar with the regular education class curriculum assists the planning stage of instruction when both educators plan a scope and sequence of instruction.

With independent work, both teachers assess and provide support to students as needed. However, the truest support for the program occurs on a daily basis by the classroom teacher. Because most classroom teachers do not have weekly exposure into the world of the special education student's curriculum, the student returns to the class with a set of tools and a teacher unable to assist the use thereof. When the classroom teacher and the entire class is exposed to the methodology of the special education practices, the teacher and students continue to practice across all curriculum areas. Digraphs, blends, examples of schwa, or word patterns like VCCV show up in science or social studies or on the wall of the cafeteria with eager first graders wanting to share "things I noticed". Parents become additional support as information about using the new reading strategies at home is provided by the teacher at conferences (such as parent teacher conferences) or in home notes.

The scope and sequence of the basic skills covered in the first grade Wilson program is listed below. All students learn Wilson strategies in a whole group setting twice per week, then these strategies are practiced throughout the week in other settings with the classroom teacher. This affords special needs students additional practice in the classroom setting with the regular education teacher, as well as time three times per week with the special education teacher in an individualized setting.

In the Wilson Program, grade one will go through approximately four steps, but approximately five to six subskills in each step. All non-reading students begin at 1:1, the beginning of the program, unless he or she is at or above grade 2 level.

The students begin by creating a Reading Scientist Notebook in which all vowels and their respective key words are listed, and drilled. Next the consonants and their respective keywords are included in the notebook. Students learn to decode and encode rather that guess to read and spell. Guessing is not acceptable, referring to the notebook for assistance is. At the end of step one students should know all vowel and consonant sounds; the definition of a digraph and the sounds (ck, qu, sh, ch, wh, th); how to segment and spell words with three sounds; nasal a (am, an); and the definition and example of blends (bl..). A "visualizing" visor is made for students to wear to assist in visualizing a decoded story. As reading becomes fluent, the student is able to wear the visor and allow story pictures to develop in his or her mind as he or she reads.

At the end of step two the student has been taught and knows the definition of welded sounds; a syllable; closed syllables and short sounds; and the difference between and digraph and a blend.

In step three, students learn syllables can be combined to make longer words; how to divide two and three syllable words; how to read two and three syllable words that combine closed syllables.

Step four stresses noticing spelling patterns such as vowel-consonant-e; the difference between a closed and a vowel-consonant-e syllable; long vowel sounds including the two long sounds for u; s may be the sound /z/ if between two vowels (busy); and words do not end in v as an e will always follow.

Assessment for both classrooms will include a phonemic awareness assessment in October, December and March, and a basal assessment in October, December, and March. Students receiving special education in classroom A have been assessed individually as well due to the student's IEP requirements. Classroom teacher A and classroom teacher B will adminster the phonemic awareness assessment to his or her own classroom. Both teachers will use identical assessment tools.

Chapter 4

Results

Data reflecting the results to the following research questions was obtained and will be presented in this chapter.

1. Does the integration of the Wilson Reading System affect a significant change in phonemic awareness of special needs students as well as regular education students in an inclusion classroom when compared to the phonemic awareness of another first grade classroom.

2. Does the integration of the Wilson Reading System into a first grade inclusion classroom affect a significant improvement in the reading ability of special needs students as well as regular education students when compared to another first grade classroom not using the Wilson Reading System.

Analysis of Data

Three forms of assessment were used in this between group study to determine whether or not a significant change occurred in the reading ability of the experimental group (A) when compared to the control group (B). Assessment included three dictation (phonemic awareness) or encoding assessment tasks which were administered in both classrooms (A and B) by the classroom teacher. Assessment was taken in the fall, another in the winter, and the last in the spring. Three sentences were selected for use out of five possible alternatives from Marie Clay's observer tasks (Clay, M., 1993). The total

number of phonemes heard and written out of the total possible provided a percentage correct for each student in each of the three assessment intervals. Student percentage increase is noted. Other forms of assessment were the basal reading test scores in vocabulary and decoding taken in October, December and March for each group from the district basal reading series, Silver Burdett and Ginn.

Table I provides descriptive information about the two subject groups (experimental and control). Table II provides March and October group means for phonemic awareness assessment and their total difference. Table III provides group means for basal vocabulary assessments for October, December and March as well as the overall mean for each group. Table IV provides group means for basal decoding tests for October, December, and March , and the overall mean for each group. Table V-X provides individual percentages for each student in each group in phonemic awareness, basal reading test vocabulary, and basal reading test decoding respectively.

Students participating in the final assessment are only those who were present for each of the three seasonal assessments. Populational information included in each table reflect gender, race, and special reading needs and are identified as follows:

Table I

Descriptive Information for Subject Groups

Group	M	F	AA	C	A	IS	BA	
Experimental	6	8	2	11	1	2	2	n=14
Control	6	7	0	13	0	0	1	n=13

Key: M=Male F=Female AA=African American C=Caucasian

A=Asian IS=Inclusion Student BA=Basic Skills Support

Table II

Group Means for Phonemic Awareness

	October	March	Difference
Experimental	85.6	97.6	12
Control	86.9	98.7	11.8

Table III

Group Means for Basal Vocabulary

	October	December	March	Total Mean
Experimental	97.8%	99.1%	97.8%	98.3%
Control	96.9%	99.6%	99.2%	98.6%

Table IV

Group Means for Basal Decoding

	October	December	March	Total Mean
Experimental	93.7%	89%	92.7%	91.9%
Control	95.3%	95.5%	94.8%	95.2%

Table V

Individual Phonemic Awareness Assessment Group A (Experimental Group)

Student Code	October	December	March	Total Increase	Gender/ Race/ Sp. Needs
A-1	95%	100%	100%	5%	M/C
B-1	70%	87%	92%	22%	M/C/BA
C-1	65%	83%	97%	32%	F/AA/IS
D-1	86%	93%	100%	14%	F/C
E-1	65%	87%	92%	27%	F/AA/IS
F-1	84%	96%	100%	12%	M/AS
G-1	97%	98%	100%	3%	F/C
H-1	100%	100%	100%	0%	F/C
I-1	100%	100%	100%	0%	M/C
J-1	92%	100%	100%	8%	F/C
K-1	73%	99%	86%	26%	M/C/BA
L-1	92%	95%	100%	8%	M/C
M-1	95%	98%	100%	5%	F/C
N-1	84%	99%	100%	16%	F/C
	$\bar{x}$ = 85.6%	$\bar{x}$ = 95.4%	$\bar{x}$ = 97.6%	$\bar{x}$ = 12.7%	Difference $\bar{x}$ =12%

Table VI

Individual Phonemic Awareness Assessment Group B (Control Group)

Student Code	October	December	March	Total Increase	Gender/ Race/ Sp. Needs
AA-1	95%	100%	100%	5%	M/C
BB-1	81%	100%	100%	19%	F/C
CC-1	78%	91%	95%	17%	F/C/BA
DD-1	97%	96%	97%	0%	M/C
EE-1	70%	100%	100%	30%	F/C
FF-1	100%	94%	97%	0%	M/C
GG-1	95%	96%	97%	2%	M/C
HH-1	84%	99%	100%	16%	F/C
II-1	95%	92%	100%	5%	M/C
JJ-1	89%	100%	100%	11%	F/C
KK-1	68%	96%	100%	32%	F/C
LL-1	97%	99%	97%	0%	F/C
MM-1	81%	100%	100%	19%	F/C
	$\bar{x}$ = 86.9%	$\bar{x}$ = 97.2%	$\bar{x}$ = 98.7%	$\bar{x}$ = 12%	Difference $\bar{x}$ =11.8%

Table VII

Individual Reading Basal Vocabulary Group A (Experimental Group)

Student Code	October	December	March	Gender/ Race/ Sp. Needs
A-1	100%	100%	100%	M/C
B-1	100%	93%	90%	M/C/BA
C-1	100%	100%	90%	F/AA/IS
D-1	100%	100%	90%	F/C
E-1	80%	100%	100%	F/AA/IS
F-1	100%	100%	100%	M/AS
G-1	100%	100%	100%	F/C
H-1	100%	100%	100%	F/C
I-1	100%	100%	100%	M/C
J-1	100%	100%	100%	F/C
K-1	90%	100%	100%	M/C/BA
L-1	100%	95%	100%	M/C
M-1	100%	100%	100%	F/C
N-1	100%	100%	100%	F/C
	$\bar{x}$ = 97.8%	$\bar{x}$ =99.1 %	$\bar{x}$ =97.8 %	$\bar{x}$ = % Total $\bar{x}$ = 98.3

Table VIII

Individual Reading Basal Vocabulary Group B (Control Group)

Student Code	October	December	March	Gender/ Race/ Sp. Needs
AA-1	100%	100%	100%	M/C
BB-1	100%	100%	100%	F/C
CC-1	100%	100%	90%	F/C/BA
DD-1	100%	100%	100%	M/C
EE-1	100%	100%	100%	F/C
FF-1	100%	100%	100%	M/C
GG-1	100%	100%	100%	M/C
HH-1	100%	100%	100%	F/C
II-1	100%	100%	100%	M/C
JJ-1	100%	100%	100%	F/C
KK-1	60%	100%	100%	F/C
LL-1	100%	95%	100%	F/C
MM-1	100%	100%	100%	F/C
	$\bar{x}$ = 96.9%	$\bar{x}$ = 99.6%	$\bar{x}$ = 99.2%	Total $\bar{x}$ =98.6%

Table IX

Individual Reading Basal Decoding Group A (Experimental Group)

Student Code	October	December	March	Gender/ Race/ Sp. Needs
A-1	100%	98%	96%	M/C
B-1	100%	80%	80%	M/C/BA
C-1	87%	73%	100%	F/AA/IS
D-1	93%	95%	88%	F/C
E-1	93%	65%	60%	F/AA/IS
F-1	100%	100%	96%	M/AS
G-1	100%	97%	100%	F/C
H-1	100%	100%	100%	F/C
I-1	100%	100%	96%	M/C
J-1	80%	84%	92%	F/C
K-1	80%	79%	100%	M/C/BA
L-1	100%	91%	98%	M/C
M-1	93%	97%	96%	F/C
N-1	87%	88%	96%	F/C
	$\bar{x}$ = 93.7%	$\bar{x}$ =89.1 %	$\bar{x}$ =92.7 %	Total $\bar{x}$ = 91.9

Table X

Individual Reading Basal Decoding Group B (Control Group)

Student Code	October	December	March	Gender/ Race/ Sp. Needs
AA-1	93%	100%	100%	M/C
BB-1	100%	95%	100%	F/C
CC-1	87%	94%	90%	F/C/BA
DD-1	100%	93%	100%	M/C
EE-1	100%	100%	100%	F/C
FF-1	87%	94%	100%	M/C
GG-1	93%	92%	100%	M/C
HH-1	100%	94%	100%	F/C
II-1	100%	100%	100%	M/C
JJ-1	100%	97%	100%	F/C
KK-1	80%	88%	100%	F/C
LL-1	100%	94%	100%	F/C
MM-1	100%	100%	100%	F/C
	$\bar{x}$ = 95.3%	$\bar{x}$ = 95.5%	$\bar{x}$ = 94.8%	Total $\bar{x}$ =95.2%

Chapter 5

SUMMARY

This study examined whether the supplemental instructional support of the Wilson Reading System, used by the regular and special education teachers, in an inclusive first grade classroom, would make a positive change in all learner's reading ability, particularly special needs students. In other words, did the incorporation of the Wilson Reading System in the regular education classroom allow special needs students to make significant strides and compete with student of the same age in another regular education classroom. It was my hypothesis that the Wilson Reading Program would support the reading needs of all students, particularly those students "at-risk" for reading failure, when the reading system was integrated into the regular education reading curriculum.

Data from phonemic awareness dictation, as well as classroom reading basal tests, were obtained in October, December and March. The study results revealed that the experimental group (supplemented with Wilson Reading) and the control group (without Wilson supplement) performed similarly in all areas. The experimental group did slightly better than the control in phonemic awareness, and the control group did slightly better in vocabulary and decoding. The most significant strides in phonemic awareness were made with special needs students.

Discussion

Consistent, valid, educational research, when taken seriously by educators and incorporated into classrooms learning environments, has the ability to transform the educational future of its students. In taking seriously the preponderance of educational research that supported the need for direct instruction in phonemic awareness in young students, particularly special needs students, this researcher sought to add an instructional supplement designed to advance phonemic awareness and decoding ability in order to advance reading skills. Researchers like Torgesen et al., (1994) stated that while notable change in phonemic awareness is not an easy battle to win in special needs students, the more compelling advances occur in students where instruction in phonemic awareness is tied to an application to reading. The significant link between future reading ability and phonemic awareness, (Behrmann, M., 1995) and the difficulty in finding a tool that affords a useful intervention, was at the heart of this research.

This research did not intend to imply that the Wilson Reading System is by any means the only support to the phonemic awareness needs of special needs students, but clearly Wilson made considerable impact in the ability of particularly special needs students to make grade level strides in decoding. While students obviously made progress, students in the experimental group (Wilson) did not make the same strides found in the research conducted by Barbara Wilson in 1995 (Wilson, 1995). In the 1995 Wilson study, students were cited as having advanced 4.6 grade levels in decoding and 1.9 grade levels in overall reading (word attack, word identification, word

comprehension, and passage comprehension). Students in the current study made grade level advances but did not excell beyond grade level expectations.

There are several possible reasons for the differences between the two studies. One, students were pulled out in the Wilson study for aproximately one third of each school day. In the current study, students were pulled out for individual Wilson instruction three times per week for 45 minutes, and instructed whole group in the regular education classroom twice per week for 45 minutes. Students in the 1995 Wilson study did complete on average 62 lessons. In the current study, students completed aproximately 45 lessons at the time of assessment. In the Wilson study, the population ranged in age from 3-12 and included 220 special needs students reported as unable to make significant progress in the current placement. In the current study, the Wilson group included 14 students, four of which were at risk in reading, between the ages of 6 and 7 years old. The experimental group was compared to another regular education classroom of same age students with one at risk student. Assessment in the Wilson study reported improvement in the number of grade levels advanced, not the ability to meet grade level expectations following the study. However, there is no reason to believe the students did not make significant progress. Assessment in the current study was measured with grade level phonemic awaresess dictation tasks and grade level basal tests. Students in the current study advanced in decoding, vocabulary and phonemic awareness, *special needs students advanced particularly in phonemic awareness*, but continued to struggle with consistently using learned strategies independently.

Limitations

One significant limitation to this study was in revealing the true growth of the experimental group. Due to student age, the first phonemic awareness testing for both groups occurred late in October, when handwriting skills allowed students to write the phonemes heard in the dictation exercise. However, the experimental group had been provided with Wilson instruction since the first week of school in September. Therefore, the true discrepancy between the two groups at the onset was not able to be shown. The first assessment occurred after almost two months of Wilson instruction when it is observed that the two groups were quite similar, even though the control group had one at-risk student and the control had four at-risk students.

Another limitation in showing growth for both groups was the basal testing. Since reading requirements improve and increase in challenge as well as difficulty due to their cumulative nature, showing growth is more difficult even when the student is truly improving in levels of overall competency.

One possible solution to this problem, is having a criterion referenced exam covering all first grade reading skills at the onset for a baseline assessment. Then retest mid year, and at academic year's end. A student's genuine improvement would be clearly observed and in comparison to peers of the same age and grade. In addition, this information would be highly valuable to the classroom teacher as well as special education personnel for inclusion students.

Implications

The implications involved relate to the limitations in many regular education reading programs. At issue is the difficulty with the regular education reading curriculum to support special needs students, often evidenced by the continued struggle with phonemic awareness of at-risk readers beyond the early elementary years. The integration of a strong program providing direct instruction in phonemic awareness alongside the regular reading program, does support the special reading needs of at risk learners. Wilson does not rely on a learners needs to "hear" the phonemes to learn, but rather teaches the learner to use spelling patterns and follow memorized drills for vowel and even consonant sounds in order to decode.

An area that still remains uncertain is how to best assist a student, equipped with learned strategies, to consistently use the learned strategies to decode and then read for meaning. This is an area young at-risk readers fall short. Practice using the decoding strategies in everyday reading, in conjunction with comprehension strategies common to any classroom reading program, appears to assist, but it remains an uphill battle with severely learning disabled students. The need for individualized support in or out of the regular education classroom remains an important support base inclusion should not remove.

In the yearlong inclusion setting, special needs students were supported with pull-out small group a few times per week, and whole group instruction with the regular education and special education teachers team teaching. The regular education teacher continued to use the Wilson strategies throughout the day in addition to other reading

strategies part of the regular curriculum. This provided for consistent instruction and maximum support. While Wilson was not a "magic formula" to cure all the reading needs of special needs students in one school year, it made a difference. It allowed students who might have been removed more frequently from the regular education classroom, to compete and demonstrate a competency in what many see as foundational to reading, phonemic awareness.

Finally, this study allowed a regular education teacher to see that with proper support, special needs students can and should be included in the regular education classroom. This study also taught the regular education teacher how to get beyond herself in sharing her room with a valuable and unfortunately untapped resource, the special education teacher.

References

Behrmann, M.M. (1995, December). Beginning reading and phonological awareness for students with learning disabilities [ERIC Clearinghouse on Disabilities and Gifted Education]. Reston, VA: The Council for Exceptional Children.

Blake, R.W. (Ed.). (1990). Whole language. New York: The New York State English Council.

Brady, S., Fowler, A., Stone, B., & Winbury, N. (1994). Training phonological awareness: A study with inner-city kindergarten children. Annals of Dyslexia, 44 26-58.

Carlisle, J.F., & Nomanbhoy, D. (1993). Phonological and morphological awareness in first graders. Applied Psycholinguistics, 14, 177-195.

Clay, M., (1993). An Observation Survey of Early Literacy Achievement. Auckland, New Zealand: Heinemann Education.

Ericson, L. & Juliebo, M., (1998). The phonological awareness handbook for kindergarten and primary teachers. Newark, DE: International Reading Association.

Gilbertson, M., & Bramlett, R. (1998). Phonological awareness screaning to identify at-risk readers: Implications for practicioners. Language, Speech, and Hearing Services in Schools, 29, 109-116.

Goodman, K. (1986). What's whole in whole language? Ontario, Canada: Scholastic.

Herald-Taylor, G. (1989). The administrator's guide to whole language. New York: Richard C. Owens.

Kozminsky, L., & Kozminsky, E. (1995). The effects of early phonological awareness training on reading success. Learning and Instruction, 5, 187-201.

Levine, M. (1994). Educational Care. Cambridge, MA: Educators Publishing Service.

Majsterek, D. & Ellenwood, A.E. (1995). Phonological awareness and beginning reading:evaluation of a school-based screaning procedure. Journal of Learning Disabilities, 28, (7) 449-456.

McBride-Chang, C., Chang, L., & Wagner, R. (1997). Growth modeling of phonological awareness. Journal of Educational Psychology, 89 (4) 621-630.

Moats, L. (1998). Just the facts about ...spelling. LaBida Journal, 6, 9.

Orton, J.L., (1966). The orton-gillingham approach. (Reprinted from The disabled reader: Education of the dyslexic child, by J.Money, Ed., 1966, Baltimore: The Johns Hopkins Press).

Rooney, K.J. (1995). Dyslexia revisited:history, educational philosophy, and clinical assessment applicaions. Intervention in School and Clinic, 31 (1) 6-15.

Spear-Swerling, L., & Sternberg, R.J., (1998). Off track,. Boulder, CO: Westview Press.

Swank, L.K., & Catts, H. (1994). Phonological awareness and written word decoding. Language, Speech, and Hearing Services in Schools, 25, 9-14.

Torgesen, J.K., Wagner, R.K., Rashotte, C.A. (1994). Longitudinal studies of phonological processing and reading. Journal of Learning Disabilities, 27 (5) 276-286.

Wagner, R.K., Torgesen, J.K., Laughon, P., Simmons, K., & Rashotte, C. (1993). Development of young readers' phonological processing abilities. Journal of Educational Psychology, 85, (1) 83-103.

Weaver, C., (1990). Understanding whole language. Ontario, Canada: Irwin Publishing.

Wilson, B.A., (1989). Wilson reading system instructor manual. Millbury, MA: Wilson Language Training Corporation.

Wilson, B.A. (1998). Matching student needs to instruction. In S. A. Vogel, & S. Reder (Eds.), Learning Disabilities, Literacy, and Adult Education (pp.213-234). Baltimore, Brooks.

Wilson, B., & O'Connor, J. (1995). Effectiveness of the wilson reading system used in public school training. (Human Development Resources). Millbury, MA: Wilson Language Training Center.