The effects of an integrated whole language and phonics-based instructional spelling program on student spelling ability and self-concept

Kimberly B. Biberman
Rowan University

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THE EFFECTS OF AN INTEGRATED WHOLE LANGUAGE AND PHONICS-BASED INSTRUCTIONAL SPELLING PROGRAM ON STUDENT SPELLING ABILITY AND SELF-CONCEPT

by

Kimberly B. Biberman

A Thesis
Submitted in partial fulfillment of the requirements of the
Master of Arts Degree
of
The Graduate School
at
Rowan University
May 4, 2004

Approved by

Date Approved 5/4/04
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THE EFFECTS OF AN INTEGRATED WHOLE LANGUAGE AND PHONICS-BASED INSTRUCTIONAL SPELLING PROGRAM ON STUDENT SPELLING ABILITY AND SELF-CONCEPT

May 4, 2004

Dr. Klanderman and Dr. Dihoff
Master of Arts in School Psychology

The purpose of this research was to create an integrated phonics and whole language approach to teaching spelling to regular education and resource students. The sample included thirty-nine fourth grade students, which was split into an experimental and a control group. Students in the experimental group completed a spelling pretest and ten-weeks of instruction implemented by the researchers. The students in the control group also completed a pretest and completed spelling instruction as followed by the required fourth grade curriculum.

After the study was completed, both groups completed a spelling posttest as well as a self-concept scale in relation to their ability in the area of spelling. The results in terms of the students overall spelling ability in both groups were significant. Although self-concept improved with both groups, the results did not yield any significant results. The results showed that an integrated approach to spelling may be helpful in improving overall spelling abilities regular education and resource students as well as improving self-concept.
ACKNOWLEDGMENTS

First, I would like to thank my family for all of their support. A special thank you also goes to Dr. Keith Case Grim for helping me through it all. Finally, I would like to thank Dr. Klanderman and Dr. Dihoff for their patience and encouragement.
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CHAPTER I
Introduction to the Study

Need

Spelling is an important, basic communication skill. Over the last several decades, there have been many questions raised about the traditional methods of spelling instruction. In addition, researchers are wondering about the effectiveness of more recent theories in spelling instruction. The researcher in this study planed to look at the student-oriented spelling approach utilized in her fourth grade curriculum set fourth by the school district. The information compiled in this study provided more research on the topic of examining how successful this spelling theory was in a classroom. The researcher examined utilizing a combination of a phonics and whole language approach to spelling with her class. While keeping in mind the diverse needs of her students in a resource classroom, the researcher hoped to utilize more effective spelling strategies in order to enhance student’s overall spelling abilities.

In addition, the researcher took a look at students’ overall self-concept in the area of spelling. The researcher set out to determine whether enhancing a district-wide approach to spelling would maintain or improve students’ feelings about their individual spelling ability.
Purpose

The purpose of this study was to improve both regular education and resource students’ academic abilities in the area of spelling. The researcher added three new activities to each weekly spelling instruction over a ten-week period. The students’ progress was evaluated using pre and post assessments of fourth grade spelling words.

Hypothesis

There will be a significant improvement in student scores on the pre and post fourth grade spelling assessment as students are taught new lessons and strategies in addition to their current spelling curriculum requirements. Students in a similar fourth grade classroom will demonstrate smaller gains in comparison. In addition, the students will demonstrate an improved self-concept toward their spelling ability, while those in the other classroom will not demonstrate as much of an improvement in their self-concept.

Theory

Educators throughout the world teach spelling. These educators vary, however, in their instructional practices. For a long time it was believed that the so-called traditional approach to spelling was successful and appropriate for teachers to use in their classrooms. As time went on, theories of integration emerged because phonetics alone could not explain the spelling of about half of English words, especially irregular spellings (Heald-Taylor, 1998). Another theory also emerged from the social-constructivists rooted in the work of Vygotsky. This involves a student-oriented
approach to spelling which focuses on spelling as an individual and developmental process. It is important to take a close look at all three theories in order to best understand the path that spelling instruction has taken over time.

Spelling proficiency was considered the “bedrock of literacy” and “the barometer of intelligence” (Heald-Taylor, 1998). As a result, spelling performance over the years has become an important cornerstone as one of the most critical curriculum subjects in schools today. Theories of empiricists, such as John Watson and B.F. Skinner advocated formal direct instruction, rote learning, and memorization. Early in the twentieth century, psychological and educational researchers were guided by a phonocentric view of the English spelling system. These educators were under the assumption that English spelling was irregular and that its acquisition was best achieved through rote memorization (Templeton & Morris, 1992). Together with the value of phonetics at the time, the creation of memorizing age-appropriate of words resulted in the traditional form of school spelling programs. In this model, spelling is taught through word lists that emphasize instruction in phonetics and spelling rules in preparation for weekly tests (Heald-Taylor, 1998).

There has been a reconceptualization of the development of spelling knowledge: It is now seen primarily as a process of conceptual learning, rather than one of rote memorization (Templeton & Morris, 1992). The transitional model incorporates the integration of many spelling strategies as well as the significance of reading in learning to spell. “Theories of integration emerged because phonetics alone could not explain the spelling of about half of English words, especially irregular spellings (Heald-Taylor, 1998).” The numerous strategies in spelling include not only phonetics, but
semantic/meaning, graphic visual, and syntactic/word patterns as well. There is much research to support the important correlation between reading and spelling. Some theories believe that spelling should come from reading material at age appropriate levels, while others still maintain the importance of individual word study.

Like the traditional model, the transitional model emphasizes spelling rules, study procedures, direct phonics instruction, and weekly testing. In the transitional model, most of the learning takes place through different activities in word study such as word sorts and word games. In this model, as compared to the traditional model, students are much more involved in their learning.

The third model, the student-oriented model, stems from the cognitive and social constructivist theories rooted in the work of Piaget and Vygotsky. Piaget’s theory provided direction and new areas of exploration in to the area of cognitive development. He theorizes that children learn in stages and that they are active constructors of knowledge. The role of language plays an important role in Vygotsky’s social-cognitive theory. He believed that the “acquisition and use of language is a primary component of children’s developing intellectual abilities” (Heatherington & Park, 2003). The work of Chomsky motivated the conceptualization of spelling as a developmental process. Chomsky’s work revealed that children are capable of constructing knowledge about the relationships between sounds and letters without direct instruction.

The student-oriented model builds on the traditional and transitional models. It encompasses the value of phonemic awareness builds upon reading and spelling which are equally supportive. However, there are three main differences. First, learning to spell
is seen as a developmental process. Second, reading provides a context for learning to spell. Finally, spelling is a functional component of writing (Heald-Taylor, 1998).

Teachers implement this model using diverse techniques. To meet the needs of diverse spellers, teachers often use word sorts and word games as forms of word study to meet varying developmental stages. Word study is done through literature as well. Teachers will draw attention to spelling patterns in books students are reading. Also, teachers will implement cooperative learning groups for spelling. Many games and activities can be done together in groups, as well as theme units in literature.

According to Rebecca Sitton, “Spelling mastery is the ability to spell words correctly in everyday writing.” This can be done through individual conferences in writing workshop with students. Minilessons can be created for small group or whole class instruction to aid in specific areas of spelling difficulty for children. Words that are given specifically to students each week based on what words they need to work on in their everyday writing is also another strategy teachers use in this student-centered approach along with many others. A main objection to the student-oriented theory is that there is too little evidence to make the claim that this approach is superior to the other models. This suggests the need for further study regarding effective practice (Heald-Taylor, 1998). Teachers use ideas for teaching spelling from all three models and it is important to note that students can become competent spellers using ideas from all three theories.
Definitions

**traditional** - A spelling model which involves direct teacher instruction of age-appropriate set list of words that must be memorized by the students for weekly assessment.

**transitional** - A spelling model which incorporates some of the traditional model as well as an emphasis on reading in relation to spelling.

**student-oriented** - A spelling model which is centered around a student’s developmental level and allows for exploratory learning through diverse means in both reading and writing.

**word study** - This refers to varying techniques for understanding the spelling of words such as word work and word walls.

Assumptions

One assumption the researcher made was that the students in the classroom were exerting their maximum effort in learning the spelling strategies during instructional time. Another assumption was that the students practiced outside of school and followed through with the completion of assignments. A final assumption was that the control group continued to maintain the same sense of continuity in teaching according to the student-centered curriculum set forth by our school district.

Limitations

One limitation to this study was that it involved a small sample size of students. There were thirty-nine students who participated. Another limitation was that no random
selection took place in choosing the participants. The researcher used her own fourth grade class as the experimental group and another fourth grade class as the control group. Finally, another limitation was the time constraint on the study itself. If more time had been permitted, there would be more data collected in the study to further analyze.

Summary

In upcoming chapter two, the researcher will delve into the research set forth by the educational and psychological community to take a deeper look into spelling achievement in children. The researcher will examine the roles of diverse students and teachers as well as take a closer look at the most beneficial ways of implementing spelling instruction. In chapter three, the researcher will present the study and provide data to be analyzed. In chapter four, an analysis of the data will be presented and implications for teaching will be presented in the final chapter.
CHAPTER II
Review of the Literature

This chapter will be broken down into five sections. The sections will include research and information in regard to studies, which have been completed in support of the researcher’s hypothesis about spelling instruction. These sections will include the importance of teaching spelling to children, the importance of a balanced approach to spelling instruction, the relationship of spelling ability and reading ability, and how spelling can affect a student’s self-perception.

The Importance of Teaching Spelling to Children

Teachers are always faced with a similar challenge. They must be able to help improve their students’ reading skills. In order to be successful at this task, students need to understand our complex language. This involves a deeper understanding of phonemic awareness. Phonics involves a relationship between sounds and their spellings. If teachers explore advanced phonics in the older elementary grade levels, students will become more excited about words and as a result, become more fluent readers. There are three primary goals of reading instruction according to Blevins, 2001. They are first, the automatic word recognition (fluency); second, comprehension of text; third, development of a love of literature and desire to read.

To become skilled readers, students must be able to identify words quickly and accurately. In order to do this, readers must be able to decode words proficiently.
Readers decode words by sounding them out, using structural analysis and syllabication techniques, or recognizing the word by sight (Blevins, 2001). Most types of phonics instruction focuses on the teaching of sound-spelling relationships so that the reader can come up a close pronunciation of the word and then check it against his or her vocabulary.

A study completed by Mangieri & Baldwin in 2001 was designed to assess whether knowing the meaning of a word facilitates ones ability to spell it. Results of analysis showed that when the effects of word frequency, word length, and phoneme-grapheme regularity were partialed out, there was a significant relationship between ability to spell words and understanding of their meanings.

According to Blevins, one of the arguments against teaching phonics is that the approximately sixteen percent of the so-called irregular words appear with the greatest frequency in text. Although these words must be taught as sight words, the reader has to pay attention to their spelling patterns in order to store them in his/her memory. It is apparent then that children need instruction in phonics in order to learn how to read.

Older children need to learn to decode multisyllabic words. They don’t often recognize common spelling patterns and many more difficult words are appearing in their books but do not exist in their speaking or listening vocabularies. Decoding plays important roles in helping the reader understand the text. Once phonics instruction has helped aid in the development of word recognition, children recognize large amounts of words quickly, which helps their reading fluency improve. Once children are no longer struggling with decoding words, they devote their full attention to the meaning of the text.
According to Blevins, there have been many research studies focused on phonics instruction. He has compiled a list of research findings regarding the importance of teaching phonics. One finding is that phonics instruction can help all children learn to read. “Even children from language-rich backgrounds benefit from phonics instruction” (Blevins, 2001).” As Chall, 1967 states, by learning phonics, students make faster progress in acquiring literacy skills reading and writing. By the age of six, most children already have about 6,000 words in their listening and speaking vocabularies. With phonics, they learn to read and write these and more words at a faster rate than they would without phonics.” In addition, children who are good decoders read many more words than children who are poor decoders states Jeul, 1991. According to this information, more reading will result in greater reading growth.

Another finding according to Blevins’ research on phonics instruction is that most poor readers have a strategy imbalance. Children need to have a repertoire of skills to choose from while reading. Unfortunately, a longitudinal study done by Juel, 1998, revealed that there is an 88% chance that a child who is a poor reader at the end of first grade would still be a poor reader by the end of fourth grade.

Problems with Traditional Approaches to Spelling

“Although most students with learning disabilities have difficulty with all forms of written expression, spelling problems rank as some of the most difficult to remediate and are common (Darch, 2000).” Students with learning disabilities are less likely than students in regular education to devise and utilize spelling strategies that allow for the systematic application of spelling rules. Darch investigated the use of spelling strategies
by elementary students with learning disabilities. He also investigated effective spelling approaches by comparing two different commercial spelling programs to see if one was more superior to the other. One program focused on rule-based strategy instruction and the other was a traditional approach.

The results of the first experiment demonstrated that students are not effective in using rule-based strategies and tend to use ineffective ones. The results of the second experiment demonstrated the superiority of a rule-based spelling program when compared to a traditional program using activities without a systematic introduction of rules. The findings of the first experiment offer support to the second experiment. This study suggests that rule-based curricula provide teachers with strategies to teach students who experience difficulty in spelling.

A very traditional and popular method for teaching spelling involves presenting students with a fixed list of words. Students are given a pretest at the beginning of the week and a posttest at the end of the week. While this approach may be suitable for some students, it is not appropriate for all. Students with learning difficulties appear to have trouble with this technique (Guza, 2001). According to Guza, “Reith et al demonstrated that students could improve their weekly spelling scores if they were provided daily tests over a portion of the words on their weekly lists. Mirkin, Deno, Tindal, and Kuehnle reported that daily measurement was significantly more effective than weekly measurement in increasing spelling achievement.”

The purpose of another study done by Guza in 2001, was to compare the traditional approach to spelling of presenting all words at the beginning of the week with a procedure in which students received a portion of the words each day and were tested
daily. This study also evaluated whether this practice would equally benefit all ability groups in the classroom.

The results indicated that students did significantly better on the weekly spelling tests when they received a portion of the words each day and were tested daily. In addition, the results indicated that the largest increase took place within the low-ability group with the most dramatic results occurring between the two weakest spellers (Guza, 2001). It also appeared that good spellers scored well in both programs. Students felt that they were better spellers as a result of the daily program.

Researchers have studied textbook use in reading, math, social studies, even geography, but they have overlooked one subject spelling (Morris et al, 1995). However, as Schlagal and Schlagal (1992) pointed out, in recent years spelling has been deemphasized as a formal topic of instruction, with a growing number of scholars and teachers viewing spelling as a minor component of the writing process-a language skill to be taught incidentally and informally as children learn to write for meaning (Morris et al, 1995). Traditionalists argue strongly for and see value in the use of spelling books, weekly spelling lists and Friday spelling tests. In the study done by Morris et al (1995), the researchers described how six elementary teachers used a traditional spelling curriculum across one school year and how much their students achieved.

One important confirmation which the researchers received was spelling books do not necessarily emphasize research based strategies for teaching/learning spelling words. Another result indicated that although two-thirds of the students could spell 86% of the curriculum-based words correctly, the lowest one third-of students could only spell 46% correctly.
Teachers are often left wondering why students spell words correctly on their weekly tests and often misspell the same words, as well as more common ones, in their daily written work. "The research in spelling is fairly clear about the major components of a good spelling program. They are 1) a list of high-frequency words; 2) efficient procedures by which the words are taught; 3) an effective method for students to use when learning how to spell words (DiStephano & Hagerty, 2001)." The authors of this study, P. DiStephano and P. Hagerty, 2001, go on to state that teachers can determine for themselves whether their spelling program makes use of effective spelling procedures for teaching words, such as the self-corrected test and test-study-test methods. Teachers can also recognize whether their spelling program is an effective one for teaching students how to study words (DiStephano & Hagerty, 2001).

The major purpose of the study was to determine whether a selected number of commercially prepared spelling series used high-frequency words for their lists and to determine whether students misspelled high-frequency words in their writing. Differences did occur among series in the number of high-frequency words based on a standard measure of word frequency. There was a lot of variation for each series across grade levels in the number of high-frequency words found at each grade level. The results of this study raise doubts as to the feasibility of using commercial spelling series as a source of spelling words for students in grades two through six since it would be necessary to purchase a number of series in order to provide students with a list of appropriate, high-frequency words at each grade level.
The Importance of Creating a Balanced Approach to Spelling: Phonics and Whole Language

According to Blevins, another finding regarding the importance of phonics instruction is that phonics improves spelling ability. “Phonics is a particularly powerful tool in improving spelling because it emphasizes spelling patterns, which become familiar from reading. Studies show that half of all English words can be spelled with phonics rules that relate one letter to one sound. Thirty-seven percent of words can be spelled with phonics rules that relate groups of letters to one sound” (Blevins, 2001). Studies also show that good spellers tend to be good readers because they share an underlying knowledge base. The most effective type of instruction, especially for children at risk for reading difficulties, is explicit instruction according to Chall, 1996. The key element in its success is having many opportunities to read decodable words, in addition to modeling of applying these skills to reading.

To be good spellers, students must possess the knowledge of effective spelling strategies. In a study by Butyniec-Thomas & Woloshyn in 1997, the authors explored whether explicit-strategy instruction combined with whole-language instruction would improve third-grade students’ spelling more than either explicit-strategy instruction alone or while-language instruction alone. The findings of this study demonstrate that explicit-strategy instruction in a whole-language environment resulted in better spelling performance than did either whole-language or explicit-strategy instruction alone.

Another study, done by Readence & Baldwin in 2001 examined the reading achievement patterns under varying phonics approaches in beginning reading instruction.
The students were classified as having an impulsive or reflective cognitive style and as receiving phonics instruction through an analytic or synthetic approach. Based on the results of this study, it is suggested that reading programs, which emphasize a more intensive phonics approach, could enhance the word recognition and vocabulary of reflective readers.

In a study done by Darch, Kim, & Johnson, in 2000, the authors formed two experiments which focused on the spelling strategies by students with learning disabilities and the effectiveness of two different approaches for teaching spelling. In the first experiment, qualitative research method was employed with four elementary students with learning disabilities to document the spelling strategies used during a structured interview, a formal spelling test, and an informal writing activity. Patterns that emerged from the data suggested that students mostly used inappropriate spelling strategies. Based on the results of experiment 1, experiment two compared the effectiveness of two highly dissimilar spelling instructional approaches, rule-based and traditional, to thirty elementary students with learning disabilities. The results of experiment two showed that students learned spelling words more effectively when the rule-based teaching and correction procedures were employed as compared to the traditional method.

Word Boxes and word sorts are two word study phonics approaches that involve teaching phonemic awareness, making letter-sound associations, and teaching spelling through the use of well-established behavioral principles according to a study done by Joseph, in 2002. The author of this study looked at the current effectiveness of word boxes and word sorts using mildly retarded students around the ages of nine and ten years old. Findings revealed that these increased students’ word recognition and spelling skills.
Visual imagery is known to be an important factor in quality of performance on a variety of cognitive tasks. Templeton's study of spelling among intermediate and secondary students led him to conclude that a higher order visual structure precedes correct pronunciation and the use of more complex word forms. The ability to spell derived forms and the ability to pronounce these forms may represent different stages word knowledge according to Templeton. The study completed by Sears & Johnson (1986) investigated the relationship between three instructional factors and spelling performance. The factors were auditory imagery, kinesthetic imagery, and visual imagery. It was hypothesized that these factors would be related to spelling performance in different degrees and that the ability to access the visual imagery factor would result in the best performance of the three factors. The results of the study suggest that spelling is a visual activity and supports Templeton's contention that a visual structure in learning is at work in spelling.

High-frequency words play an important role in spelling and reading. Although some lists differ from others, there is a general agreement on the majority of them. Many of these words are considered irregular and readers can't always find a common sound-spelling relationship in these words.

One possibility of finding words for students is in their writing. Teachers could use misspelled words from students writing to individualize word lists. Also, words can be selected from The New Iowa Spelling Scale. This scale lists words by the percentage of students in different grade levels who spelled the words correctly. Teachers can develop word lists for children at a particular grade level.
Another study done by Reith, Axelrod, Anderson, Hathaway, Wood, & Fitzgerald in 2001, compared different ways of presenting weekly spelling words to students. Four experiments were conducted and the first three demonstrated that students did better on the weekly review of tests when they received a portion of the words each day and were tested daily. This was in comparison to receiving all of the words at the beginning of the week and not having daily tests. The fourth experiment conducted gave students a portion of their words each day without daily testing in contrast with experiments one through three. All four studies concluded that students achieve higher scores on experiments one through four than they did when receiving all of their words in the beginning of the week. The findings show that daily words and practice should replace customary methods of word distribution to students.

A study done by Beckham-Hungler & Williams in 2003 assessed the effectiveness of a spelling program that was based on words students misspelled in their own writing. Data were collected from the nine lowest achieving second grade students. Results revealed that children typically spelled their "words learned" (those spelled correctly on spelling posttests) correctly when they reused those words in their writing journals. Results also indicated that spelling lists are limited in their ability to take into account children's prior knowledge of words or to anticipate the specific words that will be of greatest use to children in their self-selected writing (Beckham-Hungler & Williams, 2003).
The Relationship of Spelling Ability and Reading Ability

Reading educators have been debating the different methods of teaching reading. The discussion has centered on the effectiveness of whole language as opposed to more traditional methods. Cunningham (1994) believes that reading programs focusing on direct instruction will continue to be effective with young students. “She also feels that a format emphasizing authentic literature and utilizing reading strategies such as phonics, patterning, and decoding are valuable of the reading curriculum” (Scarcelli, 1999). Cunningham’s model for reading instruction attempts to address the needs of all beginning readers through a program combining strategies and strengths from several different reading philosophies. Her strategies combine the most effective methods of both traditional reading instruction and the whole language approach.

In the study completed by Scarcelli in 1999, the researchers examined two similar groups of first grade students and two different approaches to reading instruction within a whole language classroom/literature based curriculum. Teachers in the experimental group implemented an approach for reading instruction that involved strategies including phonics, writing, teacher-directed and self selected reading activities. Teachers in the control group used whole language for all classroom instruction. The result significantly favored the experimental group and supports the format developed by Cunningham in improving students decoding, vocabulary, and comprehension scores for both average and below average students.

The failure of some children to develop age-appropriate reading ability has created much interest and research. Some studies have identified the processing of phonemic information as being important to reading. Other investigators have confirmed
the importance of phonemic processing in reading and there is some evidence that weakness in this area impedes the effective use of phonetics in learning to read (Kochnower, Richardson, DiBenedetto, 1983).

The aim of the study done by Kochnower, Richardson, and DiBenedetto was to determine if learning-disabled children matched with normal readers on word recognition ability. Children grades two through five participated in this study. The results of this study clearly suggest that children who experience difficulty in learning how to read have a specific deficiency in the use of phonetic code. Logically, this deficiency may be seen as a causal factor in the reading disorder (Kochnower, Richardson, DiBenedetto, 1983). Children who experience no difficulties with phonemic processing quickly learn to use the phonetic code in reading to expand their reading vocabularies. In contrast, children with learning disabilities may encounter specific difficulties in tasks involving phonemic processing and may not progress at a normal rate in reading achievement.

There is considerable evidence that the central reading problem among children identified with reading disabilities involves a deficit in the aspect of word recognition (Rack, Snowling, & Olson, 1992). "The prevailing view among researchers is that these word reading difficulties are, in turn, due largely to core deficits in phonological skills, as assessed by tests of phonemic awareness or nonsense word decoding" (Manis, Doi, & Bhadha, 2000). The study done by researchers Manis, Doi, and Bhadha was designed to explore detailed relationships among different measures of naming speed, phonological skill, and orthographic skill in a representative sample of second graders. The results were consistent with the predictions of the double-deficit framework.
phonological core hypothesis proposed by Bowers and Wolf. Bowers and Wolf’s
double-deficit hypothesis of reading disability states that children with both phonological
coding and naming-speed deficits have more severe reading difficulties than children
with either deficit alone (Manis, Doi, & Bhadha, 2000).

In a study completed by de Jong and der Leij (2002), the researchers set out to
examine the specific effects of phonological abilities and linguistic comprehension on the
development of word-decoding ability and reading comprehension. This longitudinal
study examined Dutch children from the end of first grade through the end of third grade.
In first grade, measures were administered for phonological awareness and serial rapid
naming and for vocabulary and listening comprehension. At the end of grades one
through three, word-decoding speed and reading comprehension were assessed. Results
of this study indicated that phonological abilities were highly associated with word
decoding. Word decoding, vocabulary, listening and reading comprehension appeared to
exert additional influences on its further development after first grade (de Jong & der
Leij, 2002).

Research completed by Berninger et.al. (2003) evaluated the relative effectiveness
of three instructional approaches to supplementing the regular reading program for
second graders with low word reading skills. The children were randomly assigned to
one of four conditions:
1) explicit and reflective word recognition, 2) explicit and reflective reading
comprehension, 3) combined explicit word recognition and explicit reading
comprehension, or 4) treated control that only practiced reading skills without any
instruction. The results of this study showed that combined explicit word recognition and
reading comprehension treatment increased phonological decoding significantly more than the other three conditions.

One instructional component that is common to most effective techniques is the provision of immediate, corrective feedback. The effectiveness of feedback stems from, in part, the enhancement of memory, attention, and discrimination necessary to learn spelling patterns (Gettinger, 1993). This study offers direct evidence of the effectiveness of a researched-based spelling intervention in regular classroom instruction.

A study completed by Penney, Hann, & Power in 1999 investigated the ability of good and poor spellers at higher-education level, good and poor readers at the junior high school level, and kindergarten children to produce words in response to semantic, visual, and auditory cues. The findings of this study revealed that at all levels, good spellers or readers produced more words on all-word retrieval tasks than poor spellers or readers. Findings suggested that whereas poor readers failed to organize words in long-term memory according to rhyming families, good readers did.

According to Vygotsky, a child’s linguistic performance can be enhanced by a supportive social context. Shared book reading with parents or other adults is an ideal context for children to practice and improve their language skills. Experimental research has demonstrated that increasing the frequency of story reading at home and at school can enhance preschool and primary school age children’s language comprehension and expressive language skills (Thoreson, 1999). Shared book reading is also used as a language intervention procedure for children with language delays.

In this study, the researcher modified the Dialogic (interactive between adult and child) Reading training program to more specifically address the needs of children with
language delays. Thoreson compared the effectiveness of parent-implemented intervention with two levels of staff-implemented intervention. In one group children received repeated exposure to shared book reading and in the other group, children did not. The group that received repeated exposure benefited more than the control group. This study demonstrated a simple method for eliciting more complex linguistic performance from children with language delays.

**Spelling Ability and Student Self-Perceptions**

Since spelling is essential for communication in a literate society, incorrect spelling may obscure the message and slow down communication. Little research has been done to look at children’s attitudes toward poor spellers. A study done by Downing, DeSteffano, Rich and Bell (1984) investigated children’s attitudes and self-concept regarding spelling. Children in the first through six grade rated spelling as an important school subject. In another study of children’s attitudes toward spelling, Rankin, Bruning, and Timme (1994) found that children and adolescents believed that spelling is important for being a good writer, doing well in school, getting into college, and getting a good job as an adult. Rankin et al. also found that children’s spelling self-concept was strongly related to their spelling ability (Varnhagen, 2000).

The goal of the study done by Varnhagen (2000) was to extend Downing et al. and Rankin et al.’s studies to examine the attitudes toward spelling of children raised with spelling technology and receiving instruction on the philosophy of whole language. Second, fourth, and six graders read stories that were either correctly spelled or contained a number of misspellings. Varnhagen hypothesized that second graders may be less
affected by misspellings than are fourth and six graders who have presumably mastered much of the English spelling system. The researcher measured both the attitudes toward the message that was conveyed and the messenger conveying the message. A secondary goal of this study was to investigate whether spelling ability interacts with attitude.

The results of this research indicated that poor spelling has a negative impact on children’s impressions of the message as well as the messenger even in second grade. Second, fourth, and six graders considered the stories containing misspelling to be poorly constructed, less comprehensible, less interesting, and less memorable (Varnhagen, 2000). “Children also considered the authors of the misspelled stories to be less careful writers and less strong in language arts. These findings indicate that even early elementary aged children appreciate the importance of spelling for writing and academic achievement (Varnhagen, 2000).”

According to Chapman and Turnner (2003), findings of the strong predictive association both phonological sensitivity and the letter-name knowledge and subsequent reading performance, reading self-concept, and academic self-concept raise issues regarding fundamental strategies that are required for developing competence in reading. Successful reading skills are developed when children acquire word recognition strategies, which are crucial for the development of rapid word decoding skills. Self-concept is associated with strategy use. “Effective strategy use and the belief by individuals that using a particular strategy on a task will be beneficial are at the center of adaptive motivation. Adaptive motivation is an importance consequence of having a positive self-system and is necessary for persistence when children encounter increasingly challenging learning tasks” (Schunk, 1999).
For beginning readers, two strategies are normally taught in literacy programs. One focuses on an emphasis on the use of sentence context cues; the other involves the use of letter-sound patterns. Efficient readers are thought to use the fewest possible cues to make a prediction about the identity of an unfamiliar word. Literacy instruction programs that have a whole language orientation often state the teaching phonics skills explicitly is a difficult and unnecessary (Chapman & Tumner, 2003). In a contrasting view, when children encounter an unfamiliar word, they should first look for familiar spelling patterns and use context only to confirm hypotheses about what a word might be. In support of this view is a considerable amount of evidence that with rare exceptions, progress in learning to read can only occur if the child achieves a fairly advanced level of phonological recoding ability, that is, the ability to translate letters and letter patterns into phonological forms (Adams & Bruck, 1993). Approximately 35-40% of the words used in beginning reading materials appear only once. Thus, beginning readers continually encounter words that they have not seen before and may not use again for a while.

In a longitudinal study done by Tunmer and Chapman in 1991, students were asked how they try to figure out what a word means if they are not sure what it is. Of the responses, 52% indicated a preference for using word-level information, 34% preferred to use text-level information, and 14% were unable to state which strategy they prefer to use. The findings revealed that children who stated a preference for using word-level information to identify unfamiliar words consistently performed better on all reading-related measures one and two years later and were 6 and 1/2 times less likely to require Reading Recovery than children who preferred to use text-level strategies such as contextual guessing. Also, children who preferred to use text-level strategies reported
significantly more negative reading self-efficacy beliefs during third grade than those who preferred word level strategies. Teaching children to rely on text-level cues and strategies at the expense of phonological information contributes to the progressive deterioration in a child's rate of reading development as they grow older and also to the development of negative achievement-related self-systems.

The purpose of a study done by Wattenberg and Clifford (1964) was to find an association between negative self-concept and reading disabilities. In general, the measures of self-concept and of ego strength taken of kindergarteners were predictive of reading achievement two and a half years later.

Although the relationship between IQ and self-concept among regular class children is fairly well established, there is little evidence that the relationship holds true among learning disabled children (Smith, 1979). In addition, among regular education children, the relationship between academic performance and self-concept is also well established. In an investigation done by Smith (1979), the author explored the possibility of predicting self-concept among elementary school aged students with learning disabilities from a combination of intellectual, academic, and sociological variables. There was a clear indication from this study that academic performance was related to self-concept among learning disabled children.

Children with relatively high IQ's who also feel good about themselves are confident in their abilities to cope with the demands of school and tend to be successful learners. However, for students with learning disabilities, this may not be true. The purpose of the study done by Kershner (1990) was to test whether self-concept and IQ in students with learning disabilities are valid predictors of changes in academic
performance over two years of small group remedial instruction and tutoring. This study recognizes that self-concept is possibly a primary cause of academic underachievement.

Children with learning disabilities tend to hold realistic self-perceptions of their academic difficulties, perceiving themselves negatively. In a study done by Bear, Minke, Griffin, and Deemer in 1998, self-perceptions of teacher feedback, social comparison of reading competence, reading satisfaction, and general self-worth were assessed among third and sixth graders with learning disabilities and normal achievement. As predicted, in both grades teacher feedback was the most common criterion children used to judge their academic performance. In both achievement groups, perceived teacher feedback and reading satisfactions were less favorable among sixth graders. Perceived teacher feedback contributed significantly to prediction of self-worth.

Spelling errors may be perceived as an indication of lower writing ability or as an indication of lower cognitive abilities in general. According to Kriener 2002, there is evidence that perception of another person's intelligence can be affected by only a small amount of information about the person. Kriener sought to find out whether spelling errors are taken as an indication of low intellectual abilities. He hypothesized that college students reading an essay with spelling errors would rate the author's writing ability than if the essay contained no errors.

The results of this experiment are consistent with the hypothesis that spelling errors can influence how we perceive the abilities of the author. In addition, one of the goals of Kriener's research was to determine whether there is a relationship between measured spelling ability and cognitive ability. The results suggest that one does exist. Verbal ability does tend to be more strongly correlated with spelling ability. It is also
interesting that the observed correlation between verbal ability and spelling ability is consistent with how the participants rated writing abilities. In general, the results indicate that perceptions of writers can be affected by the presence of spelling errors.

Summary

“Words are the building blocks of reading and writing. In order to read and write, children must learn to recognize and spell the most commonly occurring words quickly and automatically” (Cunningham & Allington, 1999). In addition, children must also learn how to figure out the pronunciation and spelling of a word they do not know. Good readers will develop this ability, however, many poor readers will not. It is very important to teach children what good readers do when they come across an unfamiliar word in their reading or when they are trying to figure out how a word might be spelled. Children must learn the conventions and jargon of print and they must develop phonological awareness (Cunningham & Allington, 1999).

Phonics instruction teaches children strategies to decode words. The reader needs to pay attention to the spelling patterns in words in order to store the words in his or her memory. By more fully analyzing the common spelling patterns of English, the reader becomes a better speller (Blevins, 2001). Good spellers are generally good readers because spelling and reading share an underlying knowledge base. Poor readers are rarely good spellers. Phonics is a particularly powerful tool in improving spelling because it emphasizes spelling patterns, which become familiar from reading (Blevins, 2001). A student’s self-concept also plays a large role in perceived academic competence in the areas of spelling and reading. The more confidence a child has in their ability to
complete an academic task, the more likely they will be to want to continue to work hard in that particular subject area.

In conclusion, there is substantial amounts literature to support the idea that neither phonics nor whole language alone can support both regular and special education students. Therefore, teaching children through a combination of whole language and phonetic decoding strategies would be a beneficial and successful approach to learning how to spell.
CHAPTER III
Design of the Study

Sample

The subjects in this study were students in two elementary school fourth grade classrooms. The subjects range in age from 9-10 years old. The experimental group consisted of six males and thirteen females. Of these subjects, four were classified as special education students, two were males and two were females. The control group consisted of ten males and ten females. Of these subjects, six were classified as special education students, two were males and four were females. The subjects reside in a middle class community in Burlington County, New Jersey.

Measures

Every subject in both the experimental and control groups were given a pretest using 125 identical words from the Rebecca Sitton spelling program’s list of high-frequency words. These are words, which, according to the program, students should already know how to spell by the time they enter fourth grade. The subjects’ papers were checked for errors and then numbered. Therefore, each subject was noted as a number in order to remain anonymous. Upon completion of the study, the students received the exact same word list as a posttest. The papers were checked for errors and matched with the corresponding pretest. Data was analyzed for each of the subject’s pre and posttest scores.
In addition, the students completing a spelling self-concept scale prior to beginning the study as well as after the study were completed. These were also matched with the corresponding number of each subject in order to rate his or her self-concept before and after the study was completed. The teachers in both of the corresponding classrooms administered both the pre and post spelling tests as well as the spelling self-concept scales.

Anecdotal notes were also taken during this study by the researcher on individual progress of each subject as well as on overall experimental group progress. Subjects will continue to be evaluated as part of the spelling curriculum using weekly spelling word test of 15 words. Progress will be recorded for these assessments as well.

**Design**

The study was designed with a quasi-experimental basis. The control group followed the spelling curriculum exactly as it was set forth. In this scenario, weekly spelling lists were distributed to the subjects on a Monday. During this week, the teacher had given the students a cloze activity to work on one day, springboard activities which focused on the dynamics of five of the words another day, and finally a period of review on the day before the Friday spelling assessment.

The students received homework assignments using the Rebecca Sitton program two or three nights of the week such as writing sentences using spelling words, making a word search puzzle, math spelling activities, or writing their words in alphabetical order. The teacher in the control classroom utilized this plan over the same ten-week period that the experimental group was working on their spelling study.
For ten weeks the experimental group completed a series of phonics based instruction activities incorporated into the current whole-language spelling curriculum. During the first four weeks of instruction, one thirty minute period a day was set aside to work on word sorts with the subjects. Students started the first week sorting for words based on vowel sounds leading into more complicated closed sorts and sorting for ending sounds.

In the next four weeks, the students used the same time period to complete making words activities. Students used letters to make small words. Gradually, in the same lesson, they become larger and larger resulting in one word using all of the given letters. The students used this opportunity to learn about spelling patterns and irregularities.

In the final two weeks of this period, the students worked on some activities that allowed them to recognize correct spelling form incorrect spelling. The students completed “What looks right?” lessons to help them learn that good spelling requires visual memory.

For two weeks the researcher concentrated on the class word wall. The class worked on lessons using the word wall every forth week totaling time in this area to two weeks out of ten instead of using weekly spelling words. During these two weeks the students reviewed rhyme and endings. The students also made sentences with word wall words and play games. One such word wall game is called “Wordo” where the students wrote the words on a bingo card and the teacher calls out the word. The game continues until the student has a row of words. Word sorts were used with word wall containing harder homophones, contractions, and compound words.
In addition, a period a week of two weeks was devoted to word wall words, the researcher also utilized spelling lessons during reading and writing time. Content word boards using big words related to a topic were a great way to help children read and write better. Collecting big words from reading or a big word of the day helped students as well. The researcher used fifteen minutes at the start both reading and writing periods one time a week to create these learning experiences for the students. In addition, lessons on morphemes, including prefixes, suffixes and root words were incorporated into the one period of writing.

Testable Hypothesis

Ho: There was no difference in the students overall spelling ability after incorporating more phonics based approaches to spelling instruction.

Hi: The students’ overall spelling ability has improved after incorporating more phonics based approaches to spelling instruction.

Ho: The students’ spelling self-concept did not improve.

Hi: The students’ spelling self-concept did improve.

Analysis

Once all of the data was collected, a two-way mixed ANOVA was applied to conclude if students overall spelling ability improved. In addition, the two-way mixed ANOVA was applied to conclude if students’ self-concept improved as well.
Summary

The researcher set out to determine whether or not spelling ability used thirty-nine total subjects in two fourth grade classrooms and self-concept could be improved. The researcher took ten weeks to incorporate phonics-based instruction into a whole language spelling curriculum while the control group continued using weekly spelling lists and activities already set forth. Lessons were incorporated though word sorts, word wall, and additional instruction on several areas of morphemes. Once all of the data was complied, a two-way mixed ANOVA was used to conclude the results.
CHAPTER IV
Analysis of Results

In this study, the researcher looked to improve thirty-nine fourth graders' overall spelling ability and self-concept. The standard program was modified to meet a more phonics-based approach to instruction. Over a ten-week period, the students were taught using phonics-based lessons incorporating such strategies as word sorts and word wall instruction. During this time, a previously established control group worked with the standard fourth grade method of spelling instruction. Both the experimental and the control groups were given identical spelling pre and post tests. It was hypothesized that within the experimental group, the students' overall spelling ability had improved after incorporating more phonics-based approaches to spelling instruction.

In addition, the children were asked to complete Likert-type spelling self-concept scales. These were used to determine the children's overall feelings toward their spelling abilities before and after the ten-week session. The researcher also hypothesized that within the experimental group, children's overall self-concept would improve. A two-way mixed ANOVA was used to determine the results of this study.

The data collected supported the hypothesis that within the experimental group, the students' overall spelling ability would improve. The results were statistically significant at .341 within both the experimental and control groups that spelling did
improve. Graph 4.1 illustrates the improvement between both groups before and after the spelling test.

According to graph 4.1, the experimental group had a greater improvement in test scores. Thus the ten-week phonics-based instruction to teaching spelling played an important role in the teaching of spelling to all students. Resource students in the experimental group had seen a nice improvement in their overall spelling abilities in comparison to their results on the spelling pretests. There was not a significant change in the results of the resource students in the control group.
Data analyzed in regard to the students' overall self-concept in both groups was not statistically significant. The students completed a Likert-type scale that was interpreted in two ways. The first was based on the children’s overall self-concept of themselves and the second was based on their self-concept as compared to others in their class.

As illustrated in graph 4.2, the students in the experimental group believed that their self-concept had improved after the ten-week session. The control group had remained the same in relation to their self-concept. In addition, as illustrated in graph 4.3, both the experimental group and the control group viewed their overall spelling
abilities in comparison to others as better than before their respective instruction. The self-concept of both the regular education and resource students were improved as well in both the experimental and control groups.

Graph 4.3: Illustration of self-concept scale results (comparison to others)

Summary

The researcher hypothesized that a ten week phonics-based instruction program would not only improve students' overall spelling abilities, but self-concept as well. According to the data, the students' overall spelling abilities within the experimental group did improve. The control groups' abilities improved as well, but not quite as impressively. The overall self-concept of both groups improved as well, but was not
CHAPTER V
Summary and Conclusion

Summary

The purpose of this study was to improve both regular education and resource students' academic abilities in the area of spelling. The fourth grade-spelling program currently used focuses around a student-oriented theory, which uses limited direct instruction, and relies on the expectation that children will ultimately construct their own knowledge in regard to sound-symbol relationships. After a careful review of the literature in regard to spelling instruction, the researcher set out to create a program that would integrate both phonics and whole language instruction.

The researcher used both an experimental and a control group to conduct the research. Both groups were given a pretest of spelling words and then completed their course of instruction. The control group were directed with the spelling program currently used in the fourth grade, while the experimental group used the same program in addition to three extra times a week for direct word study instruction. Both the experimental and control groups contained regular education and special education students. It was hypothesized that all students would improve their spelling abilities more statistically significant. The researcher was able to improve the children’s spelling ability and overall self-concept as well.
from the ten-week word study instruction. In addition, it was thought that the resource students would benefit the most from the ten-week direct instruction program.

Furthermore, the researcher hypothesized that overall student self-concept would improve for the experimental group. The researcher believed these students would benefit from direct strategy instruction and therefore feel more confident than before in relation to themselves as well as their peers.

After the study was completed, the results showed that the overall spelling ability did improve for the experimental group. However, the results were statistically significant for both groups in improving their spelling abilities. In addition, the self-concept improved for the experimental group as well as the control group after the ten-weeks of spelling instruction.

Discussion

The results of this study were supported by much of the literature. It concurs with the importance of teaching spelling to children and how students might best learn how to spell. In order to become skilled readers, students need to identify words quickly and correctly. Order children need to know how to decode multisyllabic words. During the ten-week instructional sessions, the researcher focused on a combination of phonics instruction and whole language. By learning phonics, students make faster progress in acquiring literacy skills in reading and writing (Chall, 1967). Once phonics instruction had helped aid in the development of word recognition and decoding, students were then able to devote their attention to the meaning of text.
The students with learning disabilities, who struggled with reading in the experimental group, needed to learn a variety of direct instruction strategies to improve their spelling and reading abilities. Most poor readers have a strategy imbalance. Children need to learn a repertoire of skills to choose from while reading (Blevins, 2001). The researcher worked with the children in order to provide such strategy instruction.

Some of the strategies the researcher used to instruct were word boxes and word sorts. These are two approaches that involve teaching spelling through the use of well-established behavioral principals (Joseph, 2002). Overall, many of the principals and methods the researcher used to develop an instruction plan for teaching spelling was supported by the literature.

The researcher also addressed the importance of student self-concept in relation to spelling. Much of the literature supported the idea that children's spelling self-concept was strongly related to their spelling ability. The study completed by Varnhagen (2000) noted that even children as young as second grader acted negatively toward writing stories poorly spelled. It showed that children appreciate the importance of spelling for writing and academic achievement.

Children with learning disabilities hold realistic self-perceptions of their academic difficulties. This was seen in the results of the self-concept scale completed by the students with learning disabilities. Many studies noted in the literature support the idea that poor spelling affects the academic perception of that individual at any age. Therefore, children with or without learning disabilities who have spelling difficulties perceive themselves as poor spellers in comparison to others. The researcher in this
study set out to improve spelling ability and self-concept in order to help all of the children achieve academic and personal success.

Conclusions

Overall, the study was successful in that it achieved what the researcher sought to achieve. The students in the experimental group had successfully improved their overall spelling ability and self-concept. The control group had improved their spelling and self-concept as well, and therefore both methods of spelling instruction appear to have been successful in teaching fourth graders spelling. More specifically, the students who were classified had improved more in the experimental group than those in the control group. Thus concluding that direct strategy instruction with an integrated phonics and whole language approach to teaching spelling was more successful for those individuals. The rest of the students were able to learn by both methods and therefore were developmentally ready for both means of instruction.

The self-concept did not seem to be a factor in using one particular method over the other. The results of the experimental and the control group in terms of self-concept were very positive. The ten-week instruction helped more students in terms of their ability to feel as though they were slightly better in spelling in relation to themselves and others, however, it was not statistically significant in relation to the results of the control group.

One limitation to this study was the size of both the experimental and control groups. If there had been more classes who participated in this study, the results would have been more generalizable. Another limitation was the number of students who were
classified in each classroom. Using more than nine students would have also yielded better results.

In addition, a third limitation was the amount of time the researcher had to complete this study. More time would have allowed the researcher to instruct over a longer period of time, thus allowing more strategy instruction and practice in utilizing each strategy. Additional time would have allowed for the researcher to determine whether or not reading ability was affected by an improvement in spelling ability. A fourth limitation was the time constraint of each day in the classroom. Many times students needed to leave the room for other instruction that took time away from spelling, or something would interfere with instruction, and the researcher needed to reschedule the spelling instruction. Absent children affected the consistency of their instruction as well.

Implications for Future Research

It would be suggested that future research in the area of spelling programs in relation to children with learning disabilities be further researched. Children who are developmentally behind in school perhaps need a different type of instruction than those who are on level. Research into developing a specific program would be beneficial for teachers and parents to utilize with their child.

Another area of research could focus around spelling ability and it’s direct affect on reading ability. Over time, future studies could focus on how to improve spelling instruction to improve reading. Students with reading disabilities could be targeted and instructed to improve word recognition along with overall spelling ability.
Finally, the area of self-concept for all students could be researched in more depth. This would benefit every student in school who feels that they are struggling in one way or another. Teachers and parents could target self-concept and learn how to improve it in order to promote a successful learning environment for all students.
References


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October 22, 2003

Dear Parents,

I am currently working on my graduate school thesis in the field of School Psychology. As the year goes on, I will be taking a closer look at our spelling curriculum and searching for ways to enhance student learning. I will be teaching the students specific decoding and spelling strategies that I have thoroughly researched. In addition, I will be adding spelling and word work activities into our daily practice. My goal is to find out the overall extent to which I can improve students’ spelling ability by enhancing our current curriculum. I want to inform you that my study should positively impact your children in the classroom.

I will be assessing the students with a word test before and after I begin these strategies and activities. Please be aware that no student names will be used for the thesis.

Please sign the bottom of this page if you are willing to let your child participate in this study. Thank you for your support

Sincerely,

Kimberly Biberman

________________________________________
I will let my child participate this study as part of Ms. Biberman's graduate school thesis.

Signature __________________________ Date ______________
THE SPELLING SELF-PERCEPTION SCALE

Listed below are statements about spelling. Please read each statement carefully. Then circle the letters that show how much you agree or disagree with the statement. Use the following scale:

SA=Strongly Agree  A=Agree  U=Undecided  D=Disagree  SD=Strongly Disagree

Example: I think Batman is the greatest superhero.  SA  A  U  D  SD

If you are really positive that Batman is the greatest, circle SA (Strongly Agree).
If you think that Batman is good, but maybe not great, circle A (Agree).
If you can’t decide whether or not Batman is the greatest, circle U (Undecided).
If you think that Batman is not great at all, circle D (Disagree).
If you are really positive that Batman is not the greatest, circle SD (Strongly Disagree).

(OC)  1. I spell better than other kids in the class.  SA  A  U  D  SD

(GPR)  2. Spelling is easier for me than it used to be.  SA  A  U  D  SD

(OC)  3. When I spell, the writing the word out is easier for me than for the other kids in my class.  SA  A  U  D  SD

(GPR)  4. I am getting better at spelling.  SA  A  U  D  SD

(OC)  5. I can spell harder words than my classmates.  SA  A  U  D  SD

(GPR)  6. I need less help to spell than I used to.  SA  A  U  D  SD

(GPR)  7. I think I am a good speller.  SA  A  U  D  SD

(GPR)  8. My spelling has improved.  SA  A  U  D  SD

(GPR)  9. It’s easier to spell better now than it used to be.  SA  A  U  D  SD

(OC)  10. I have less trouble trying to spell than my classmates.  SA  A  U  D  SD
THE SPELLING SELF-PERCEPTION SCALE SCORING SHEET

Student Name

Date _______________  Grade _______________

Scoring Key:  5 = Strongly Agree (SA)
              4 = Agree (A)
              3 = Undecided (U)
              2 = Disagree (D)
              1 = Strongly Disagree (SD)

Scales

General Progress (GPR)  Observational Comparison (OC)

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Raw Scores

_________ of 6  ________ of 4

Score Interpretation  GPR  OC

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