

Using Houghton Mifflin and Reading First Instruction
To Improve ELL Kindergarten Students Literacy Skills

A Special Project

Presented to

Dr. Jack McPherson

Heritage University

In Partial Fulfillment

Of the Requirements for the Degree

Master of Education

Specialization in English as a Second Language

Maria Isabel Rivera

2008

MASTERS' PROJECT

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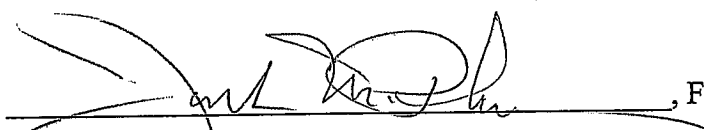
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Using Houghton Mifflin and Reading First Instruction
To Improve ELL Kindergarten Students Literacy Skills

Approved for the Faculty


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Dr. Jack McPherson

7-14-08, Date

ABSTRACT

The purpose of this experimental study was to determine the extent to which a group of ELL Kindergarten students improved reading literacy scores after receiving Houghton Mifflin (HM) literacy reading instruction, augmented with Reading First intervention instruction, compared with scores of ELL Kindergarten students who received instruction using only traditional HM curricula. To accomplish this purpose, a review of selected literature was conducted. Additionally, the DIBELS reading assessment was used to obtain baseline data from which related conclusions and recommendations were formulated. An analysis of data obtained supported the null hypothesis that ELL Kindergarten students who received reading instruction using the traditional HM curricula augmented with RF interventions showed no significant difference in DIBELS reading assessment scores compared with ELL Kindergarten students who received only HM traditional reading curricula.

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TABLE OF CONTENTS

	Page
FACULTY APPROVAL.....	ii
ABSTRACT.....	iii
PERMISSION TO STORE.....	iv
TABLE OF CONTENTS.....	v
LIST OF TABLES.....	viii
CHAPTER 1.....	1
Introduction	
Background on the Study.....	1
Statement of the Problem.....	2
Purpose of the Study.....	3
Delimitations.....	3
Assumptions.....	4
Hypothesis.....	4
Null Hypothesis.....	4
Significance of the Project.....	5
Procedure.....	6
Definition of Terms.....	7
Acronyms.....	8

	Page
CHAPTER 2.....	9
Review of Selected Literature.....	9
Introduction.....	9
No Child Left Behind.....	9
Reading and Second Language Learners.....	11
HM, RF, and other Reading Interventions.....	12
Brain-Based Learning.....	16
Summary.....	18
CHAPTER 3.....	19
Methodology and Treatment of Data.....	19
Introduction.....	19
Methodology.....	19
Participants.....	20
Instruments.....	20
Design.....	20
Procedure.....	21
Treatment of the Data.....	22
Summary.....	22
CHAPTER 4.....	23
Analysis of the Data.....	23
Introduction.....	23
Description of the Environment.....	23
Hypothesis/Research Question.....	24

Null Hypothesis	24
Results of the Study	24
Findings.....	28
Discussion.....	29
Summary.....	29
CHAPTER 5.....	30
Summary, Conclusions and Recommendations.....	30
Summary.....	33
Conclusions.....	30
Recommendations.....	32
REFERENCES.....	33

LIST OF TABLES

	Page
Table 1, Pre and Posttest DIBELS Reading Scores for Kindergarten Students January and May, 2007.....	25
Table 2, <i>t</i> -test for Independent Sample's DIBELS Scores for January, 2007...	26
Table 3, <i>t</i> -test for Independent Sample's DIBELS Scores for May, 2007.....	27

CHAPTER 1

Introduction

Background for the Project

According to the Office of Public Instruction (OSPI), the No Child Left Behind Act (NCLB) was a significant mandate reform that redefined the federal role in K-12 education. The Act which focused on closing the achievement gap for disadvantage and minority students was founded on four basic principles: strong accountability for records; increased flexibility and local control; expanded options for parents; and an emphasis on teaching methods that have been proven to work.

Houghton Mifflin (HM) and Reading First (RF) programs have been found to be beneficial for low performing schools. These programs required selecting and screening low performing students, and administering diagnostic, classroom-based instructional reading assessments to determine which students' in grades Kindergarten-3 were at risk of reading failure.

Reading has become one of the areas that must show progress according to the NCLB Act. Many methods of reading instruction and approaches had been questioned on their effectiveness with the improvement of student's performance. Learning to read has become a complex process which has presented many challenges to young learners. The reading process for English Language Learners

(ELL's) who were learning to read posed further challenges upon considering the linguistic and cultural backgrounds of ELL's were different from the language and culture implanted in the reading process.

Statement of the Problem

Ridgeview Elementary School (RES) was one of several schools in the Yakima School District (YSD) that had entered into the RF program for the first time during the 2005-2006 school year. According to the school report card Washington Assessment of Student Learning (WASL) reading scores for that school year were under 46 percent for grades three and five. Kindergarten students at RES were enrolled in an all-day program the majority of whom were Hispanic. More than 61 percent of kindergarten students at RES were reading below grade level. Identified in this population were many ELL's who's native language was Spanish. Reading has been crucial for a successful start in Kindergarten, the determination was made to address the need of reading literacy in the primary grades and help close the achievement gap.

Phrased as a question, the problem which represented the focus of the present study maybe stated as follows: To what extent did ELL Kindergarten students who received HM reading instruction, augmented with RF interventions, earn higher scores on the DIBELS reading assessment, when compared with ELL

Kindergarten students who received instruction using only the traditional HM curricula?

Purpose of the Study

The purpose of this experimental study was to determine the extent to which a group of ELL Kindergarten students improved reading literacy scores after receiving HM literacy reading instruction, augmented with RF intervention instruction, compared with scores of ELL Kindergarten students who received instruction using only traditional HM curricula. To accomplish this purpose, a review of selected literature was conducted. Additionally, the DIBELS reading assessment was used to obtain baseline data from which related conclusions and recommendations were formulated.

Delimitations

The present study included ELL Kindergarten students from two classrooms at RES and two participating Kindergarten teachers, including the researcher (Maria Isabel Rivera). The DIBELS assessment was used to obtain baseline data from the 2006-2007 school year. The study consisted of two groups, a control group and an experimental group. The control group (X) consisted of eleven ELL Kindergarten students who received reading instruction using only the traditional HM curricula. The experimental group (Y) consisted of eleven ELL

Kindergarten students who received reading instruction using HM curricula augmented with RF interventions.

Assumptions

The researcher made the assumption that the ELL students who received reading instruction using HM curricula, augmented with RF interventions would earn higher scores on the DIBELS assessment compared with the ELL students that only received the reading instruction using only the traditional HM curricula. A further assumption was made that both the writer (Maria Isabel Rivera) and the other participating Kindergarten teacher were both familiar with the HM and RF instructional approaches. Finally, the assumption was made that all participating ELL Kindergarten students gave their best effort when completing reading assignments and the DIBELS reading assessment.

Hypothesis

Kindergarten ELL's at RES who received reading instruction using a traditional HM curricula, augmented with RF interventions will earn higher scores on the DIBELS reading assessment, when compared with Kindergarten ELLs who received reading instruction using only the traditional HM curricula.

Null Hypothesis

Kindergarten ELL students who received reading instruction using the traditional HM curricula, augmented with RF interventions will show no

significant difference in DIBELS reading assessment scores compared with Kindergarten ELL's who received only HM traditional literacy reading curricula. Significance was determined for $p \geq$ at .05, .01, and .001 levels.

Significance of the Project

The NCLB act has imposed great pressure on schools and school districts to improve student performance in the area of reading. Increasing numbers of minority students in the public schools who require additional help with language and literacy have increased, challenging teachers to meet higher standards on state mandated high stakes tests. This study focused on the need to discover strategies and techniques that would benefit ELL students as well as other lower performing students in the area of reading.

Research conducted by Schuele & Boudreau (2005) concluded that providing intervention to children with poor phonological awareness as early as Kindergarten would benefit those students and would also lead to improvement in word decoding. Teachers in schools that adopted the RF program were aware that this program had been found to be a good predictor of later reading achievement. Accordingly, the present study could provide important information/data confirming the presumed beneficial results of the RF program

Educators at schools where the RF curriculum had been adopted knew the importance of using diagnostic tests that were "scientifically based" such as the

DIBELS. According to the DIBELS authors, the Phonemic Segmentation Fluency (PSF) and Nonsense Word Fluency (NWF) instructional approaches had been found to be a good predictor of later reading achievement.

Procedure

During Fall term, 2007 the researcher sought and received permission from Jill Sunwold, principal at RES, to undertake the present study and to utilize ELL Kindergarten student's DIBELS test results from the 2006-2007 school year. The researcher who was also the assigned teacher of one participating classroom with ELL Kindergarten students then invited another teacher to participate in the study using ELL students from a second Kindergarten classroom.

During November 2006, the researcher selected participating ELL Kindergarten students and organized them into control and experimental groups. Both control and treatment group received reading instruction five days a week throughout the school year. The treatment group received HM reading instruction augmented with RF interventions such as small group instruction as well as instruction which focused on letter and sound recognition given in the morning and afternoon, where as the control group received only traditional HM reading curricula. During January, 2007 both control and treatment groups were pre-tested using the DIBELS assessment. In May, 2007 both groups were post-tested.

For purposes of the present study only year-end DIBELS scores were used to compare the reading performance for each group.

Definition of Terms

Significant terms used in the context of the present study have been defined as follows:

DIBELS. The Dynamic Indicators of Basic Early Literacy Skills(DIBELS) are a set of standardized, individually administered measures of early literacy development.

ELLs. English language learner students whose first language is not English.

Experimental research. Research in which at least one independent variable is manipulated, other relevant variables are controlled, and the effect on one or more dependent variables is observed.

Houghton Mifflin. A reading curricula.

Reading First. A reading program.

t-test. Inferential statistics technique used to determine whether the means of two data groups are significantly different from one another.

t-test for independent samples. A parametric test of significance used to determine whether there is a significant difference between the means of two independent samples at a selected probability level.

Acronyms

AYP. Academic Yearly Progress

DI. Direct Instruction

DIBELS. Dynamic Indicators of Basic Early Literacy Skills

ELL. English Language Learners

GLE. Grade Level Expectations

HM. Houghton Mifflin

NAEP. National Assessment of Educational Progress

NCLB. No Child Left Behind

NRP. National Reading Panel

NWF. Nonsense Word Fluency

OSPI. Office of Superintendent of Public Instruction

PSF. Phonemic Segmentation Fluency

RES. Ridgeview Elementary School

RTI. Response-to-intervention

WASL. Washington Assessment of Student Learning

YSD. Yakima School District

CHAPTER 2

Review of Selected Literature

Introduction

The review of selected literature and research summarized in chapter two has been organized around the following topics:

No Child Left Behind

Reading and Second Language Learners

Reading Interventions-HM and RF Instruction

Brain-Based Learning

Summary

Data current primarily within the last 10 years were obtained through an online computerized literature search of Educational Resources Information Center (ERIC) as well as the Internet and ProQuest. A hand-search of selected research materials was also conducted.

No Child Left Behind

According to the United States Department of Education, the original Elementary and Secondary Education Act of 1965 has evolved into the No Child Left Behind Act of 2001. The NCLB Act which has been supported by President George W. Bush included the following important principles: reducing bureaucracy; allowing state flexibility; and expanding parent's choice in their

child's education. During the legislative process those initiatives were either changed or eliminated. The NCLB Act created new rules and regulations for schools as well as compliance costs. The essential elements of NCLB included annual state-level student testing, information reporting to the public, and a series of mandated sanctions for schools that failed to demonstrate adequate yearly progress (AYP) toward achievement benchmarks. No Child Left Behind mandates that states test students and report on the performance of various subgroups of student populations including ethnic minorities, those from low-income families, and students with limited English skills otherwise known as ELL's.

Abedi & Dietel (2004) concluded that NCLB Act held schools and teachers accountable for student achievement. Schools must help ELL students among other subgroups make continuous progress. States have been required to set targets for overall achievement. These targets would then determine whether the school achieved AYP. Students must be tested annually in reading and math and teachers must be qualified to teach core academic subjects in every classroom. An elementary teacher must have a bachelor's degree and pass a rigorous test in core curriculum areas. Middle and high school teachers must demonstrate competency in subjects they teach by passing a test or completing an academic major, graduate degree or comparable coursework. Teacher aides and other para-

professionals have been required to complete two years of college or equivalent training. Teachers in K-3 have been required to teach reading in accordance with “scientifically based” research. One goal this law established was that all children including ELL’s would achieve proficient in English language arts and math by the year 2014.

Reading and Second Language Learners

According to Constantino (1999), a prerequisite for reading skill has been familiarity with the primary language. Children who enter the public schools have typically faced the primary task of learning to read. A child who was a native-English speaker generally came to school with some oral proficiency in English. However, a child whose first language was not English entered Kindergarten with a possible set of reading readiness “tools” that did not serve the child in learning to read in English. The child must master the English language at a high level of proficiency to learn successfully. Said Constantino: “Acquiring a language is a process that is determined by two principle components: the brain and the learning environment” (p. 1).

The challenges ELL students faced when learning to read in English have included learning the English language along with the phonemic and phonological principles of the new language. A child’s perception of speech progress has evolved from holistic (i.e. focusing on shapes of syllables and words) to

segmental during the preschool years. This was important in reading alphabetic language, such as English, where letters corresponded roughly to phonemes (Snow et al.,1998).

The English language has relied on an alphabetic system which represented parts that made up spoken syllables rather than representing syllables as a unit. As cited by Snow et al:

Such a system poses a challenge to the beginning reader, because the units represented graphically by letters of the alphabet are referentially meaningless and phonologically abstract. For example, there are three sounds represented by the three letters in the word “but”, but each sound alone does not refer to anything, and only the middle sound can really be pronounced in isolation (p. 22).

Houghton Mifflin, Reading First, and other Reading Interventions

Houghton Mifflin has been one of the leading United States producers of published textbooks and other materials for teachers. The HM corporation has developed scientifically/research-based reading /language arts programs with proven results. These programs have provided teachers with a comprehensive instructional framework that has engaged all students in learning to read. One in four Americans have learned to read using HM programs (Houghton Mifflin, 2006).

The Office of Superintendent of Public Instruction (OSPI) has listed HM as one of several approved core reading programs. These programs have been closely aligned with Washington State grade level expectations (GLE). Also, HM literacy programs have consistently fostered the five critical reading elements of phonemic awareness, phonics, vocabulary, fluency, and comprehension.

Slavin (2003) has credited President Bush and Congress with the provision of funding for scientifically proven reading programs. Reading First was one of the favored programs which demonstrated impressive gains in reading proficiency in almost all grades and subgroups including Hispanics, African American, Disabled, ELLs, and the economically disadvantaged, to help in closing the achievement gap.

According to Blackman (1997), several research studies have linked deficiencies in phonemic awareness in Kindergarten and the early grades with poor reading achievement. Torgesen, Wagner and Rashotee (1994) reported in one study that children who began first grade with phonological awareness skill below the 20th percentile lagged behind their peers in word identification and word decoding. Phonological awareness can be improved through instruction and intervention that will lead to improvement in word decoding. Bus & VanIJzendoorn (1999) have called on practitioners to provide phonological awareness intervention to children with poor phonological awareness as early as

Kindergarten. Teachers needed to seek and implement research-based practices that were effective in children's literacy achievement.

Research conducted by Kamp et al.(1998) focused on using small-group reading instruction as an intervention for ELL's. This experimental/comparison study focused on secondary level and small group instruction. Participants included 318 first and second grade students from 16 schools over a five-year period. Ten schools were in the experimental group and six in the comparison group. The study was conducted in response to the increase in ELL students enrolled in the public schools which was also a result of the increased Hispanic population. According to the National Assessment of Educational Progress (NAEP) as cited in National Reading Panel (2000), students were not meeting proficiency reading standards, and were lacking specific skills needed to learn to read and perform adequately on assessments. These skills included phonemic awareness, phonics, vocabulary, comprehension and fluency.

A suggestion was made in the National Reading Panel (NRP) journal, that teachers should be sensitive to the fact that sounds of English and other phonetic languages are not the same. Intervention research has suggested that for students that have reading challenges, instruction should be (a) evidenced based, (b) explicitly taught, and (c) curricula should include a scope and sequence of essential reading skills (Foorman et al., 1998).

Torgesen (2000) observed that programs that provided direct instruction (DI) as well as the instructional environment could produce gains made by lower performing students. The number of hours intervention lasted and the intensity of the interventions also produced greater gains in reading performance by lower achieving students. This authority recommended “double doses” of daily intervention in smaller groups.

Fuchs et al. (2003) described another approach that integrated and organized critical components for all learners, this three tiered system, a response-to-intervention (RTI) model, provided guiding parameters for determining academic placement and instruction based on student progress. The first-tier involved primary instruction in general education using evidence-based strategies to help students learn to read. All students were part of this tier and those that did not reach academic benchmark were then assigned to the additional second-tier of instruction. The second tier of instruction was characterized by small group intervention provided by the teacher or the reading specialist. This tier provided targeted intervention that enabled students to “catch up”. Progress was monitored and measured by the percentage of benchmark mastery. Students that did not meet progress checks were then moved to tier-3. The third-tier model was characterized as long-term instruction which was provided by reading or special education instructors in individualized grouping.

The study examined the effects of school-wide three-tier intervention models at the Kansa Center for Early Intervention in Reading and Behavior. This authority concluded there were higher gains for ELL students that received small-group, secondary-tier, evidence-based interventions (Fuchs et al., 2003).

Brain Based Learning

Jensen (1998), as cited in Teaching With the Brain in Mind, contended that what the brain does best was to learn. The brain rewired itself each time something new was learned, such as a new experience, stimulation, and behavior that triggered a change in the brain.

According to Kotulak (1993) the left side of the brain processed rapid auditory information faster than the right. This skill was critical when separating the sounds of speech into distinct units of comprehension. The left hemisphere was responsible for language development.

Research conducted by Huttenlocher (1990) at the University of Chicago found that parents who talked to their infant often and used big words helped the child develop better language skills. This crucial time was what lead to a pathway for reading skills later on. Babies can learn to see, point, and say a word, yet they acquired little meaning until they could make later connections with life experiences. Babies listened to words even though they could not speak. All the

words, whether understood or not, contributed to language development that included syntax, vocabulary, and meaning.

Huttenlocher also researched the question of whether whole language or direct phonics instruction was more brain compatible. Although there was merit in both, a combination of each was best. Children that were exposed to new words developed the cells in the auditory cortex which helped to discriminate between sounds. Parents were encouraged to read to their children beginning at six months rather than waiting until they are four or five. Before puberty, most children will learn any language without an accent. The lightest nuances in pronunciation can be learned at that time. However, after puberty, most of the literacy connections needed have almost disappeared.

The more vocabulary the child hears from his or her teachers, the greater chance the child will retain the vocabulary for life. One way teachers can help students acquire more vocabulary was for them to model it, expect it, and make it part of the learning. Memory recall was another important element in the learning process. Teachers often assess students learning when they have demonstrated recall of what was taught. Instructional strategies can be used to retrieve learning, such as activation with rhymes, visualization, mnemonics, peg words, music, and discussion. Using the wrong retrieval process can lead to performance deficit (i.e. forgetting). Over time performance deficit can lead to a lowered self-image and

giving less of a full effort. Research has shown that links exist between memory skills, better self-esteem, and school achievement. Teachers were reminded of the strategy of using attitude, such as telling students “yes you can”, and using a more positive attitude reinforcement to motivate students (Huttenlocjer, 1990).

Summary

The review of selected literature presented in Chapter 2 supported the following research themes:

1. NCLB Act focused national attention on the importance of academic achievement, reporting to the public, and school and teacher accountability.
2. The challenges Second Language Learners faced when learning to read in English have included learning the English language along with the phonemic and phonological principles of the new language.
3. Intervention research suggested that for students that have reading challenges, instruction should be (a) evidenced based, (b) explicitly taught, and (c) curricula should include a scope and sequence of essential reading skills.
4. Introducing vocabulary during infancy assists in the development of memory, and in subsequently mastering language development and reading skills.

CHAPTER 3

Methodology and Treatment of the Data

Introduction

The purpose of this experimental study was to determine the extent to which a group of ELL Kindergarten students improved reading literacy scores after receiving HM literacy reading instruction, augmented with Reading First intervention instruction compared with scores of ELL Kindergarten students who received instruction using only traditional HM curricula. To accomplish this purpose, a review of selected literature was conducted. Additionally, the DIBELS reading assessment was used to obtain baseline data from which related conclusions and recommendations were formulated.

Chapter 3 contains a description of the methodology used in the study. Additionally, the researcher included details concerning participants instruments, design, procedure, treatment of data, and summary.

Methodology

An experimental design was used to determine the effectiveness a traditional reading curricula augmented with RF interventions improved ELL Kindergarten DIBELS literacy skills. A *t*-test for independent samples was used for data analysis to determine significance following pre- and posttest. All students were administered a pre-test in January 2007, and a posttest in May

2007. The pre and posttests were then assessed to determine any significant improvement in DIBELS reading skills.

Participants

Participants involved in the study were 22 ELL Kindergarten students from RES during the 2006-2007 academic year. The control group consisted of 11 ELL Kindergarten students and the treatment group also included 11 ELL Kindergarten students. Both groups were given reading instruction throughout the school year, five days each week. However, instruction of the treatment group was augmented with RF interventions five days weekly. Control and treatment groups included both boys and girls who primarily represented Hispanic ethnicity.

Instruments

The DIBELS reading assessment was utilized for administering pre- and posttests to determine significance. The DIBELS assessment was an approved testing instrument used by the YSD to assess Kindergarten literacy skills.

Design

Pre- and posttests for participating ELL Kindergarten students at RES were organized as follows:

Experimental group (X): 11 ELL Kindergarten students that received reading instruction using HM curricula augmented with RF interventions. .

Control group (Y) : 11 ELL kindergarten students that participated in reading instruction using only traditional HM curricula.

Procedure

Procedures employed in the present study evolved in several stages, as follows:

1. During Fall term, 2007 the researcher sought and received permission from Jill Sunwold, principal at RES, to undertake the present study and to utilize ELL Kindergarten student's DIBELS test results from the 2006-2007 school year.
2. The researcher who was also the teacher of one classroom of participating ELL Kindergarten students, then invited another teacher to participate in the study using ELL students from a second Kindergarten classroom.
3. During November 2006, the researcher selected participating ELL Kindergarten students and organized them into control and experimental groups. Both control and treatment group received reading instruction five days a week throughout the school year.
4. The treatment group received HM reading instruction, augmented with RF interventions, such as small group instruction as well as instruction which focused on letter and sound recognition given in the morning

and afternoon, where as the control group received only traditional HM reading curricula.

5. During January, 2007 both control and treatment groups were pre-tested using the DIBELS assessment. In May, 2007 both groups were administered the posttest. For purposes of the present study only year-end DIBELS scores were used to compare the reading performance for each group.

Treatment of the Data

A *t*-test for independent samples was used along with the windows STATPAK statistical software program that accompanied the Education Research: Competencies for Analysis and Applications, Sixth edition text (Gay, Mills, and Airasian, 2006). The *t*-test allowed the researcher to compare DIBELS scores for treatment and control groups essential for assessing the hypothesis and null hypothesis. The following *t*-test formula used to assess independent samples.

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\left(\frac{SS_1 + SS_2}{n_1 + n_2 - 2}\right)\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

Summary

Chapter 3 provided a description of the research methodology employed in the study, participants, instruments used, research design, and procedure utilized. Details concerning treatment of the data obtained and analyzed were also presented.

CHAPTER 4

Analysis of the Data

Introduction

This experimental study sought to determine the extent to which a group of ELL Kindergarten students at RES improved reading literacy scores after receiving HM literacy reading instruction, augmented with Reading First interventions . The DIBELS pre- and posttests scores were used to compare control and treatment groups of participating ELL Kindergarten students.

Description of the Environment

The study focused on 22 ELL Kindergarten students attending RES. The population included 11 ELL Kindergarten students from the researchers classroom and another 11 ELL Kindergarten students from a second teachers classroom. The researcher's class was provided reading instruction using HM curricula, augmented with RF interventions such as small group instruction augmented with twice a day instruction of phoneme segmentation, and letter and sound recognition. The control group received reading instruction using only HM curricula. Both teachers held Washington State Endorsement in Early Childhood Education.

Hypothesis

Kindergarten ELL's at RES who received reading instruction using a traditional HM curricula, augmented with RF interventions will earn higher scores on the DIBELS reading assessment, when compared with Kindergarten ELLs who received reading instruction using only the traditional HM curricula.

Null Hypothesis

Kindergarten ELL students who received reading instruction using the traditional HM curricula, augmented with RF interventions will show no significant difference in DIBELS reading assessment scores compared with Kindergarten ELL's who received only HM traditional literacy reading curricula. Significance was determined for $p \geq$ at .05, .01, and .001 levels.

Results of the Study

Table 1 displays the DIBELS pre- and posttest results for the 22 participating ELL Kindergarten students. Pre-test scores were obtained in January 2007, and posttest scores were obtained in May 2007.

Table 1

Pre- and Posttest DIBELS Reading Scores for Kindergarten Students

<u>Student number</u> <u>Group X</u> <u>(treatment)</u>	<u>Pre-test</u> <u>January 2007</u> Oral Reading Fluency	<u>Posttest</u> <u>May 2007</u> Oral Reading Fluency	<u>Student number</u> <u>Group Y</u> <u>(control)</u>	<u>Pre-test</u> <u>January 2007</u> Oral Reading Fluency	<u>Posttest</u> <u>May 2007</u> Oral Reading Fluency
1	18	34	1	13	25
2	8	41	2	12	20
3	20	53	3	1	2
4	29	38	4	9	23
5	16	49	5	15	39
6	34	87	6	37	51
7	31	63	7	72	83
8	62	55	8	26	39
9	20	25	9	35	66
10	26	39	10	24	17
11	33	44	11	22	34

Table 2 displays the results of the *t*-test for independent samples using the DIBELS reading scores in January 2007 and the distribution of *t* with 20 degrees freedom. Significance was determined for $p >$ at 0.05, 0.01, and 0.001 levels.

Table 2

t-test for Independent Sample's DIBELS Scores for January 2007

Levels of Significance	.05	.01	.001
<i>t</i> -value	.39	.39	.39
Degrees of freedom	2.086	2.845	3.850
Levels of Significance	.05	.01	.001
Null Hypothesis	Accepted	Accepted	Accepted
Hypothesis	Not supported	Not supported	Not supported

Table 3 displays the results of the *t*-test for independent samples using the DIBELS reading scores in May 2007 and the distribution of *t* with 20 degrees freedom. Significance was determined for $p >$ at 0.05, 0.01, and 0.001 levels.

Table 3

t-test for Independent Sample's DIBELS Scores for May 2007

Levels of Significance	.05	.01	.001
<i>t</i> -value	1.36	1.36	1.36
Degrees of freedom	2.086	2.845	3.850
Levels of Significance	.05	.01	.001
Null Hypothesis	Accepted	Accepted	Accepted
Hypothesis	Not supported	Not supported	Not supported

Findings

From an analysis of data obtained, a limited number of findings became apparent. Data presented in Tables 1, 2 and 3 were used to compare ELL Kindergarten students that received reading instruction using HM curricula, augmented by RF interventions were compared to ELL Kindergarten students that received reading instruction using only traditional HM curricula.

Table 2 identified the mean for groups X and Y in January, 2007. Treatment group X had a mean of 27.00 and control group Y a mean of 24.18. The degrees of freedom was 20 with a *t*-value of .39. Accordingly the determination was made there was no significant difference between treatment and control groups at $p > 0.05$, 0.01, and 0.001 levels.

Table 3 identified the mean for groups X and Y in May, 2007. Treatment group X had a mean of 48.00 and control group Y with a mean of 36.27. The degrees of freedom was 20 with *t*-value of 1.36. Accordingly the determination was made there was no significant difference between treatment and control groups at $p > 0.05$, 0.01, and 0.001 levels.

From these data, the researcher concluded that students who received reading instruction using HM curricula, augmented with RF interventions performed similarly to those that received reading instruction using only HM curricula.

Discussion

Data analyzed indicated January 2007 DIBELS *t*-test calculations demonstrated the hypothesis was not supported at $p > 0.05$, 0.01, and 0.001 levels. The *t*-test was again used for calculating May 2007 DIBELS scores for the control groups. Once again, the hypothesis was not supported and null hypothesis was accepted.

Summary

Chapter 4 provided a review of the environment, hypothesis, null hypothesis results of the study and discussion. An analysis of data obtained supported the null hypothesis that ELL Kindergarten students who received reading instruction using the traditional HM curricula, augmented with RF interventions showed no significant difference in DIBELS reading assessment scores compared with ELL Kindergarten students who received only HM traditional reading curricula.

CHAPTER 5

Summary, Conclusions and Recommendations

Summary

The purpose of this experimental study was to determine the extent to which a group of ELL Kindergarten students improved reading literacy scores after receiving HM literacy reading instruction, augmented with RF interventions compared with scores of ELL Kindergarten students who received instruction using only traditional HM curricula. To accomplish this purpose, a review of selected literature was conducted. Additionally, the DIBELS reading assessment was used to obtain baseline data from which related conclusions and recommendations were formulated.

Conclusions

From the review of selected literature presented in Chapter 2 and the analysis of data in Chapter 4, the following, conclusions were reached:

1. NCLB Act focused national attention on the importance of academic achievement, reporting to the public, and school and teacher accountability.

2. The challenges Second Language Learners faced when learning to read in English have included learning the English language along with the phonemic and phonological principles of the new language.
3. Intervention research suggested that for students that have reading challenges, instruction should be (a) evidenced based, (b) explicitly taught, and (c) curricula should include a scope and sequence of essential reading skills.
4. Introducing vocabulary during infancy assists in the development of memory, and in subsequently mastering language development and reading skills.
5. An analysis of data obtained supported the null hypothesis that ELL Kindergarten students who received reading instruction using the traditional HM curricula augmented with RF interventions showed no significant difference in DIBELS reading assessment scores when compared with ELL Kindergarten students who received only HM traditional reading curricula and instruction.

Recommendations

Based on the conclusions, cited above, the following recommendations have been suggested:

1. To continue to focus national attention on academic achievement, reporting to the public, and school/teacher accountability, educators should support and endorse the NCLB Act.
2. To ensure that ELL students receive the tools necessary to learn to read the English language, phonemic and phonological principles should be addressed.
3. To assist students who face reading challenges, instruction and intervention strategies should be evidenced-based, explicitly taught, and should include a scope and sequence of essential reading skills.
4. To improve language development and build vocabulary, parents and teachers should model it, expect it, and make it part of the learning at an early age.
5. School district personnel seeking information related to Intervention programs designed to help ELL's improve reading skills may wish to utilize information contained in this study or, they may wish to undertake further study more suited to their unique needs.

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