Implementation of early reading interventions to increase student achievement

Julie Schmitz
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Abstract
How to close the achievement gap amongst students has been a hot topic for educators. Many educators are studying a variety of educational programs and theories which would lead to the educational success of all students. Dr. Walter Cunningham School for Excellence has a history of students who are not meeting the new standards set by No Child Left Behind. As the administrators and teachers discuss and analyze the data of the students we teach we are looking for upward or downward trends. Discussions are a large part of data analysis. As we look at the trends we ask ourselves what is impacting the students we are teaching.
Implementation of Early Reading Interventions to Increase Student Achievement

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Chapter 1

Introduction

How to close the achievement gap amongst students has been a hot topic for educators. Many educators are studying a variety of educational programs and theories which would lead to the educational success of all students. Dr. Walter Cunningham School for Excellence has a history of students who are not meeting the new standards set by No Child Left Behind. As the administrators and teachers discuss and analyze the data of the students we teach we are looking for upward or downward trends. Discussions are a large part of data analysis. As we look at the trends we ask ourselves what is impacting the students we are teaching.

Statement of Problem

A major hurdle faced at Dr. Walter Cunningham School for Excellence is the lack of readiness skills students have when they begin their educational journey. Many students come to school with little or no foundation to build upon. The background knowledge of our students is limited, with little exposure to literacy skills, as well as other areas of study such as math and language. The focus of this paper will be literacy skills. Many of the students at Dr. Walter Cunningham School for Excellence are not provided with the opportunity to attend preschool and many parents do not take the
time to expose their children to literature and phonemic awareness activities; therefore many students begin their academic journey behind the average student entering kindergarten. Analyzing the students we teach continuously leads us to the question: “What can the staff, at Dr. Walter Cunningham School for Excellence, do to support the students we teach? How do we establish the foundation to allow the students to be successful students? What reading interventions will have the greatest results on reading achievement?”

To address the issues, many early reading interventions have been implemented at Dr. Walter Cunningham School for Excellence, these include the cooperation of the classroom teacher, title I teacher and special need teacher to work cooperatively to guide instruction for students. Early interventions that have been implemented include kindergarten literacy, first-grade literacy groups, Reading Recovery, small group guided reading instruction, and most recently the co-teaching model.

Kindergarten Literacy was implemented in the 2003-2004 school year. First-grade literacy instruction was implemented for the 2007-2008 school year and the 2008-2009 school year was changed to the co-teaching model for reading. Reading Recovery has been a district-wide initiative since 1986.
Another district-wide initiative is small group guided reading instruction which was implemented in 2000. Guided reading instruction was a comprehensive district initiative. Professional consultants, Gail Saunders-Smith, Ph.D. and Angela Maiers trained the teachers, and professional books and resources were purchased for each building. The district also constructed a structured reading curriculum which included a timeline for teaching specific skills. The purpose of the structured reading curriculum was to allow for the mobility of our students when a student transferred to another building within our district. At the time of this initiative Reading Coaches were assigned to each school to support the reading initiatives and assist classroom teachers with reading instruction.

Another comprehensive initiative has occurred in the buildings most in need in the area of reading. Reading First is the latest initiative our district is involved in implementing. Reading First is a federally funded initiative focused on improving reading instruction and student reading success based on standardized testing. The initiative is for grades K-3. With the closing of Longfellow Elementary, Dr. Walter Cunningham School for Excellence became a Reading First school. The focus of monthly professional development for Reading First has been placed on implementing explicit vocabulary instruction into the classroom for the 2008-2009 school year. Required in-service training
for all certified staff working with students in grades K-3 is led by the reading coach within each Reading First building. Certified staff, working with fourth and fifth grade students, is strongly encouraged to attend the in-service training as well.

**Research Question**

The goals of the interventions implemented at Dr. Walter Cunningham School for Excellence are to increase student achievement and lay the foundation for student reading success. This paper was completed to determine if early reading interventions impact student reading achievement. In researching this topic I would like to determine what impact early reading interventions have on student’s reading achievement. Does early intervention increase student achievement?

**Significance of problem**

According to No Child Left Behind and the Iowa Test of Basic Skills, Dr. Walter Cunningham School for Excellence has been a school that tends to be right on the bubble for either being placed on the watch list or a School in Need of Improvement (SINI) due to reading comprehension scores. What can Dr. Walter Cunningham School for Excellence do to improve reading scores? Determining the impact of early interventions and how they impact student learning is vital. Programs which support early intervention may help rectify the issue
of low reading scores, with the students benefiting the most by becoming successful a lifelong reader.

**Definitions of terms**

**Kindergarten Literacy:** The Kindergarten Literacy program consists of a classroom teacher, a Title I teacher and a paraprofessional working simultaneously with different groups of students. Kindergarten Literacy is a 45-minute block of reading instruction, which meets four days a week. The kindergarten students are divided into four homogenous groups. Each group is then instructed by either the classroom teacher, Title I teacher, or paraprofessional. Students are then rotated throughout the week.

**Reading Recovery:** Developed by New Zealand educator Dr. Marie M. Clay, Reading Recovery® is a short-term intervention for children who have the lowest achievement in literacy learning in the first grade. Children meet individually with a specially trained teacher for 30 minutes each day for an average of 12-20 weeks. The goal is for children to develop effective reading and writing strategies in order to work within an average range of classroom performance.

**First-grade Literacy Groups:** An intervention, lead by the classroom teacher and Title I/special needs teacher, which focuses on reading and writing skills. Teachers co-teach and the students are divided into two ability groups. The students meet with the classroom teacher
and then the Title I teacher for 22 minute sessions. Instruction takes place within the classroom with the focus being placed on reading and writing skills; 1st grade literacy groups meet daily.

**Guided Reading Instruction:** Reading instruction designed to help individual students learn to process a variety of increasingly challenging texts with understanding and fluency (Fontas & Pinnell, 2000). The use of guided reading allows the teacher to work with a small group of children who use similar reading processes and are able to read similar levels of text with teacher support.

**Co-teaching Reading Block:** A title I or special needs teacher is assigned to work with a classroom teacher. Teachers collaborate their instruction based on student need within the classroom. Students are then placed in groups which remain flexible based on need. Instruction is delivered in an uninterrupted 60 minute block of time. Both teachers deliver small group reading instruction or a specific skill group during this time frame.

**Organization of Paper**

This paper will present information based on the effects of early reading interventions. What impact do early reading interventions have on student achievement? How will the findings in this study promote student reading achievement? Are there other early reading
interventions worth implementing? Important findings will be provided throughout the study.

Chapter 1 presents an overview of the problem being reviewed. The definition of terms are provided and the problem faced at Dr. Walter Cunningham School for Excellence is presented. The significance of the problem is discussed at length in Chapter 1.

Chapter 2 will begin with an overview of the interventions used at Dr. Walter Cunningham School for Excellence, followed by the rationale and history of early intervention. A thorough description of the interventions is provided, as well as research which supports the effectiveness of each intervention.

Research supporting current reading interventions used at Dr. Walter Cunningham School for Excellence is presented in chapter 3. Chapter 3 presents what current research states about early reading interventions. When reviewing the current research advantages and disadvantages are discussed.

Chapter 4 is an analysis of the findings presented in the research. Three key components for best teaching practices are explained in chapter 4. The three key teaching components are researched based teaching practices which can be integrated into current teaching practices at Dr. Walter Cunningham School for Excellence. Each teaching practice will be explained in detail.
Teaching practices presented in chapter four have proven to have an impact on student reading achievement.

Implications for best teaching practice are presented in chapter 5 and will conclude the study. Chapter 5 will present each key component presented in chapter 4 and explain how the components will be integrated into the teaching practices already in place at Dr. Walter Cunningham School for Excellence. Procedures for implementation of best teaching practices will be thoroughly explained.
Chapter 2

Introduction

Reading is more than decoding words. The definition of reading which drives literacy programs in the United States is made up of three parts. The parts being: learning to pronounce words, learning to identify words and get their meaning, and learning to bring meaning to a text in order to get meaning from it. Current literacy research supports a more comprehensive definition. This definition consists of the three attributes above and places learning skills in the context of authentic reading and writing instruction. The most recent definition supports balanced reading instruction for students.

Chapter 2 will provide detailed descriptions of the interventions which have been initiated at Dr. Walter Cunningham School for Excellence. Along with detailed descriptions of the programs, research findings will be stated. The skills needed for reading are taught through Kindergarten Literacy, Reading Recovery, 1st grade literacy groups (2006-2008), Guided Reading, and currently the Co-teaching reading block (2008-2009) at Dr. Walter Cunningham School for Excellence with the focus placed on providing a balanced reading program. Chapter 2 will provide a thorough description of the interventions already in place at Dr. Walter Cunningham School for Excellence.
**Kindergarten Literacy**

Early intervention is crucial in benefiting our students. Research supports early reading interventions. If early intervention is to be successful it must begin early. Any kind of remediation later will most likely be less effective (Ziolkowska, 2007).

According to reading research the first step to preventing reading disabilities must be to identify students as early as possible so intervention may take place. According to Foorman et al. 82% of remedial children can become successful readers if intervention is provided in the early grades; only 46%, however, can be effectively remediated at grades 3-5 (Foorman, Francis, Shaywitz, Shaywitz, and Fletcher, 1997).

Kindergarten Literacy is a program designed after the LEAP program (Language Enrichment Activities Program) to meet the needs of kindergarten students. All children in kindergarten are a part of kindergarten literacy and students are homogeneously grouped according to initial assessments. Groups continuously change as the needs of students change. The classroom teacher and Title I teacher are required to monitor student progress and move students as necessary. According to Perkins and Cooter (2005) there is strong evidence that poverty level African American students need explicit instruction in phonemic awareness, phonics, vocabulary development,
reading comprehension and fluency. The kindergarten literacy program at Dr. Walter Cunningham School for Excellence was set up to meet some of these instructional needs for student achievement.

Focus of instruction is placed on phonemic awareness, vocabulary development, letter-sound association and reading skills. The chart below shows the rotation for groups.

**Kindergarten Literacy Rotation Table**

<table>
<thead>
<tr>
<th>Classroom teacher</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>groups A &amp; B</td>
<td>groups A &amp; B</td>
<td>groups C &amp; D</td>
<td>groups C &amp; D</td>
<td></td>
</tr>
<tr>
<td>Independent Group</td>
<td>groups A &amp; B</td>
<td>groups A &amp; B</td>
<td>groups C &amp; D</td>
<td>groups C &amp; D</td>
</tr>
<tr>
<td>Title I teacher</td>
<td>groups C &amp; D</td>
<td>groups C &amp; D</td>
<td>groups A &amp; B</td>
<td>groups A &amp; B</td>
</tr>
<tr>
<td>Paraprofessional</td>
<td>groups C &amp; D</td>
<td>groups C &amp; D</td>
<td>groups A &amp; B</td>
<td>groups A &amp; B</td>
</tr>
</tbody>
</table>

Each group receives 20 minutes of instruction per session and then the students rotate to the next group. For example on Monday the Title I teacher works with group C, while the paraprofessional works with group D. Then after a 20 minute lesson the Title I teacher and paraprofessional switch groups and the Title I teacher works with group D, while the paraprofessional works with group C. Focus of the lessons are always placed on increasing students literacy skills.
A range of skills are taught throughout the course of the year. Skills taught are: letter identification, letter sound identification, name writing and recognition, rhyme, phonemic awareness, concepts about print, vocabulary development, basic sight word recognition, sentence structure, writing simple sentences/stories, and text level reading. Skills taught are based on student need; as students' needs change, groups change to allow students to progress at their instructional level. The goal of kindergarten literacy is to lay a solid foundation of literacy skills so students can build upon the literacy skills as the student progresses in school with reading instruction.

According to Yopp, 1992, "...there is also substantial evidence that at least some level of phonemic awareness is a prerequisite for learning to read." Students must have a certain level of phonemic awareness in order to benefit from formal reading instruction. The relationship between phonemic awareness and learning to read is most likely one of reciprocal causation (Perfetti, Beck, Bell, & Hughes cited in Yopp, H., 1992, p.697).

Several studies have posed the question: "Can phonemic awareness be taught, or is it strictly a result of maturation?" The results from multiple studies have demonstrated children can be successfully trained in phonemic awareness. A study by Lundberg, (cited in Yopp, H., 1992) found children which received 15-20 minutes
of daily supplemental phonemic awareness activities outperformed students who did not participate in the training. The phonemic activities used were focused on the precise phonemic skill the teacher wants the students to achieve. Research on phonemic awareness activities suggests such activities will increase the students’ potential for success when learning to read.

**Reading Recovery**

Reading Recovery is a program developed by Marie Clay in the early 1970's. The program was developed in New Zealand. In 1984 with the help of Marie Clay and Barbara Watson, Reading Recovery was implemented in schools in Ohio. Reading Recovery continues to grow in the United States.

Reading Recovery is an individually designed series of lessons within a short-term intervention program for readers who experience reading difficulties in their first years of reading instruction (Lyons et al., 1993). Children in first grade are given an assessment with six components: letter identification, word test, dictation of sounds, timed writing (students are encouraged to write as many words as they can generate in 10 minutes), Concepts about Print, and an oral read to determine the student’s text level. This assessment known as the Observation Survey is then analyzed by the teacher. Students are then selected for the Reading Recovery program based on need. After
student selection the student receives daily, one-on-one reading/writing instruction by a trained Reading Recovery teacher. Reading Recovery is not intended to be a long-term or permanent program (Deford & Lyons, 1993). The reading lesson is 30 minutes daily with the program lasting between 12-20 weeks, depending on the student.

**First Grade Literacy Program**

Dr. Walter Cunningham School for Excellence supported first-grade students with a first-grade literacy program from 2006-2008. Two classrooms were supported by Title I teachers, while the other classroom was supported by a Special Needs teacher for the first-grade literacy program. During a 45 minute block of time the classroom teacher and the Title I or special needs teacher worked simultaneously on reading and writing instruction. Instruction for this program occurred daily with the students being instructed by the Title I and classroom teacher for 22 minute per lesson. Students were divided into two groups based on ability. These groups were flexible throughout the year depending on the needs of the students.

Phonemic awareness and writing skills were the focus for instruction during the 45 minute block of time. A major focus during instruction was placed on letter/sound associations and spelling patterns. A popular instructional strategy which promotes letter/sound
associations and spelling patterns is Making Words. During a Making Words lesson students are given the opportunity to manipulate letters to make new words. Emphasis can be placed on word families, blends, prefixes, suffixes, spelling patterns, etc. The teacher is responsible for leading the Making Words lesson for the entire year. The students are then monitored by the teacher as they work through the lesson. After a Making Words lesson is complete, the teacher can instruct the students to do a variety of activities with the words generated. Instruction varies depending on the skill the teacher wanted the students to master. Making Words is an effective instructional technique because it allows the students to manipulate the letters and see connections between multiple words.

Co-teaching

For the 2008-2009 school year the first-grade literacy groups transitioned into the Co-teaching reading block model. This model consists of a Title I or special needs teacher being assigned to a first-grade classroom during a 60 minute uninterrupted reading block. Initially the classroom teacher and the co-teacher collect and analyze student data to identify student’s needs. Students are then placed in groups based on individual needs. Instruction is planned to meet the needs of the groups. The classroom teacher and the co-teacher both provide reading instruction during this 60 minute block of time.
Collaboration of the classroom teacher and co-teacher is crucial to allow for the most efficient instruction to take place. Instructional needs are constantly changing based on the needs of students. Depending on the needs of students one teacher may be working on reading skills students are struggling with, while the other teacher works exclusively on guided reading instruction.

**Guided Reading Instruction**

Students within the classrooms at Dr. Walter Cunningham School for Excellence are placed in guided reading groups after the teacher has assessed each child and analyzed the results. Groups change as the need of students change and there are 3-4 students per group. Selection of text is critical for guided reading groups because the teacher needs a text which offers the student a limited amount of new ideas to learn. During a guided reading lesson the teacher introduces the text to a small group. The goal of guided reading is for students to become fluent readers who can problem solve strategically and read independently and silently (Fontas & Pinnell, 1998).

A guided reading lesson consists of three components: before lesson, during lesson, and after lesson. Comprehension strategies can be taught at any phase, depending on the text. The first component of a lesson is the teacher accesses and builds prior knowledge of the students. The teacher helps the students make connections to
personal experiences and develops vocabulary which supports the text being read. Predictions about the text and a “picture walk” take place in the before reading portion of a guided reading lesson. A picture walk allows the student to preview the book, while the teacher continues to develop vocabulary needed to read the text.

The second component, which occurs during the lesson, consists of the student reading the text. During this component of the lesson the teacher notes strategies or lack of strategies used by the students. After the initial oral read, the teacher returns to the text. Returning to the text allows the teacher to teach specific skills, discuss vocabulary of the text, and analyze the reading strategies the student used or didn’t use.

The third component of a guided reading lesson allows the teacher and students to discuss the text. Responses should connect new knowledge with what the student already knows. Students also revisit their initial predictions; this can be done orally or in written form. Popular end-reading strategies for informational text are graphic organizers such as webs, comparison charts, story maps, KWL charts, and writing.

**Students of Low SES—Role of Knowledge**

The role of knowledge, according to Neuman (2001), has been underestimated. Knowledge is defined as: “information, rules, and
beliefs in specific domains (e.g., knowledge about the natural world).” She presents the idea that the role of knowledge can be obtained through the use of informational text. Duke (1999) found access of informational text limited to low SES classrooms, but it is crucial for young learners to gain knowledge and have a better understanding of the world around them. Development of knowledge and concepts in early literacy lays a foundation for life-long learning. Neuman (2001) found the most effective programs had partnership factors with strong links to parents and communication among colleagues and teaching factors with time spent in small-group instruction with high student engagement (Taylor et al., 2000). The article by Neuman reinforces many of the early reading interventions being implemented at Dr. Walter Cunningham School for Excellence. The professional development workshops provided by Angela Maiers stressed the use of informational text for guided reading instruction. Angela Maiers provided teachers with a variety of strategies which would guide teachers in instructing students with the use of informational text. 

**Student-Parent-Teacher Connections**

Another piece of the puzzle for low SES students is parent connections. At Dr. Walter Cunningham School for Excellence teachers are required to make home visits at the beginning of the school year. During a home visit the teacher makes contact with the parent or
guardian and sets up an appointment to meet with them at the students home, if possible. At the home visit the teacher visits with the parent/guardian about the upcoming school year: expectations in the classroom, homework policy, procedures and sets goals for the student.

**Summary**

Dr. Walter Cunningham School for Excellence has implemented early reading interventions which research supports as good reading practices. The instructional methods in place have shown promising outcomes on student assessments, but unfortunately an achievement gap still remains as students’ progress through elementary school. How can the achievement gap be narrowed?

The staff continues to diligently analyze data, effectiveness of the interventions listed above, and search for other interventions which may enhance the initiatives already in place; which in turn, impacts student achievement.
Chapter 3—Current research findings

Introduction

As our nation continues to face academic shortfalls compared to other countries around the world, researchers continue to take a deeper look at what is good instruction for our children. No Child Left Behind has forced many school systems to analyze the reading and math instruction being used. Chapter 2 took a closer look at the interventions or instructional strategies Dr. Walter Cunningham School for Excellence currently has in place to increase reading achievement.

Chapter 3 will present current research for best teaching practices for early reading intervention. Research studied in chapter three will present teaching practices which have been proven to be effective in increasing student reading achievement. The researched teaching practices presented are early remediation, the positive impact of phonemic awareness instruction, instruction provided by paraprofessionals, and the effects of early childhood education.

Success of Early Remediation

According to reading research the first step to preventing reading disabilities must be to identify students as early as possible so intervention may take place. As cited in Bishop 82% of remedial children can become successful readers if intervention is provided in the early grades; only 46%, however, can be effectively remediated at
grades 3-5 (Foorman, Francis, Shaywitz, Shaywitz, and Fletcher, 1997). Combinations of predictive measures that correlate to reading achievement were identified based on review of the literature. Measures that represented letter identification and phonological processing were selected. Cited throughout this article were studies that prove early intervention is the key to student reading success in school. Educators must identify and reach children early. Time is of essence; delaying intensive, explicit instruction may have long-lasting negative effects on student success.

A study, conducted by Musti-Rao, S. and Cartledge, G., (2007), followed seven kindergarten students and one first-grade student identified to be at risk for reading failure. Enrollment at this Midwestern, urban school was 236 students, 72% of whom were African American. Each child received an additional 20 minutes of reading instruction 3 days a week. A typical lesson was 8 minutes of instruction focusing on phonological awareness, alphabetic understanding, and word reading; then 12 minutes of instruction emphasized further development of phonological awareness, writing development, and integration to letter-sound to whole word writing. The author states that early intervention needs to be explicit, intensive, and systematic in nature.
This research made it clear that supplemental reading instruction can improve student success. The use of paraprofessionals played a critical part in delivering early intervention. When teachers plan to utilize paraprofessionals in delivering instruction the teacher must take the time to effectively train the paraprofessionals in the instructional strategies being used to deliver instruction.

The stakeholders in the study were pleased with the outcome. The teachers saw an overall performance level of the student. The majority of parents who completed a survey were pleased with the progress their child made and wanted their child to continue with the supplemental program. The student enjoyed the supplemental reading program and expressed interest in being involved in the program the next year.

Limitations of the study were time constraints which always tend to be an obstacle when initiating supplemental support for students. Also, the type of program the researcher implemented was a skill and drill program which typically doesn’t allow for the development of language skills. If this were the only reading instruction for the child it could have negative effects on the child, but this was used as a supplemental reading program with the teachers of each child continuing to give reading instruction within the child’s classroom.
Phonemic Awareness in Elementary Students

Students must have a certain level of phonemic awareness in order to benefit from reading instruction. This article focused on the idea that phonemic awareness is both a prerequisite to and a consequence of learning to read.

When developing phonemic awareness activities the activity needs to facilitate a child’s ability to perceive that their speech is made up of a series of sounds. The teacher must identify the specific task to focus on during phonemic awareness instruction. This article provided many examples of activities to enhance a young child’s phonemic awareness. The examples provided are drawn in part from a series of activities created several years ago (Yopp & Ivers, 1988). The activities are categorized as followed: sound matching activities, sound isolation activities, sound blending activities, sound addition and substitution activities, and segmentation activities.

**Sound matching activities** instruct children to decide which of several words begin with a certain sound or identify words beginning with a particular initial sound. **Sound isolation activities** children must decide what sound occurs at the beginning, middle, or end of a given word. **Blending activities** requires the child to combine individual sounds to form a new word. An example of this would be given the isolated sounds /c/ /a/ /t/, the child blends the sounds
together to say, "cat". **Sound addition and substitution activities** allow the child to focus on sounds that make up their speech. **Segmentation activities** are the most difficult phonemic awareness task to perform. Children must do the reverse of blending. The child must take a word such as cat and segment the individual sounds.

When preparing phonemic awareness instruction the teacher needs to allow for individual differences. Research reveals a wide variation among children. The National Association for the Education of Young Children (1986), made the following general recommendations:

- Experiences should help develop a positive feeling toward learning.
- Activities should take place in a group setting that encourages interaction among children.
- The teacher should encourage the child's curiosity of language and their experimentation with it.
- Allow for individual differences.
- Activities should be fun and informal, not evaluative.
- Teachers are encouraged to use strictly oral activities with younger children. The use of visual symbols may distract younger children that have not been exposed too much written language.
Research on phonemic awareness activities suggests such activities will increase the students' potential for success when learning to read.

**Paraprofessionals and early intervention**

Only 36% of U.S. fourth graders performed at or above proficiency level in reading according to Perie, Grigg, and Donahue, 2005. A disproportionate performance is by race with whites at 41% and blacks at 13%. This article reported to what extent paraprofessionals effectively supplement instruction beyond basic decoding skills for second and third grade students, who must master the complexity of the alphabetic system. "Explicit and systematic phonics approaches to teaching these skills have been well validated (Foorman, Francis, Fletcher, Schatschneider, & Mehta, 1998; Torgesen, Wagner & Rashotte, 1997; Vellutino et al, 1996).

Twenty-six second and third grade teachers from nine urban, public elementary schools in the Northwest were asked to refer students who were below-grade level word reading skills. Forty-six students in second and third grade with low word-level skills were randomly assigned to 1 of 2 groups. The students received supplemental, phonics-based reading instruction. Instruction was provided by trained paraprofessional 4 days per week, for thirty minutes. Paraprofessionals used a set of scripted lessons. Each lesson consisted of fifteen minutes of phonics instruction and fifteen
minutes of oral passage reading. Students were assessed in September-October prior to completing the first intervention.

Students were assessed again in March at the conclusion of the first intervention and then again a third time in May-June after the second intervention. Measures administered in March and May were selected to assess the three central components of instruction: reading accuracy, fluency and spelling.

Students receiving the instruction made gains in reading accuracy and passage fluency. The students had three fourths of a standard deviation in performance beyond the no-treatment students. The results also showed a great advantage for second graders over third graders. This finding is consistent with other studies.

The implications of this study confirm paraprofessionals can have an impact on a students reading success. Paraprofessionals must be trained in the program to be effective. The research in this article supports the use of paraprofessionals to increase student achievement. Extended supported reading practice with paraprofessionals may move students closer to grade-level fluency. Given similar instruction the intervention appeared more effective with second grade students.

This article supports my belief that paraprofessionals can play an important role in assisting children in meeting academic success. The
key to successful use of paraprofessionals lies in the opportunity to
train and collaborate with them. Dr. Walter Cunningham School for
Excellence have paraprofessionals assist with student instruction, this
article stressed the importance of training the paraprofessional. When
paraprofessionals are properly trained the impact on student success
increases.

**Effects of Early Childhood Education**

*Early Positive Experiences*

Research provided by Ramey and Ramey explored the benefits
of early positive experiences by exploring the research question:
Can the cumulative developmental toll (children who have not had
early childhood experiences which promote a foundation for academic
success), experienced by socially defined high-risk children be
prevented or reduced significantly by providing systematic, high-
quality early childhood education that emphasized the seven essentials
from birth through kindergarten entry? The Abecedarian or ABC study
selected 111 high risk children in North Carolina. The children were
divided in to “treated” and “untreated” groups. The treated group was
enrolled in an early childhood center by 6 months of age. The
curriculum consisted of 500 specified activities in the areas of
cognition, fine motor development, social and self development, motor
development, and language.
During the first 9 months the two groups performed similarly, their performance was above the national average. Thereafter, there was a precipitous decline in the control group. By 18 months the control group was performing at the low end of the normal range, while the treated group did not decline. The children continued to be assessed through their preschool years using the Stanford-Binet IQ and the McCarthy General Cognitive Index. The treatment group averaged approximately 14 IQ points higher than the control group.

This study was of great interest because 98% of the children in this study were African American and have similar characteristics to the students I instruct. Staff is continuously discussing what can be done to increase student success in school. This study clearly shows the role of early, positive experiences is crucial in preventing "intellectual disabilities." Ninety-five percent of the children in the treatment group were in the normal range of cognitive abilities at all tested ages, while 90% of the children in the control group were in the normal range at 6 months of age, but steadily declines to 45% by age 4 years.

The study was replicated and the results continued to mirror the initial study. There are significant benefits for children who are high risk due to poverty, maternal education, and low maternal intellect. The information in this study allows for a good argument for early
childhood intervention, starting at 6 months of age and continuing to school age. Children from high risk families showed great gains when given the opportunity to attend the ABC preschool. Researchers did stress that not all early intervention programs have had such positive results. The article gave some reasons as to why some preschools do not get the same results. Less effective preschools typically did not have certified staff members, which were trained in early childhood education. Staff working with children must be delivery effective learning opportunities for the children at the preschools. Some preschools do not require early childhood certification and these preschools did not make equivalent gains. Research supports that preschools with a high success rate employ highly qualified staff members whom are delivering effective age appropriate curriculum to the children.

*Peer Tutoring*

Another instructional strategy found in the research literature is peer tutoring. This study investigated the effects of total class peer tutoring on students' sight word acquisition. The study also examined students' reading fluency and comprehension.

The study took place in an urban elementary school, located in a Midwestern metropolitan area. A majority of the school population were African American students. The students were in a second/third-
grade combination classroom with the targeted class having 14 African American students (8 girls and 6 boys). Out of the fourteen students five of the second graders and 1 third grader were identified for the study because of low test scores and participation in intervention the previous year. Another key point for this study is half of the class received special education services outside the general education classroom fifty to sixty percent of the school day. The general education teacher was the main implementer of the program, while the special education teacher monitored students.

After the students were selected for the study, peer tutoring training took place. Training for peer tutoring procedures involved demonstrations and role playing situations. Both the general education and the special education teachers were present during the intervention and helped facilitate the peer tutoring. Peer tutoring took place three times per week for thirty minutes. The tutoring sessions consisted of five components. Tutor huddles provided the tutors opportunities to learn and practice the words they were to teach their partner. Practice allowed the students to join their tutor and practice the words for 6 minutes. Testing took place after the students had practiced the words. After the students were tested the students counted the number of words identified correctly during testing and charted the number correct. Once an entire chart was completed
students were eligible for a tangible reward. The results for this study were positive. All study participants learned more words during peer tutoring than during teacher-led classroom instruction. Reading fluency and comprehension scores also increased. A parent questionnaire was administered and all the parents believed peer tutoring helped their child become better readers. According to the results of this study peer tutoring had positive affects and could be a cost effective way to increase reading scores with resources within our classrooms.

Summary

Instructional programs that were found to be effective in increasing student achievement were presented in chapter 3. The best teaching practices presented were: early remediation, the positive impact of phonemic awareness instruction, instruction provided by paraprofessionals, and the effects of early childhood education. Early remediation consists of providing children with positive early learning experiences and the use of peer tutoring. Some of the instructional techniques could be implemented in their entirety or educators may take the information presented and select techniques which could be implemented into current instructional strategies already in place. Educators must continue to stay current on academically sound programs and be willing to think outside the box to implement
programs which research has found to increase student achievement. Educators must review current research and strive to implement best teaching practices into their teaching practice.
Chapter 4

Introduction

Chapter three provided detailed overviews of current research for increasing student achievement, with the focus being primarily on increasing reading achievement. Dr. Walter Cunningham School for Excellence has initiated a range of learning strategies to impact student reading achievement. Initiatives presented in chapter three were:

- early remediation
- phonemic awareness instruction
- instruction provided by paraprofessionals
- early childhood education

Each initiative has been proven to increase student achievement and is a good teaching practice.

Chapter four will present three teaching strategies which research supports as good teaching practices and can be implemented at Dr. Walter Cunningham School for Excellence. Each teaching strategy presented in chapter four can be integrated into programs already implemented at Dr. Walter Cunningham School for Excellence. The three teaching strategies which will be presented are early intervention using the co-teaching model, use of paraprofessionals to increase student achievement, and explicit phonemic awareness
instruction. Research supports the use of these teaching strategies to increase student achievement. Each teaching strategy will be presented at length.

**Early Remediation in Kindergarten Literacy & Co-teaching**

Research supports the effectiveness of early intervention. The Kindergarten Literacy program, as well as the use of co-teachers and paraprofessionals, has been implemented at Dr. Walter Cunningham School for Excellence. In order to continue closing the achievement gap the programs should continue to be utilized. Intense and explicit instruction is critical for the programs to be successful and have an impact on student achievement.

Current research suggest that during a supplemental kindergarten literacy lesson a child receive phonological awareness, alphabetic understanding, word reading, and letter-sound to whole word writing learning experiences. When instructional planning takes place educators need to keep these four key components at the forefront of planning. Many early childhood resources are available for teachers to access. During instructional planning it would be beneficial to use a selection of resources which promotes meeting the individual needs of students. The research suggests that the success of the program lies in the explicit teaching strategies provided by the instructors delivering instruction and grouping students with similar
needs. Grouping of students is fluid throughout the program; students are continuously being monitored and groups of students changing based on their individual needs of the skill being taught.

Time for teachers to collaborate and discuss student progress promotes the success of co-teaching, but is also the most difficult to work into the weekly schedule of the teachers. When time constraints can be overcome, co-teaching is a powerful instructional strategy to increase student achievement. Utilizing the co-teaching model allows educators to better meet the individual needs of students.

**Paraprofessionals and Early Reading Interventions**

Paraprofessionals can play a critical role in delivering instruction. When utilizing paraprofessionals the teacher must take the time to effectively train paraprofessionals with the program or instructional strategy to be implemented. When paraprofessionals are properly trained, student achievement is increased. Explicit and systematic phonics approaches to teaching have been well validated through current research. Students in grades two and three benefited greatly from a supplemental phonics based reading instruction provided by a trained paraprofessional. A scripted phonics based program could be implemented by a trained paraprofessional.

When providing supplemental reading instruction, instruction needs to be consistent and students need to meet on a regular basis.
Teachers must work closely with the paraprofessional and continue to monitor student progress. Based on student progress teachers must continue to plan explicit instruction for the paraprofessionals to deliver. When three criteria are met trained paraprofessionals, explicit and daily instruction; research supports the impact on increased student achievement.

**Phonemic Awareness Instruction and Early Reading Intervention**

Early detection and remedial intervention has been proven to impact student achievement when students are identified early. The success rate of student achievement in grades kindergarten, one, and two is positive. Once a student has reached third grade and beyond research indicates the success rate of remedial intervention decreases greatly.

An abundance of research indicates the type of supplemental reading instruction and the time frame in which the intervention is administered will impact the success of the intervention. When implementing supplemental reading programs in kindergarten and grade one there are key components which should be present to increase student achievement. Most research suggests the importance of phonemic awareness instruction. Students must have a good understanding of letter-sound association, be able to identify sounds,
blend sounds, segment sounds in words, and substitute/isolate sounds in words. These skills are crucial for successful reading achievement; therefore, children who do not have a solid understanding of how words work will struggle with reading.

As children enter school educators can assess the child’s individual ability with a variety of assessments available. As children are assessed, educators can diagnose the strength and weakness of a child and use the information to guide instruction. Research supports the fact that early detection is crucial, so assessing students' ability is the first step for implementing instruction which will address a student’s academic needs. As educators plan instruction they must be conscious of implementing phonemic awareness instruction which will lay the foundation for reading instruction. Early detection is necessary or there could be long term effects on student achievement.

**Summary**

When students begin their academic journey, they come to school with a wide range of ability. Research has provided educators with many instructional strategies which can be implemented to successfully close the achievement gap amongst students. Some of the instructional strategies are easily integrated into the curriculum already being taught, while other supplemental reading strategies take a greater commitment. Even if the supplemental reading strategies
require a greater commitment research has proven the commitment pays off in student achievement.

Time is of essence when educators are searching for answers on how to increase long term student academic achievement. Research supports the fact that when effective, explicit instruction is implemented at the beginning of a student’s academic journey, students are more likely to overcome achievement gaps and have greater success in school. Research supports if interventions are not implemented in the early stages of a child’s education it becomes more difficult to close the achievement gap amongst students.

Providing effective staff development and training for staff which is delivering instruction is vital. The staff implementing the supplemental reading instruction must be competent for the instruction to be effective. Therefore school systems may have the initial expense of providing professional development for the staff.
Chapter 5

Introduction

The purpose of this chapter is to integrate current research into the initiatives already being used at Dr. Walter Cunningham School for Excellence. While studying current research there were three key instructional techniques presented in chapter 4 that have potential to impact student achievement and ultimately promote lifelong readers. Integrating current research strategies into the programs already being used at Dr. Walter Cunningham School for Excellence, as well as implementing new teaching techniques within the school could have a greater impact on student achievement.

Chapter 5 will present the use of the three key components presented in chapter four and integrate with the initiatives already in place at Dr. Walter Cunningham School for Excellence. The use of a kindergarten literacy program, phonemic awareness instruction, and paraprofessionals delivering reading instruction are three successful ways to close the achievement gap for early learners. Chapter five will describe how

- Kindergarten literacy skills
- Phonemic awareness instruction
- Paraprofessionals deliver reading instruction
will be integrated into the reading initiatives already in place at Dr. Walter Cunningham School for Excellence.

All of these recommendations depend on early detection. Early detection is a key component in preventing reading disabilities. If remediation occurs in the early grades of a child’s academic journey a child can become a successful reader. Therefore, a child’s literacy strengths and weaknesses should be assessed and analyzed in the early stages of his/her education. Intervention should take place immediately if weaknesses appear.

**Improving reading with Kindergarten Literacy**

There is strong evidence that suggests children benefit greatly from having the opportunity to attend an effective preschool. Unfortunately not all students have this opportunity; therefore, schools must find ways to effectively teach a range of abilities when a child enters kindergarten. Intervention in kindergarten is one way of meeting a child’s academic needs and can have a positive impact on student achievement. Dr. Walter Cunningham School for Excellence refers to this intervention as Kindergarten Literacy groups. When analyzing the current kindergarten literacy program the structure of the program is set, but the instructional content needs to be more specific and remain at the forefront of instructional planning.
Following are steps to be taken to improve kindergarten literacy instruction.

1. Assess and Analyze Ability

The first step to integrating a kindergarten literacy program is to assess and analyze the students' ability. At the beginning of each school year kindergarten students will be assessed using the D-PAT. Administration of the assessment will take place within the first two weeks of school. The data collected will be analyzed by the classroom and Title I teachers. Teachers will document each child's strengths and weaknesses. Teachers will then place students into homogeneous groups, which will remain flexible throughout the school year. At each quarter teachers will assess the students using the quarterly district assessments, as well as take anecdotal notes pertaining to individual abilities. The information gathered will allow teachers to continuously monitor and adjust kindergarten literacy instruction and groups. Teachers will be presented with a binder to keep assessments and anecdotal records pertaining to kindergarten literacy groups.

2. Consistency and Commitment

The second step is consistency and commitment. When implementing kindergarten literacy instruction research supports consistency and commitment to make the program most effective. Kindergarten Literacy instruction will take place Monday, Tuesday,
Thursday, and Friday for one hour. Two groups, containing a maximum of six students, will receive thirty minutes of teacher guided literacy instruction during this block of time. Research suggests smaller groups, but this is not always possible due to class size. Lower ability groups should have fewer students if possible.

3. Appropriate Instructional Content

The third step is the instructional content of the program. Instructional content is a key component for application of the kindergarten literacy program. Kindergarten literacy instruction will consist of:

- phonological awareness,
- alphabetic understanding,
- word reading, and
- letter sound to whole word writing learning experiences.

A child will receive instruction based on these components; therefore, educators must plan with these components guiding instruction. A lesson plan template will be provided for each teacher to ensure each lesson is focused on the research based components which have proven to increase student achievement. Each individual teacher will be allowed the freedom to plan the activities for each group, but each activity must be linked to one of the four major
components. Teachers are required to turn in weekly lesson plans allowing administrators to monitor content being taught.

**Phonological awareness** will focus on a range of phonics techniques. Students will be exposed to a range of word patterns and phonological skills which will allow the students to approach new text by making connections between letter sounds and parts of words. Phonemic awareness instruction for kindergarten literacy will emphasize letter-sound association, rhyme, categorizing picture cards by sounds, and a variety of other activities which will increase a students’ phonemic awareness.

**Alphabetic understanding** places the focus on individual letters and the sounds associated with individual letters. Students in kindergarten literacy groups will be provided with instruction that lays a solid foundation of alphabetic understanding. Students needing this component will be provided with instruction based on the alphabet promoting the student to understand that letters grouped together form words. Instruction beginning at the most basic form of letter identification, then letter-sound association, and moving instruction toward the understanding of putting letters together to form words.

Activities to increase alphabetic understanding will focus on individual letter identification and letter sound association. An example of instruction would be simply identifying letters, a student
having the ability to successfully write each individual letter, as well as verbally identify individual letters and sounds.

**Word reading** will be another component to focus on during kindergarten literacy. Instruction for word reading will consist of allowing students to work with sight words and extend to simple, age appropriate making words lessons. The Waterloo School District has provided a list of fifty sight words kindergarten students should master prior to first grade. During kindergarten literacy groups, students will be provided with lessons which will allow students to successfully master the fifty sight words. Instruction will provide students with a variety of word work activities. Some examples for instructing students are: use of magnetic letters to form sight words, use of white boards to practice writing and reading sight words, use of a variety of tactile letters and manipulatives which students use to construct the sight words.

4. *Continuous Assessment*

Success of the program depends on continuous assessment of the students' strengths and weaknesses. Instruction during this sixty minute block will be explicit and remain focused on the objective, which is based on the needs of the students in each group. Data collected must guide instruction, while keeping in mind the key components previously listed. Groups will remain fluid as the child's
needs continue to change throughout the school year, so should groups. The classroom teacher, along with the co-teacher, must continue to monitor student tasks. Collaboration between the classroom teacher and co-teacher is vital to gain optimum student achievement. Finding time for collaboration is the most challenging aspect of this intervention. Many of the studies conducted for research stated time constraints. With the support of the principal the goal within our building is to schedule one Wednesday a month for co-teacher meetings. One Wednesday a month will allow teachers to work together to guide literacy group instruction. Each co-teaching team is required to set up a time for collaboration to take place. Communication should remain open with a scheduled planning time meeting twice per month. Each meeting will be focused on student assessments and guiding further kindergarten literacy instruction. Planning sessions between teachers will be documented.

**Improving reading with Phonemic Awareness Instruction**

Explicit teaching of phonemic awareness is critical to lay the foundation for a successful reader. When implementing early literacy programs phonemic awareness instruction will be a core part of the curriculum/intervention. A lesson plan design will be provided to teachers at grades one and two so educators plan instruction based on the core components for effective instruction. Teachers are required
to submit weekly lesson plans allowing administrators to monitor instruction. Instruction will consist of phonemic awareness components, which are sound matching activities, sound isolation activities, blending activities, sound addition and substitution activities, and segmentation activities. When planning instruction for early learners, educators will include consistent, daily instruction linked to increasing phonemic strategies for the students he/she instructs.

In order for Dr. Walter Cunningham School for Excellence program to be more effective research states these components need to at the forefront of instruction. If the key components are explicitly taught, student achievement should increase. Therefore, it is critical teachers planning instruction find best teaching practices to obtain the objectives. Each lesson planned should include an activity which will promote the components stated above. Teachers will be provided with a list of the key components and a brief overview of each component. Key components for early literacy instruction are:

- Sound matching instruction
- Sound isolation instruction
- Blending instruction
- Sound addition instruction
- Sound substitution instruction
- Segmentation instruction
Listing the key components and providing the list to teachers will allow the teachers to access the key components when planning instruction for the students. Focusing instruction on these key components has proven to increase reading achievement. As teachers continue to build their professional resources, teachers at the primary level will select resources which can be utilized to teach these particular components. At Dr. Walter Cunningham School for Excellence there is a reading coach which is a great resource for teachers. As reading coach he/she is accessible to train and guide teachers in best teaching practices. When teachers are struggling to reach or teach students the reading coach will provide teaching techniques. The reading coach may also provide modeling or training for the teachers.

Educators must keep in mind the range of learning styles, as well as the range of student abilities. Lessons should include auditory, tactile, and visual opportunities for students. The lesson plan design specifically outlines the components necessary for instruction. Engaging students in the activities allows the student to have greater success with the lesson. Planning is a critical piece to increasing student achievement because the educator must continue to monitor and adjust instruction.

The ultimate goal is for each student to successfully reach a level of independence with each of the phonemic awareness components.
mentioned previously. Research strongly supports the correlation between student success and phonemic awareness. Educators must build this foundation in order for their students to be successful with reading; therefore teachers must guide his/her instruction based on these findings.

**Improving readers with the use of paraprofessionals**

Paraprofessionals can be a cost effective way to provide intervention for struggling readers. Research supports when paraprofessionals are properly trained in effective teaching strategies the impact on student achievement is positive. Dr. Walter Cunningham School for Excellence utilizes paraprofessionals when working with students, but training paraprofessionals to effectively work with students is a weakness. A developed program would greatly improve the effectiveness of the use of paraprofessionals. The obstacle to overcome is the time constraints and teachers not having the time to effectively train/communicate expectations and instructional techniques to the paraprofessionals. Implementing a schedule for providing training for paraprofessionals will enhance the instruction provided by the paraprofessionals, thereby enhancing academic achievement of the students. Providing guidance and training for paraprofessionals will take place on a rotation cycle. Each
grade level utilizing instruction provided by paraprofessionals will be responsible for the training.

At the beginning of the school year each grade level team utilizing paraprofessionals will meet with the paraprofessionals to explain the objectives of the program. The meeting will take place within the first three days of school, before students begin school. At this time the grade level team will give the paraprofessionals an overview of expectations for implementing instruction to students. Throughout the school year teachers will model the instructional strategies for the paraprofessionals. Paraprofessionals will observe teachers or the reading coach modeling a variety of teaching strategies used to increase student understanding of the key components.

Currently kindergarten is the only grade level using paraprofessionals to deliver instruction during kindergarten literacy. Each teacher on the grade level team, including the title I and special needs staff, will be responsible for training the paraprofessionals on one phonemic awareness component. The components being: sound matching activities, sound isolation activities, blending activities, sound addition and substitution activities, and segmentation activities. When training the paraprofessionals, the teachers will begin with the importance of each component and how it relates to reading. Then each teacher will provide paraprofessionals with activities that teach
the concept. Over the past four years teachers have purchased many resources which enhance the kindergarten literacy program. Teachers will model the use of each activity being presented. Paraprofessionals will be given the opportunity to gain a better understanding of the activity by watching the teacher use the activity with his/her students.

Training the paraprofessionals will take place during an in-service training or during teacher planning time. Responsibility for training paraprofessionals will be shared by the staff. Each teacher will be responsible for attending the beginning of year meeting and then providing one other training session during a school year. District guidelines/objectives will dictate when the training takes place.

Training of paraprofessionals will take place each time a new concept is introduced to students.

There is a minimum of six teachers delivering instruction during kindergarten literacy. This does not include the special education teachers which provide instruction during this block of time. Therefore each teacher, including title I staff, will be responsible for one key component of phonemic awareness and early intervention instruction. Paraprofessionals will be presented with the components that correlate with the districts small group instruction objectives. The objectives presented align with phonemic awareness instruction. Training provided by the teacher will consist of an overview of the key
components and learning strategies. Teachers will provide paraprofessionals with resources which will be used to increase student understanding. Teachers will be responsible for training the paraprofessionals using the resources provided for teaching the components of kindergarten literacy. The reading coach will circulate periodically during kindergarten literacy groups to encourage and clarify any confusions/questions which may arise during instruction. The reading coach is an asset because he/she is not responsible for instruction, therefore he/she has the freedom to circulate during instruction and provide additional guidance for both teachers and paraprofessionals.

In implementing this training paraprofessionals will feel more confident in delivering instruction and the paraprofessionals will gain a better understanding of phonemic awareness instruction. Just as professional development is crucial for teachers it should be crucial for paraprofessionals when he/she is being asked to deliver instruction to students. Student achievement may increase significantly if teachers take the time to effectively train the paraprofessionals.

**Summary**

Dr. Walter Cunningham School for Excellence has many good initiatives implemented. The three ideas presented for application in
chapter five are components which complement or enhance the teaching practices already in place. The three applications are:

- Improving reading with the use of kindergarten literacy instruction and sound instructional content
- Improving reading with the use of phonemic awareness instruction
- Improving reading with the use of paraprofessionals providing instruction.

As the school moves in to its second year utilizing the co-teaching model there must be a component built in to allow teachers to collaborate their instruction for optimum student achievement. As the school continues to utilize phonemic instruction educators must be trained with effective instructional strategies. As the school continues to utilize paraprofessionals for student instruction paraprofessionals must be provided with the tools and training he/she needs.

The mission is to close the achievement gap among students. To do so a school must always be willing to analyze and adjust the programs being utilized. With the integration of the previous applications the achievement gap amongst students may continue to narrow.
Bibliography


