

Using the Reading Mastery Signatures Program
to Improve Kindergarten ELL Reading Performance

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FACULTY APPROVAL

Using the Reading Mastery Signature Program to
Improve Kindergarten ELL Reading Performance

Approved for the Faculty

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ABSTRACT

The purpose of this quantitative, experimental research study was to determine the extent to which Kindergarten English Language Learner DIBELS scores improved after implementation of the Reading Mastery Signatures program HES. To accomplish this purpose, a review of selected literature was conducted. Additionally, a *t*-test for independent samples was used to obtain and analyze baseline data from which related conclusions and recommendations were formulated. It was concluded that Reading Mastery Signatures program was not effective in improving Kindergarten English Language Learning DIBELS scores at HES.

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CHAPTER 1

Introduction

Background for the Project

For many years, the focus of policy debates relating to the reading education of English Language Learners (ELLs) has been on the question of language of instruction, contrasting bilingual and English-only approaches. As important as language instruction is, however, there has been a growing recognition in recent years that quality of instruction is at least as important as language of instruction in the ultimate success of ELLs. Quality instruction is the product of many factors, including the quality of teachers, class size, and other resources. One factor is the program of instruction used each day to teach reading (Cheung & Slavin 2003 p. 81).

In the above statement by Cheung & Slavin attention was called to the importance of quality instruction. Quality instruction has typically included the reading curriculum, qualified reading instructors, and small class sizes. Antunez (2002) has described the importance of reading skill as follows:

It is impossible to ignore the importance of literacy in education. Reading is the skill upon which success in every other academic area is based.

Study after study shows that students who cannot read by age nine are unlikely to become fluent readers, and have a higher tendency to drop out.

The above authorities and their statements have provided the context for developing literacy for English Language Learners (ELL) and second language learning which were the focus of the present study.

Statement of the Problem

The Teachers at Harrah Elementary School (HES) believed strongly that Kindergarten students who were struggling readers needed to have an effective curriculum to teach them to read. Intensive and strategic students were not making the gains expected when using the Open Court Reading Program (OCRP). The program was a spiraling curriculum, which meant that if a student did not pick-up the skill at that specific time the skill would be reviewed again later. However, this did not happen with many of the students at HES due to their frequent absences. Although small interventions were being used with OCRP, the teachers lacked the time and resources to effectively provide students the individual instruction and materials they needed to make adequate progress in reading, as indicated by their Dynamic Indicators of Basic Early Literacy Skills (DIBELS) assessments.

The OCRP had been in use at HES from 2000-2007. During this time the majority of students were not passing the Reading component of the Washington

Assessment of Student Learning (WASL). Parents and teachers were concerned, as only 32.9% of 4th grade students in 2007 met the standard. In 2007, HES adopted Reading Mastery Signatures (RMS) literacy program. The Mount Adams School District Superintendent and School Board wanted to know if RMS worked, and if more students were meeting the DIBELS reading standard with the implementation of the RMS program. Students who did not meet the standard, would not be successful in upper grade levels, causing grief to the next teachers who would have to “dumb down” the current curriculum causing extra stress, time, and effort on the teacher.

Phrased as a question, the problem which represented the focus of the present study, may be stated as follows: To what extent did Kindergarten DIBELS scores improve after implementing the Reading Mastery Signatures Program at Harrah Elementary School?

Purpose of the Project

The purpose of this quantitative, experimental research study was to determine the extent to which Kindergarten English Language Learner DIBELS scores improved after implementation of the Reading Mastery Signatures program HES. To accomplish this purpose, a review of selected literature was conducted. Additionally, a *t*-test for independent samples was used to obtain and analyze

baseline data from which related conclusions and recommendations were formulated.

Delimitations

The study was conducted at HES from 2006-2008. Student participants included 33 ELL Kindergarten students: 13 from 2006-2007 and 20 from 2007-2008. All ELL kindergarten students were included in this study. The researcher (Melissa J. Barnett) sought to determine the effectiveness of the Reading Mastery Signatures program implemented at HES during the 2007-2008 school year. To make this determination, Kindergarten DIBELS scores from 2006-2007 and 2007-2008 were compared.

Assumptions

The researcher believed that teachers at HES provided students with 90 minutes of reading instruction and fidelity to the given curriculum. The assumption was also made that the DIBELS test was administered in a consistent manner, three times each year throughout 2006-2007 by HES teachers. The researcher also believed that the teachers were highly qualified, competent, and trained to teach the RMS program. Finally, the assumption was made that HES students from 2006-2007 were generally comparable in terms of their reading ability with students tested in 2007-2008.

Hypothesis

Kindergarten English Language Learner DIBELS scores will be improved after implementing the Reading Mastery Signatures at Harrah Elementary School.

Null Hypothesis

There will be no significant effect on Kindergarten English Language Learner DIBELS scores due to the change in curricula from Open Court Reading to Reading Mastery Signatures at Harrah Elementary School. Significance was determined for $p \geq$ at 0.05, 0.01, and 0.001 levels.

Significance of the Project

The researcher chose the present research topic to determine whether changing the reading curriculum at HES was a benefit to ELL students. A great deal of money has been invested purchasing the Reading Mastery Signatures program and training teachers and paraprofessionals. Both school and district administrators wanted to know if Reading Mastery Signatures provided a significant change in the Kindergarten DIBELS scores 2007-2008 as compared to 2006-2007.

Procedure

During August 2008, the writer (Melissa J. Barnett) obtained permission from Mr. Charles Cook, the present HES principal, to undertake the present study. At this time, the researcher defined the basis of the study, hypothesis, null-

hypothesis, how participants were chosen, and identified expectations of each staff member. The DIBELS test scores were then obtained for 2006-2007 and 2007-2008 ELL Kindergarten students. Tables were organized to compare scores of students enrolled in Open Court Reading and Reading Mastery Signatures literacy programs. Data were obtained and analyzed from which related conclusions and recommendations were formulated and shared with the principal, reading coach, and Kindergarten teaching team.

Definition of Terms

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

direct instruction. Is a general term for explicit teaching of a skill-set using lecture or demonstration of material. Features of direct instruction include: explicit systematic instruction based on scripted lesson plans; the students are grouped and re-grouped based on their rate of progress through the program; and emphasis on pace and efficiency of instruction. DI programs are meant to accelerate student progress; therefore, lessons are designed to bring students to mastery as quickly as possible.

Dynamic Indicators of Basic Early Literacy Skills. The DIBELS assessment was defined as a standardized screen that measures early literacy

development that monitors the development of pre-reading skills focusing on phonological awareness, alphabetic understanding, and automaticity and fluency (Kaminski & Good, 1996, p.216).

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.

fluency. Fluency was defined as the effortless reading of words. Fluent readers grouped words into meaningful phrases and used expression and involved reading speed and accuracy of word identification.

No Child Left Behind. Is a United States federal law that was originally proposed by President George W. Bush on January 23, 2001. It enacts the theories of standards-based education reform which is based on the belief that setting high standards and establishing measurable goals can improve individual outcomes in education. The Act requires states to develop assessments in basic skills to be given to all students in certain grades, if those states are to receive federal funding for schools.

Open Court Reading. Is a comprehensive reading and writing program known for its systematic instruction in phonological and phonemic awareness and phonics.

quantitative research. The collection of numerical data to explain, predict and/or control phenomena of interest.

Reading Mastery Signatures. Uses direct instruction to help students develop into fluent, independent, and highly skilled readers. Reading Mastery has been a successful reading intervention program with a wide range of students, including significantly at-risk populations, for more than 35 years. Reading Mastery Signatures is appropriate for use as a supplemental intervention program or as a comprehensive core reading program.

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

Washington Assessment of Student Learning. Is a standardized educational assessment system that is also used as a high school graduation examination in the state of Washington. The WASL assessment consists of examinations over four subjects (reading, mathematics, science, and writing) with

four different types of questions (multiple-choice, short-answer, essay, and problem solving).

Acronyms

AYP. Adequate Yearly Progress

DIBELS. Dynamic Indicators of Basic Early Literacy Skills

EALR. Essential Academic Learning Requirement

ELL. English Language Learner

HES. Harrah Elementary School

LNF. Letter Naming Fluency

NCLB. No Child Left Behind

OCR.P. Open Court Reading Program

OSPI. Office of Superintendent of Public Instruction

RMS. Reading Mastery Signatures

WASL. Washington Assessment of Student Learning

W.L.P.T. II. Washington Language Proficiency Test

CHAPTER 2

Review of Selected Literature

Introduction

Several related research topics and themes emerged while conducting the review of selected literature. For example, research authorities placed great emphasis on the importance of the No Child Left Behind Act which has done much to advance the cause of reading achievement. Additionally, numerous theoretical and instructional approaches, including the Reading Mastery Signatures Program, have emerged to support the acquisition of second language learning. Each of these research subtopics has been discussed in depth on the following pages.

Data current primarily within the last five (5) years were identified through an online computerized literature search of the Educational Resources Information Center (ERIC), the Internet, and Proquest.

No Child Left Behind

The No Child Left Behind (NCLB) Act signed into law in 2001 by President George W. Bush, sought “To provide all children with a fair, equal, and significant opportunity to obtain a high-quality education” (US Department of

Education, 2002, p. 19). and included high expectations for all students. Further this law “mandated that every state needed to create their own set of high achievement standards that all students needed to meet” (US Department of Education, 2002, p. 16). In Washington State, the Essential Academic Learning Requirements (EALRs) were created as the academic standards for each grade level. The Washington Assessment of Student Learning (WASL) was created to test whether specific high academic standards were being learned by students.

(Washington State Office of Superintendent of Public Instruction, 2008).

Teachers at HES used the WASL and Dynamic Indicators of Basic Early Literacy Skills (DIBELS) assessments to identify where students needed support and to guide their instruction to focus on those areas where students were struggling to meet the standard.

Another component of NCLB required that schools and school districts were to be held accountable for making Adequate Yearly Progress (AYP) (US Department of Education, 2002, p. 17). Additionally, NCLB required teachers in K-12 schools to meet the definition of Highly Qualified Teacher through three criteria;

- 1) minimum of a bachelor's degree, 2) full state teacher certification, and
- 3) demonstrated subject matter knowledge in each core academic subject

assigned to teach, including in Bilingual, English as a Second Language and Special Education classrooms (Washington State Office of Superintendent of Public Instruction, 2008).

In compliance with NCLB, all HES teachers were highly qualified in the subject matter they were teaching. As discovered by the researcher, all HES teachers held at least a Bachelor's degree, Washington State teaching certification, and they demonstrated competency in their specific area of instruction.

An important requirement of NCLB was that “every student can read at grade level or above by the end of grade 3” (US Department of Education, 2002, p. 18). This mandate has guided reading instruction at HES. Funding and manpower has focused on implementing a reading model in Kindergarten through third grade that created a strong learning to read foundation in the early years, thereby preparing students for reading to learn later in elementary school.

Selected Theoretical and Instructional Approaches Supporting Second Language Acquisition

Wilson (2000) contended that language acquisition is a subconscious process not unlike the way a child learns language. Said Wilson: “language

acquirers are not consciously aware of the grammatical rules of the language, but rather develop a feel for correctness. In non-technical language, acquisition is 'picking-up' a language" (p. 2506).

Chomsky (1986) asserted that a substantial part of language acquisition must be innate. Said Chomsky: "the theoretical construct of Universal Grammar – the innate, generalized blueprint, common to all human brains" – is supported by the following observations:

1.)All human cultures, even primitive cultures, have complex, rule-governed language. 2.)Children, in natural settings, learn language rapidly and without formal instruction. 3.)If children are not exposed to rule-governed, complex language, they will create it. Children had no choice but to fill in their innate blueprint of the brain (pp.15-33).

Krashen (1981), an expert in the field of linguistics, specializing in theories of language acquisition and development concluded that first and second language acquisition took place in very similar ways. The central role of Krashen's theory was the concept of comprehensible input. As stated by Krashen:

The language learner needed language “input” which consisted of new language along with clues as to what the language meant, without those clues, the learner could not hear a lot of language without ever learning to understand it. Comprehensible input was the type of language that parents naturally supplied their children: it is slower and simpler, if focused on here and now, it focused on meaning over form, and it extended and elaborated on the child’s language (p 98).

Krashen claimed that comprehensible input was most effective just slightly beyond the learner’s current level of competence. When comprehensive input was written as “ $i + 1$.” If the input was too easy or too difficult, improvement was not promoted (Grognet, Jameson, et al., 2000, p. 41).

According to Piaget’s theory of universal developmental stages of cognitive reasoning, young children construct understanding in the context of their own activity. Young learners progress from concrete to more abstract thinking, from figurative to operative aspects of cognition. Therefore, students learn more easily when they can manipulate objects rather than use abstract thought. The implications of this theory were that English language learning should follow instructional approaches that progress from the concrete to the more abstract and employ rich learning experiences that develop cognitive

thinking. When the environment supported the learner, meaning was constructed in accordance with their background knowledge or use of their primary language to explain the complex thought (Hernandez, 2003, p. 139).

Baker & Hornberger (2001) quoted from a study by Cummins regarding linguistic development as follows:

It takes an average of five to seven years to acquire cognitive academic language proficiency (CALP), a level at which English language learners can use higher-order thinking skills — analysis, synthesis, evaluation, generalization, conclusion formulations, etc. — in language and thought. A lack of linguistic development in either primary or the English language can have negative effects on cognitive development (pp. 8-9).

No Child Left Behind (2001) provided that “all children will have a fair, equal, and significant opportunity to receive a high-quality education and reach, at a minimum, proficiency on challenging state academic assessments” (US Department of Education, 2002, p. 20). This statement also indirectly included English Language Learners. Specific skills must be learned to become a good reader, including: phonemic awareness, phonics, vocabulary, comprehension, and fluency” (National Reading Panel, 2000, p. 7). According to Gersten & Geva (2003), regardless of primary language children must learn these essential reading

skills and English-driven reading instruction should be linked with these skills has been linked to reading success.

Foorman, Francis, et al. (1998) suggested that students who face reading challenges can benefit from instruction that is “evidenced based, explicitly taught, and a curriculum that includes a scope and sequence of essential reading skills” (p. 45). According to these authorities programs that met those requirements included direct instruction (DI), and Reading Mastery Signatures (RMS). Both DI and RMS taught beginning word recognition skills by explicitly and systematically teaching phonemic awareness, phonics, and vocabulary skills.

Gunn, Biglan, et al. (2000) referenced an experimental study of 122 Kindergarten to third grade Hispanic and non-Hispanic struggling readers. As explained by these authorities:

After two years of small-group instruction with Reading Mastery and Corrective reading, the experimental group significantly outperformed the control group on letter identification, word attack, fluency, reading vocabulary, and passage comprehension. These findings demonstrate that systematic curriculum is a critical component of interventions for both ELL and non-ELL students who struggle with learning to read (p. 426).

Alphabetic knowledge has been viewed as central to linguistic development. This kind of knowledge included letter names, the knowledge of letter sounds, and the ability to access this information quickly and automatically. Letter naming knowledge, when measured in Kindergarten has proven one of the best predictors of future reading and spelling achievement (O'Connor & Jenkins, 1999). Kindergarten letter-name knowledge has become a significant predictor of reading achievement, not only in the early primary grades, but also throughout elementary school and even into the middle and high school grades (Ritchey & Speece, 2006).

Summary

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

1. The No Child Left Behind (NCLB) Act mandated that every state create its own set of high student achievement standards, and that every student was to read at grade level or above by the end of 3rd grade.
2. Theoretical and instructional approaches supporting acquisition of second language learning have emerged including Krashen's

comprehensible input, Chomsky's universal grammar, and Piaget's universal developmental stages of cognitive reasoning.

CHAPTER 3

Methodology and Treatment of Data

Introduction

The purpose of this quantitative, experimental research study was to determine the extent to which Kindergarten English Language Learner DIBELS scores improved after implementation of the Reading Mastery Signatures program HES. To accomplish this purpose, a review of selected literature was conducted. Additionally, a *t*-test for independent samples was used to obtain and analyze baseline data from which related conclusions and recommendations were formulated.

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

Methodology

The researcher used a quantitative, experimental research method where at least one independent variable was manipulated. Other relevant variables were controlled, and effects were observed on one or more dependent variable. Significance between control (X) and experimental (Y) groups was determined by

implementing and analyzing a *t*-test for independent samples. Both groups were administered a pre- and posttest. Group X received regular classroom instruction and Group Y received Reading Mastery Signatures intervention. This research was conducted during the 2006-2007 and 2007-2008 school years affecting Kindergarten English language learners (ELL). The control group included the ELL Kindergarten students enrolled at HES during 2006-2007 who were instructed using Open Court Reading program. The experimental group included the ELL Kindergarten students enrolled at HES 2007-2008 instructed using the newly implemented Reading Mastery Signatures program.

Participants

Participants in this study consisted of 33 Kindergarten ELL's who attended Harrah Elementary School (HES) during the 2006-2007 and 2007-2008 school years. Participants included a combination of male and female low income ELL students. The 2007-2008 Kindergarten students received Reading Mastery Signatures intervention. Teachers that administered Reading Mastery Signatures program were HES Kindergarten teachers. These individuals were trained by a qualified Reading Mastery Signatures trainer.

Instrument

The Dynamic Indicator of Basic Early Literacy Skills (DIBELS) assessment was used for measuring student scores on early pre-reading skills. This assessment tool was designed to establish a student's position in relation to predetermined benchmark reading acquisition levels. The DIBELS standardized test had been found to be reliable and valid. Information gained from the outcome of this test provided teachers with essential specific data that informed them about appropriate interventions.

For purposes of comparison, the letter naming fluency (LNF) test from the Kindergarten DIBELS assessment was utilized. Students administered the DIBELS screening assessment at the beginning (September), middle (January), and end (May) of the 2006-2007 and 2007-2008 school years. The LNF scores were the focus of this study. Students were individually screened by either their homeroom teacher or a para-professional.

Design

This experimental study involved a two-group pre- and posttest to determine the extent to which Kindergarten letter naming fluency DIBELS scores

increased following the implementation of the Reading Mastery Signatures program. The two pre- and posttest independent groups included:

Group X (i.e. control group):

This group, consisted of 13 ELL Kindergarten students from the 2006-2007 school year. These students received reading instruction using Open Court Reading (OCR) in small groups consisting of four to six students to one adult. The students remained with the same teacher throughout the duration of the school year except when the teacher was absent, and a substitute teacher trained in OCR would teach.

Group Y (i.e. experimental group):

Twenty ELL Kindergarten students from the 2007-2008 school year. These students received Reading Mastery Signatures (RMS) reading instruction in small groups consisting of four to six students to one adult. The students remained with the same teacher throughout the duration of the school year except when the teacher was absent, at that time a RMS trained substitute teacher would teach.

Procedure

The investigator (Melissa J. Barnett), conducted this quantitative experimental research study at Harrah Elementary School (HES) located in

Harrah, Washington. First, the researcher compared the DIBELS scores of Kindergarten ELL students from 2006-2007 to Kindergarten ELL students 2007-2008. Reading Mastery Signatures program was introduced at HES during the 2007-2008 school year. The premise of this study was to determine whether Reading Mastery Signatures was an effective reading program for ELL students.

Subsequent procedures employed evolved as follows:

1. August, 2008: permission to undertake this study was obtained from Mr. Cook, the Principal of HES. At this time, the purpose of the study was determined.
2. The researcher decided to compare Kindergarten ELL students LNF DIBELS scores from 2006-2007 and 2007-2008 to see if there was a significant difference changing curricula to Reading Mastery Signatures.
3. The researcher defined the basis of the study, hypothesis, null-hypothesis, how participants were chosen, and defined expectations of each staff member involved.
4. The researcher obtained DIBELS test results for 2006-2007 and 2007-2008 ELL Kindergarten students from the HES reading coach.

5. At this time, the DIBELS LNF scores were compiled and analyzed for significance .
6. A *t*-test for independent samples was chosen as an appropriate measurement tool for determining significance between the experimental and control groups.
7. Further analysis, related conclusions, and recommendations were then formulated during March and April 2009.

Treatment of the Data

A *t*-test for independent samples was chosen as an appropriate measurement tool for determining significance between the experimental and control groups. The researcher used the Windows STATPACK statistical software program and the text, Educational Research: Competencies for Analysis and Applications (Gay, Mills, & Airasian, 2006) for interpreting the data compiled from the *t*-test results for significance levels $p \geq$ at the 0.5, 0.01, and 0.0001 levels.

To test the null hypothesis which would show no significance difference between the Reading Mastery Signatures experimental group and the Open Court Reading control group, a *t*-test for independent samples was performed a second time. The following formula was implemented to test for significance:

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

Summary

Chapter 3 provided a description of the research methodology employed in the study, participants, instrument used, research design, and procedures 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 Kindergarten English Language Learner DIBELS scores improved after implementation of the Reading Mastery Signatures program HES.

Chapter 4 was organized to include the following: Description of the environment; hypothesis; null hypothesis; results of the study; findings; and summary.

Description of the Environment

Educators at Harrah Elementary School (HES) in Harrah, Washington, believed a change of curriculum was needed for English Language Learners (ELL) students to become proficient in reading as assessed by DIBELS. Participants involved in the study include a total of 33 ELL students. Most of the students lived on the Yakama Nation Indian Reservation, where the elementary school was located. At HES 65.5% of students were Native American, 25.3% Hispanic, 8.8% White, and 0.4% Black. The area was a low-income with 84% of students who received free or reduced lunch. 13.9% of students were Transitional

Bilingual. There was very little parent involvement, and HES was the only elementary school in the Mt. Adams school district.

The control group (Group X) included 13 Kindergarten students from the 2006-2007 school year and (Group Y) consisted of 20 Kindergarten students during the 2007-2008 school year. Control and treatment groups included both boys and girls who qualified as an ELL student as deemed by the Washington Language Proficiency Test (WLPT –II).

Hypothesis

Kindergarten English Language Learner DIBELS scores will be improved after implementing the Reading Mastery Signatures at Harrah Elementary School.

Null Hypothesis

There will be no significant effect on Kindergarten English Language Learner DIBELS scores due to the change in curricula from Open Court Reading to Reading Mastery Signatures at Harrah Elementary School. Significance was determined for $p \geq$ at 0.05, 0.01, and 0.001 levels.

Results of the Study

A *t*-test for independent samples was calculated to compare the level of significance between experimental and control groups. *Figure 1* disclosed the

results of the *t*-test while Table 1 represented the distribution of *t* with 31 degrees of freedom. Significance was not determined for $p \geq 0.05$, 0.01, and 0.001.

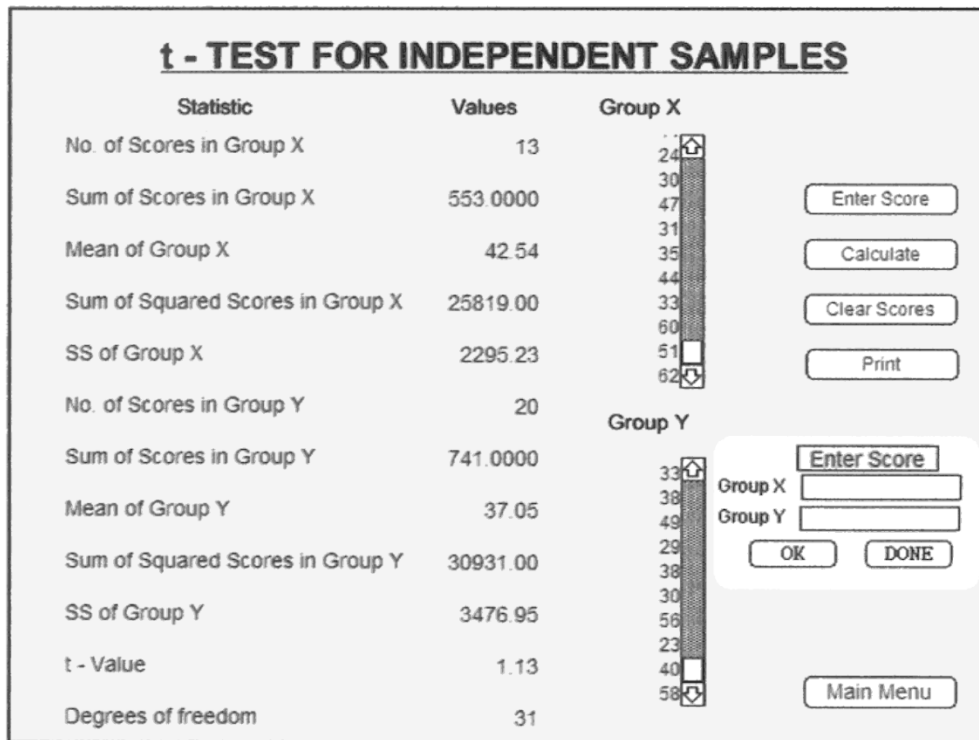


Figure 1. Summary of *t*-test for Independent Samples

Figure 1 displayed 13 scores for Group X (experimental) and 20 scores for Group Y (control).

The Sum of Scores for X was 553 and Y was 741. The mean of Group X was 42.54 and Group Y was 37.05. The Sum of the Squared Scores in Group X was 25,819 and the Sum of the Squared Scores in Group Y was 30,931. The degree of

freedom was 31 and the t value was 1.13. The values used to determine significance were published in the textbook Educational Research: Competencies and Applications (Gay and Airasian, 2003, p. 571). Table 1 represented the t value with 31 degrees of freedom used in the study.

Table 1.

Distribution of t with 31 Degrees of Freedom

Distribution of t with 31 Degrees of Freedom			
	p		
df	0.05	0.01	0.001
31	2.042	2.750	3.646

The t -test was used to compare treatment and control groups. The t -value was at 1.13 as noted in *Figure 1*, and the degrees of freedom at 0.05, 0.01, and 0.001, as noted in Table 1. Significance was not determined at the $p \geq 0.05$ level of 2.042, 0.01 level of 2.750, or 0.001 level at 3.646. Accordingly, the null hypothesis was accepted at all levels and the hypothesis was not supported at any level.

Findings

Data obtained were used to compare whether implementation of Reading Mastery Signatures program during the academic year 2007-2008 improved pre-reading skills for ELL Kindergarten students as reflected on the DIBELS LNF standardized test. Data revealed that the experimental group (Y) mean, 37.05, was below the control group (X) mean, 42.54. Through statistical analysis, it was determined that no significant difference occurred between the experimental group and the control group at all levels of $p \geq 0.05$, (2.042), 0.01 (2.750), and 0.001 (3.646). The findings did not support the hypothesis at any level of $p \geq 0.05$, 0.01, and 0.001. The null hypothesis was accepted at levels of $p \geq 0.05$, 0.01, and 0.001.

Summary

Chapter 4 reviewed and detailed the description of the environment, hypothesis, null hypothesis, results of the study, and major findings.

1. The hypothesis was not supported (i.e., Kindergarten English Language Learner DIBELS scores will be improved after implementing the Reading Mastery Signatures at Harrah Elementary School).

2. The null hypothesis was accepted (i.e., There will be no significant effect on Kindergarten English Language Learner DIBELS scores due to the change in curricula from Open Court Reading to Reading Mastery Signatures at Harrah Elementary School).
3. The fundamental research question on which the study focused was answered in the negative. The research indicated that the treatment had a negative impact on intervention group student performance.

CHAPTER 5

Summary, Conclusions, and Recommendations

Summary

The purpose of this quantitative, experimental research study was to determine the extent to which Kindergarten English Language Learner DIBELS scores improved after implementation of the Reading Mastery Signatures program HES. To accomplish this purpose, a review of selected literature was conducted. Additionally, a *t*-test for independent samples was used to obtain and analyze baseline data from which related conclusions and recommendations were formulated.

Conclusions

From research findings presented in Chapter 2 and an analysis of data presented in Chapter 4, the following conclusions were reached:

1. The No Child Left Behind (NCLB) Act mandated that every state create its own set of high student achievement standards, and that every student was to read at grade level or above by the end of 3rd grade.

2. Theoretical and instructional approaches supporting acquisition of second language learning have emerged including Krashen's comprehensible input, Chomsky's universal grammar, and Piaget's universal developmental stages of cognitive reasoning.
3. The hypothesis was not supported (i.e., Kindergarten English Language Learner DIBELS scores will be improved after implementing the Reading Mastery Signatures at Harrah Elementary School).
4. The null hypothesis was accepted (i.e., There will be no significant effect on Kindergarten English Language Learner DIBELS scores due to the change in curricula from Open Court Reading to Reading Mastery Signatures at Harrah Elementary School).
5. The fundamental research question on which the study focused was answered in the negative. The research indicated that the treatment had a negative impact on intervention group student performance.

Recommendations

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

1. Since President Bush mandated the No Child Left Behind (NCLB) Act, educators should recognize the adverse impact on second language learners because of the high-stakes connected with the Washington Assessment of Student Learning (WASL).
2. Teachers need to become familiar with English Language Learner (ELL) acquisition strategies recommended by ELL theorists to provide support that will facilitate optimum second language acquisition.
3. According to the research findings, the Reading Mastery Signatures Program should be revisited because there was negative student impact and no significant difference was found between the experimental and control groups.
4. Educators seeking information related to the extent to which Kindergarten English Language Learner DIBELS scores improved after implementation of the Reading Mastery Signatures program may wish to utilize information presented in this study or, they may wish to conduct further research more suited to their unique needs.

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