Utilizing Selected Houghton Mifflin Instructional Interventions to Improve

> Reading Fluency of Spanish Readers

A Special Project<br>Presented to<br>Dr. Jack McPherson<br>Heritage University

## In Partial Fulfillment

Of the Requirements for the Degree of Master of Education Specialization in Bilingual Education

Irma Alcalá-Badillo

## FACULTY APPROVAL

Utilizing Selected Houghton Mifflin Instructional Interventions to Improve

Reading Fluency of Spanish Readers

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Approved for the Faculty
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``` Faculty Advisor
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#### Abstract

The purpose of this descriptive research study was to determine the extent to which selected HM instructional interventions improved the reading fluency of participating $1^{\text {st }}$ grade Spanish readers. To accomplish this purpose, a review of selected literature was undertaken. Additionally, essential baseline data were obtained and analyzed from which related generalizations, conclusions and recommendations were formulated.

The analysis of baseline data support the hypothesis that $1^{\text {st }}$ grade students how were instructed when utilized selected HM intervention strategies demonstrated improve Spanish reading fluency skills.


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## CHAPTER 1

Introduction

## Background for the Project

A review of first $\left(1^{\text {st }}\right)$ grade English and Spanish reading data at BargeLincoln Elementary School (BLES) in Yakima, Washington, indicated Spanish readers had fallen behind their English reading peers in obtaining end of the year fluency goals. However, an ongoing comparison of 2008-2009 Spanish and English readers at Barge-Lincoln has shown that Spanish readers have been gradually closing the gap between the target level of reading proficiency and reaching the goal of 40 words read per minute at the end of $1^{\text {st }}$ grade.

The No Child Left Behind (NCLB) federal law was signed by President Bush on January 8, 2002. This law reformed the focus of the educational system in the United States as follows:

A primary focus of this law is the requirement that school districts and individual schools use effective research-based reading remediation programs so all children are reading at grade level by the end of third grade. The law authorizes funds to provide assistance to State educational agencies and local educational agencies in establishing reading programs for students in kindergarten through grade 3 that are focused on scientifically based reading research, to ensure that every student can read
at grade level or above no later than the end of grade 3 (Wrightslaw: No Child Left Behind, p. 73).

The need to close the achievement gap in reading proficiency among $1^{\text {st }}$ grade Spanish reader at BLES combine with the NCLB initiative to improve reading programs in the primary grades have served to provide a research context for the present study.

## Statement of the Problem

Barge-Lincoln Spanish reading students needed to meet Washington State Indicadores Dinámicos del Éxito en la Lectura (IDEL) benchmarks. To accomplish this objective, BLES administrators decided to implement selected instructional interventions to help Spanish readers to read fluently. These interventions, adopted from Houghton Mifflin (HM), included letter naming and sounds, high frequency words, templates, reading accuracy and fluency (Biblioteca Fónetica/Phonics Library, and Me Encanta Leer/I love to read). The students that qualified for these interventions were administrated the Language Assessment Scales (LAS) test. The test indicated the reading-level and ${ }^{\text {st }}$ grade reading placement for each participating student.

The problem which represented the focus of the present study may be as follows: To what extent did select HM instructional interventions improve the reading fluency of participating $1^{\text {st }}$ grade Spanish readers?

## Purpose of the Project

The purpose of this descriptive research study was to determine the extent to which selected HM instructional interventions improved the reading fluency of participating $1^{\text {st }}$ grade Spanish readers. To accomplish this purpose, a review of selected literature was undertaken. Additionally, essential baseline data were obtained and analyzed from which related generalizations, conclusions and recommendations were formulated.

## Delimitations

To deliver an effective reading intervention program for BLES Spanish readers, a team of reading specialists and the classroom teacher and researcher (Irma Alcalá-Badillo) analyzed data obtained during the 2008-2009 school year. The use of research-based reading practices, language acquisition strategies, and weekly diagnostic tests were used to measure the effectiveness of the selected HM interventions. Additionally, IDEL progress monitoring was used to monitor each student's progress on a weekly basis to measure accuracy and reading fluency gains as well as to pinpoint gaps in reading skills.

Conclusions reached as result of this data analysis could prove important in determining whether or not BLES and Yakima School District (YSD) teachers and administrators should limit or expand the use of selected HM instructional intervention to improved Spanish readers fluency in the future.

## Assumptions

The assumption was made that the students selected to participate in this study had similar characteristics which included, Spanish ethnicity, low socioeconomic level, 6-7 years of age, and low reading fluency skills. The researcher, who also served as the participating student's $1^{\text {st }}$ grade teacher, was an experienced native Spanish speaker, and qualified to instruct students in HM Spanish interventions. Finally, it was assumed the interventions were based on the specific needs of each student in the area of reading.

## Hypothesis or Research Question

Participating $1^{\text {st }}$ grade students who were instructed when utilizing selected HM interventions strategies will show improved Spanish reading fluency skills.

## Significance of the Project

The result of this investigation will hopefully prove beneficial for BLES and YSD administrators and teachers for determining: how to provide guidance regarding interventions used to close the reading proficiency gap between Spanish and English readers; and, to indicate the extent to which the $1^{\text {st }}$ grade reading level goal of 40 words per minute at the end of the first school year was achieved. Also, other schools who serve a similar student population may benefit from the research by understanding that early interventions may provide an answer for helping students to overcome reading limitations.

## Procedure

During June, 2008, the writer (Irma Alcalá-Badillo) obtained permission from Mrs. Netty Hull, Principal of BLES, to undertake the present study. At that time, the writer defined the purpose of the study, hypothesis, and the characteristics and selection of participants. The IDEL test scores were then obtained for 2008-2009 and used to determine the extent to which selected HM instructional interventions improved the reading fluency of participants. Data obtained and analyzed were then used to formulate conclusions and recommendations which were shared with the principal, reading specialist, and $1^{\text {st }}$ grade reading teaching team.

## Definition of Terms

Significant terms used in the context of the present study have been defined as follows:
benchmark. Levels of academic performance used as checkpoints to monitor progress toward performance goals and/or academic standards.
direct instruction. is a behaviorist instructional design model for classroom teaching
descriptive research. Research that determines and describes the way things are; involves collecting numerical data to test hypotheses or answer questions about the current subject of study.
descriptive statistics. Data analysis techniques that enable a researcher to meaningfully describe many pieces of data with a small number of numerical indices.
fluency. Fluency was defined as the effortless reading of words. Fluent readers group words into meaningful phrases and use expression and involved reading speed and accuracy for word identification.

Houghton Mifflin. The publishing company that produced selected instructional materials used to improve Spanish readers proficiency in the present study. These materials were designed to meet the needs of each reader with the latest in scientifically-based, explicit instruction. Powerful intervention resources were combined with built-in assessment tools and a wealth of leveled literature to assure that intervention were highly effective and easily manageable.

Indicadores Dinámicos del Éxito en la Lectura. The IDEL is the Spanish version of Dynamic Indicators of Basic Early Literacy Skills (DIBELS). This 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 (Kaminiski \& Good, 1996, p. 216).
intensive reader. Students who read below target and grade-level.
No Child Left Behind. This law reformed the focus of the educational system in the United States by requiring school districts and individual schools to
use effective research-based reading remediation programs so all children are reading at grade level by the end of third grade.
progress monitor. Progress Monitor (PM) allows teachers to closely monitor students' fluency development through regular assessment as often as once a week, using grade-level passages.

Professional Leadership Committee. A grade-level meeting where the team discusses different student related issues and possible recommendations and solutions.

Response to Interventions. A team of specialist who develop and support an intervention plan to help students in different areas such as speech, counseling, and special needs.

## Acronyms

BLES. Barge-Lincoln Elementary School.
FLO-TLP. Fluídez en la Lectura Oral.
FPS-TSL. Fluídez en las Palabras sin Sentido-Total de Sonidos de Letras
Correctos.
FPS-NPC. Fluídez en las Palabras sin Sentido-Número de Palabras Correctas y Completas leídas.

FSF-TLP. Fluídez en la Segmentación de Palabras-Todas las Partes.

FSF-SíL. Fluídez en la Segmentación de Palabras-Partes Silábicas.
HM. Houghton Mifflin.
IDEL. Indicadores Dinámicos del Éxito en la Lectura.

PLC. Professional Leadership Committee.
PM. Progress monitoring.
RTA. Response to Interventions.
YSD. Yakima School District.

## CHAPTER 2

## Review of Selected Literature

## Introduction

Research topics and themes that emerged while conducting the review of selected literature focused primarily on factors involved in reading development and second language learners. For example, a discussion of several approaches used to teach children to read has been explored. As the present study has been concerned with teaching second language learners, instruction related to the unique needs of this population have also been discussed.

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.

## Research on Reading Development

As educators it has become essential to understanding various approaches to teaching reading and how to provide students with the strategies necessary to become proficient readers. Teachers must have the knowledge to teach intentionally when students struggle to reach grade-level reading expectations. Teachers must provide extra activities, time, practice and feedback for those students (National Reading Panel, 2000).

One of the references used in this investigation was a report published by the National Reading Panel - Teaching Children to Read, an evidence-based assessment of scientific research literature on reading and its implications for reading instruction. This guide has focused on areas of instructional intervention needed to teach students to succeed in reading. If students do not master these fluency skills, they will struggle to succeed. In a related study, the National Institute of Children Health and Human Development (NICHD) identified specific strategies proven successful in reading instruction. In consultation with the Secretary of Education, the NICHD convinced a national panel to analyze the research-based knowledge and effectiveness of some approaches used to teach children to read, some including: Alphabetic - Phonemic Awareness Instruction; Phonics Instruction; Fluency; Comprehension - Vocabulary Instruction; Text Comprehension Instruction; Teacher Preparation and Comprehension - Strategies Instruction; Teacher Education and Reading Instruction; and Computer Technology and Reading Instruction (National Reading Panel).

Based on the study of scientific research in the areas mentioned above, the National Reading Panel found that "phonemic awareness and letter knowledge were the two best school-entry predictors of how well children will learn to read during their first 2 years in school" (p. 2.1). Also, these authorities stated that "teaching children to manipulate phonemes in words was highly effective across all the literacy domains and outcomes" (p.2.3). The Panel concluded that
phonemic awareness instruction can be effectively used to teach under different conditions and with different learner populations. The investigation emphasized how important it was for students to master the names and sounds of letters. This knowledge was deemed essential for transferring comprehension to reading and spelling, and has been used as foundational pieces to help students to know how the alphabetic system works in order to read and write (National Reading Panel).

Some of the research mentioned in the above publication related to phonemic awareness (PA) as described by Hatcher et al. (1994) who stated: "the use of PA when added to a Reading Recovery program improved its success. Castle et al. (1994) found that whole language programs benefitted from PA in the areas of decoding and spelling skills. Wise et al. (2000) described a computerassisted strategy used to improve students reading comprehension through extensive text- reading practice (National Reading Panel).

A publication entitled Teaching Reading, a sourcebook for kindergarten through eighth grade by Honig et al. (2000), was designed to guide teachers when instructing students to read while implementing effective research-based reading practices. This reference described social problems that some students faced due to their difficulty with reading. For example, reading limitations can have many negative repercussions on the quality of life, including low wages, limitations in the acquisition of basic information in the areas of nutrition, health, safety, and
other information that can help to enrich life. Also, these limitations have extended to other areas such as culture, history, literature, science, and mathematics (Teaching Reading).

Presley et al. (1996) found that teachers who used a balanced and comprehensive approach that included direct instruction focused on phonemic awareness and phonics as well as an abundance of rich and varied literature and writing practice can have a profound effect on teaching students to read successfully.

According to Honig et al. (2000), some of the most significant factors that have influenced the development of reading included:
"1) development of phonemic awareness and of the alphabetic principle (how print maps to speech), 2) ability to decode words, 3) automaticity with enough words, 4) acquisition of vocabulary along with the application of reading comprehension strategies, 5) extensive reading of both narrative and expository text, 6) maintaining the motivation to learn, 7) adequate teacher preparation and material" (p. 1.7).

Comprehensive literacy strategies needed to help students achieve literacy were: "print concepts, alphabet recognition, phonemic awareness, decoding (systematic, explicit phonics), independent wide reading, spelling, vocabulary
development, comprehension strategies, oral language development, writing intervention, and home/school connection" (p. 1.13).

According to O’Connor \& Jenkins (1999), Alphabetic knowledge has been viewed as central to linguistic development. This kind of knowledge included letter names, the knowledge of letter sound, and the ability to access this information quickly and automatically. Also they stated that, when measure in Kindergarten Letter naming knowledge prove to be one of the best predictors of future reading and spelling achievement. Ritchey \& Speece (2006), agree that Kindergarten letter-name knowledge has become a significant predictor of reading achievement, not only in the primary grades, but also throughout elementary school and even into the middle and high school grades.

Foorman et al. (1997) described a Connecticut Longitudinal Study concerned with understanding all the pieces that make a student fluent in reading, and the importance of the construction of meaning/comprehension. To reach reading comprehension, students used their previous knowledge of words and letters, the knowledge of the theme, syntactic knowledge, text-structure understanding, personal background knowledge, and the ability to put letter sounds into words, and words into sentences to give meaning. The method used to change the word into its spoken form was called decoding. Decoding abilities of first- grade students was the major factor in comprehension and progress in
reading. This allowed the student to read almost every word and letter needed to become proficient in reading. Reading a word many times produces automaticity, and the best way to develop automaticity is to read, and re-read.

The Teaching Reading sourcebook sited earlier also provided information describing how brain research has been related to the mental process of converting words into sound. Students who are able to develop letter identification processes to transfer information to a phonological/meaning processor become proficient readers. This reference specifically identified the additional skills need it for reading mastery. These included:

1) Print Concepts - Students understand reading from left to right and for top to bottom and recognize spaces between words. 2) Alphabet Recognition - Recognition of sounds and uppercase and lowercase forms. 3) Phonemic Awareness - The understanding of the spoken language compose of phonemes. 4) Decoding - Convert the print word to a spoken form. 5) Spelling - each letter represent a sound and letters a group of sound are words. 6) Vocabulary - The knowledge of the meaning of the words (p. 2.14).

Different strategies teachers can use in the classroom to help students become proficient readers also included "Metacognitive knowledge" which was defined as "thinking about thinking" (p. 2.4). When students were made aware of
their own thinking process they become "active learners who engage in metacognitive activities as they read (i. e., previewing before reading, adjustment speed, re-reading, reading on, and checking for understanding after reading)" ( p . 2.4). Students can also use key reading strategies such as using prior knowledge/previewing, prediction, identifying the main idea and summarization, questioning, making inferences, and visualizing.

## Research on Second Language Learners

An article entitled "Teaching Struggling Readers Who Are Native Spanish Speakers: What Do We Know?, (2007) has presented evidence that supports effective practices in early interventions for struggling Spanish Speaking readers in the early elementary grades. The authors (Mathes, Pollard-Durodola, CárdenasHagan, Linan-Thompson \& Vaughn and 2007) defined struggling readers "as students who enter first grade with poor phonemic awareness, little letter knowledge, and little or no alphabetic decoding ability in any language" (p. \#).

To better understand the process of learning to read in Spanish and other languages, Chapter 4 in the Teaching Reading sourcebook cited above explained how the Spanish letter/sound system, phonics instruction, syllables types and patterns, issues in spelling, differences between English and Spanish sound/spelling, and Spanish phonic skills were transferable to English phonics, and how the role of English/Spanish cognates, and English sounds have posed
problems for speakers of other languages. This information can be used to plan lessons to reach the English languages learners.

Wilson (2000) contended that language acquisition was a subconscious process not unlike the way a child learns language. Also, Wilson argued: "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 means '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" (pp.15-33) was supported by following observations:

1) All human cultures, even primate cultures, have complex, rulegoverned 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.

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 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 simple, 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. If the input was too easy or too difficult, improvement was not promoted.

According to Piaget's theory of universal development stages of cognitive reasoning, young children construct understanding in the contest of their own activity. Young learners progress from concrete to more abstract thinking, form figurative to operative aspects of cognition. Therefore, students learn more easily when they can manipulate objectives rather than use abstract thought. The implications of this theory were that English language learning should follow
instructional approached 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).

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

It takes an average of five to seven year to acquire cognitive academic language proficiency (CALP), a level at which English language learners can use high-order thinking skills-analys8is, 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 or cognitive development (pp. 8-9).

A research publication cited by Hall (2006) entitled I've Dibel'd, Now What? Designing Interventions with DIBELS Data, proved an useful resource for identifying reading interventions and which described an approach whereby data analysis was used to group students by grade-level. Student progress was monitored to determine whether the students remain at grade-level or not, and which areas the teacher needed to focus on, based on the student's skill deficiencies.

According to Hall, selecting an appropriated instructional intervention has an important place in reading. The focus of the intervention has typically been to provide teacher feedback, to correct errors, and to provide opportunities for reading practice for each student. After students have been identified, an intervention approach will be implemented. This approach has been called the "Preventive Model," which is based on the following three premises, all of which have high reading expectations for students:

First, all but a very few children can be taught to read proficiently. Second, prevention of reading difficulties in kindergarten through thirdgrade is far more cost effective and efficient than remediation in later grades. Third, relying upon research findings about assessment tools and the components of effective instruction can prevent reading failure (I've Dibel'd, now what? Designing Interventions with DIBELS Data, p.6).

When the "Preventive Model" was placed in practice, the school needed to adopt a progress monitoring system to determine the lack of reading skills experienced by some students. For students who were at grade- level, progress should be monitored one a month; for students almost at grade-level, two times a month; and for students behind grade-level, once a week. Students' skills should continue to be monitored until they reach benchmark/grade-level. Progress should be further monitored to measure skills in the areas of letter naming, letter-sound,
phonemes identification, reading grade-level passages, and comprehension. Instruction should be delivered in small groups of three-five students who are working on similar skills. Progress monitoring should help teachers to detect which students need extra help and to determine what specific skills need to be taught. Students should be moved from one group to another depending on their ability to reach reading grade-level or, if there is a need to adjust the intervention (Hall).

An article cited by Ziolkowska (2007), entitled "Early Intervention for Students With Reading and Writing Difficulties," established the importance of early detection of students who struggled in reading and the implementation of quality early interventions to help those students to reach reading grade-level. This author emphasized the value of small group instruction, close observation and reflection.

According to Germinario, et al. (1992), traditional intervention programs such as remedial reading where students leave the classroom for a short period of time to receive instruction from a reading specialist can have a negative effect on the student's feelings and self-esteem. Archambault (1989), in an article entitled "All Children Successful: Real Answers for Helping At-Risk Elementary Students," agreed that students can experience negative feelings in regular classes and in pull-out programs when they suffer from reading difficulties. Other criticisms cited in this article when students left the regular classroom included no
provision for social interaction between students, and loss of time when students go from one place to other. Special education students have also required remedial intervention. Although, the curriculum can be adapted to cover the specific necessities of these students, they are often moved from one classroom to other to receive extra instruction. Unfortunately, special education programs have sometimes been perceived as having established lower expectations for children, when in reality, special education students do not require extra instruction. What they really need is instruction at a slower pace.

For struggling readers, small-group instruction has been strongly recommended. However, the positive aspect of this type of grouping has depended on the ability of the teacher to monitor the students' growth and where they are lacking in specific reading skills. By grouping students, the teacher can make the adjustments necessary for instruction and to re-group students depending upon their abilities. Even in small groups, students can better utilize individualized reading strategies where they can be taught the selected vocabulary before the reading exercise begins. This prior exposure to difficult words will help students to better understand the content without significant interruptions before they actually read the text. After reading the selection, students can continue reading. Re-reading can also help students to improve comprehension, fluency, while enhancing their self-esteem (I've Dibel'd, now what? Designing Interventions with DIBELS Data).

Although self-monitoring has been a difficult task for struggling readers, they can learn to apply and adapt certain reading strategies to make sense of what they are reading and to think if what they read makes sense. Thinking of their own thinking or Metacognition gives students the ability to correct themselves when they are reading (I've Dibel'd, now what? Designing Interventions with DIBELS Data).

The Tier approach has also been used to provide students with a strong, intensive program of instructional intervention. Tier 1, focused on a base reading research core program provided intentional instruction for all the students in the areas of phonemic awareness, phonics, vocabulary, fluency, and comprehension. Tier 2, provided intervention to small groups as a support to the core program. Students who participate in Tier 2 are below grade-level benchmarks, according to the Dynamic Indicators Basic Early Literacy/Indicadores Dinámicos del Éxito en la Lectura test given three times a year to measure of reading fluency and to determined the instructional needs of students. Tier 3 has been given to students who required a more intentional, specific, and intensive intervention in the areas of phonemic awareness, alphabetic knowledge and skills, fluency, vocabulary, and comprehension (I've Dibel'd, now what? Designing Interventions with DIBELS Data).

## Summary

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

1. Educators responsible for reading development must have knowledge concerning the effectiveness of the variety of research-based practices used to teach children to read.
2. Research authorities strongly supported the used of multiple intervention practices for struggling Spanish speaking readers in the early elementary grades.

## CHAPTER 3

## Methodology and Treatment of Data

## Introduction

The purpose of this descriptive research study was to determine the extent to which selected Houghton-Mifflin (HM) instructional interventions improved the reading fluency of participating $1^{\text {st }}$ grade Spanish readers. To accomplish this purpose, a review of selected literature was undertaken. Additionally, essential baseline data were obtained and analyzed, from which related generalizations, 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 the data and summary.

## Methodology

The present descriptive research study involved collecting numerical data to determine the extent to which participants $1^{\text {st }}$ grade students show improvement in Spanish reading fluency skills after receiving instruction utilizing selected HM interventions strategies. The researcher (Irma Alcalá-Badillo) was a participant in teaching and observing all participants, and in collecting data for all intervention activities.

## Participants

The ten (10) participating $1^{\text {st }}$ grade students involved in the study included 2 boys and 8 girls. Students were 6-7 years of age and had similar characteristics which included Spanish ethnicity, low socio-economic level, and low reading fluency skills. All participants were native Spanish speakers. The researcher, who also served as the students' $1^{\text {st }}$ grade teacher, was an experienced native Spanish speaker and was fully qualified to instruct students in HM Spanish interventions. The researcher was assisted in the instructional process by 3 paraprofessional reading interventionists.

## Instruments

The Indicadores Dinámicos del Éxito en la Lectura (IDEL) instrument was used to measure the improvement of student reading fluency skills from September, 2008, to June, 2009.

## Design

The IDEL assessment instrument used in the study was administered in January, 2009, and May, 2009, to measure progress regarding the following student reading fluency skills. Three types of HM instructional interventions listed below were selected by the instructor to facilitate the improvement of participating students reading fluency skills. SAMPLES of these intervention materials have been provided in the APPENDIX.

1. Fluídez en Segmentación de Fonemas (FSF).
2. Fluídez en las Palabras sin Sentido (FPS).
3. Fluídez en la Lectura Oral (FLO).

## Procedure

Procedure employed in the present study evolved in several stages, which included the following:

1. Permission to undertake the study was sought and obtained from Mrs.

Netty Hull, Principal at BLES during August, 2008.
2. At this time, the participating student population was selected.
3. In August, 2008, IDEL scores for participating students were obtained and analyzed.
4. The researcher then undertook a review of related literature.
5. Throughout the 2008-2009 school year, students received instruction consistent with the selected HM reading interventions.
6. The IDEL was used to measure students' progress in reading fluency in January, 2009 and May, 2009.
7. During summer 2009, results of student reading progress for 2008-2009 were compiled and analyzed.

## Treatment of the Data

The researcher tabulated and analyzed IDEL scores to determine the extent to which student reading fluency skills improved from January to May, 2009. These results have been presented in Chapter 4.

## Summary

Chapter 3 provided a description of the research methodology employed in the study. Additionally, information related to participants, instruments used, research design, procedures utilized, and details concerning treatment of the data obtained were presented.

## CHAPTER 4

## Analysis of the Data

## Introduction

A primary objective of this research project was to identify and utilize a combination of selected instructional intervention strategies to improve reading literacy skills of $1^{\text {st }}$ grade Spanish speaking/reading students. A team of reading specialists and classroom teachers at Barge-Lincoln Elementary School in Yakima, Washington, analyzed resulting data to consider potential reading gaps, program design, and to deliver an effective Tier 3 Spanish reading intervention for BLES Spanish readers. The use of research-based reading practices, language acquisition strategies, and weekly diagnostic monitoring was used to measure the effectiveness of the selected instructional interventions. Additionally, Indicadores Dinámicos del Éxito en la lectura (IDEL) progress tests were administered in January and May, 2009 to participating students to measure reading fluency gains as to pinpoint gaps in student reading skills.

Chapter 4 provides a description of the environment, an overview of the hypothesis, results of the study, major findings, a discussion of the data, and a summary.

## Description of the Environment

The study was conducted at Barge-Lincoln Elementary School (BLES) located in Yakima in Eastern Washington. A total of nine (9) participants from $1^{\text {st }}$ grade Spanish readers were selected and involved in this study. Demographically, BLES had 537 students including 87.3\% Hispanic, 9.3\% White, 1.5\% Black and 1.1\% American Indian. All of the participating students qualified for the federal free and reduced lunch program. Educational services were provider to students in the following areas: $8.8 \%$ special education, $53.9 \%$ transitional bilingual, and $33.8 \%$ migrant. One hundred percent of participating students were Hispanic native Spanish speakers from low socio-economic homes, with low reading fluency skills. Participants ranged in age from 6-7 years and included 7 girls and 2 boys.

## Hypothesis/Research Question

Participating $1{ }^{\text {st }}$ grade students who were instructed when utilizing selected HM intervention strategies will show improved Spanish reading fluency skills.

Results of the Study
Table 1 has provided a summary of student IDEL reading fluency results for the two assessments conducted in January (Winter) 2008, and May (Spring) 2009 (APPENDIX). The Table has identified, by number, the 9 participating students and their progress toward meeting state Benchmark Standards (BS) from

Table 1

Participants Scores for Three IDEL Reading Fluency Tests, January-May, 2009

|  | January, 2009 |  |  |  | May, 2009 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Benchmark Standard WPM |  |  |  |  |  |  |
| Student <br> Number | 50 | 90 | 20 | 50 | 90 | 40 |  |
|  | FSF-TLP | FSF-TSL | FLO | FSF-TLP | FSF-TSL | FLO |  |
| 1 | 53 | 55 | 10 | 85 | 67 | 19 |  |
| 2 | 59 | 101 | 16 | 84 | 138 | 28 |  |
| 3 | 63 | 151 | 34 | 52 | 154 | 32 |  |
| 4 | 71 | 162 | 31 | 78 | 152 | 39 |  |
| 5 | 76 | 132 | 41 | 81 | 192 | 40 |  |
| 6 | 80 | 134 | 23 | 83 | 170 | 42 |  |
| 7 | 30 | 138 | 43 | 49 | 180 | 45 |  |
| 8 | 43 | 145 | 37 | 94 | 207 | 50 |  |
| 9 | 53 | 170 | 47 | 78 | 218 | 60 |  |

Key.
FSF-TLP = Fluídez en la Segmentación de Fonemas-Todas las Partes
FPS-TSL = Fluídez en las Palabras sin Sentido-Total de Sonidos de Letras Correctas
$\mathrm{FLO}=\quad$ Fluídez en la Lectura Oral
WPM $=\quad$ Words Per Minute (i.e., indicates the number of required words first-grade students should read to meet the state standard).

January, 2009, to May, 2009. The companion Key has defined each of the three benchmark tests and the dates each test was administrated.

## Findings

As shown in the Table, Test \# 1 (Winter) indicated that in Fluídez en la Segmentación de Fonemas (FSF-TLP), 7 of 9 students (78\%) met the Benchmark Standard (BS) of 50 while $22 \%$ remained below grade-level. Test \# 1 (Spring), in the FSF-TLP category, indicated that 8 of 9 students ( $89 \%$ ) met the BS, while $11 \%$ were below grade-level.

Test \# 2 (Winter) in the FPS-TSL category showed that 8 of 9 students (89 \%) met the BS of 70 whereas $11 \%$ below grade-level. When Test \# 2 (Spring) in this category was administered in May, 2009, 8 of 9 students again met the BS.

Test \# 3 (Winter) scores for FLO indicated 7 of 9 participants (78\%) met BS of 20 while $22 \%$ were below grade-level. Test \# 3 (Spring) showed 5 of 9 students ( $56 \%$ ) met BS of 40 while the $44 \%$ remained below grade-level.

The analysis of data presented above provided conclusive evidence that participating students consistently improved their IDEL reading fluency scores in all three test categories from January to May 2009. Accordingly, the hypothesis was supported (i.e., participating $1^{\text {st }}$ grade students who were instructed when utilizing selected HM intervention strategies will show improved Spanish reading fluency skills).

## Discussion

Based in the analysis of data cited above provided a convincing argument from which the researcher found there was significant reason to support the hypothesis. The researcher therefore believes that the used of selected HM instructional interventions can positively impact the academic performance of students and help them to overcome educational barriers needed to become proficient readers.

Summary
The analysis of data presented in Chapter 4 supported the hypothesis that students who received daily instruction in HM interventions improved their Spanish reading proficiency. Chapter 4 has also provided an overview of the study's environment, results, findings, discussion, and a summary.

## CHAPTER 5

## Summary, Conclusions and Recommendations

## Summary

The purpose of this descriptive research study was to determine the extent to which selected Houghton-Mifflin (HM) instructional interventions improved the reading fluency of participating $1^{\text {st }}$ grade Spanish readers. To accomplish this purpose, a review of selected literature was undertaken. Additionally, essential baseline data were obtained and analyzed, from which related generalizations, 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. Educators responsible for reading development must have knowledge concerning the effectiveness of a variety of research-based practices used to teach children to read.
2. Research authorities strongly supportive the used of multiple intervention practices or struggling Spanish speaking readers in the early elementary grades.
3. The hypothesis that first-grade students who received daily HM instructional interventions will improve their Spanish reading proficiency was supported.

## Recommendations

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

1. To effectively teach children to read, educators responsible for reading development must have knowledge concerning a variety of researchbased literacy practices.
2. To help struggling Spanish speaking readers in the early elementary grades, responsible teachers are encouraged to use multiple intervention practices.
3. To improve Spanish reading proficiency of elementary-level students, utilizing selected Houghton Mifflin instructional interventions is recommended.
4. School district personal seeking information related to Spanish reading instructional interventions may wish to utilize information contained in this study or, they may wish to undertake further research more suited to their unique needs.

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## APPENDICES

## Selected Houghton Mifflin Instructional Interventions SAMPLES

SAMPLE \# 1: Fluídez en la Segmentación de Fonemas-Todas las Partes

SAMPLE \# 2: Fluídez en las Palabras sin Sentido-Total de Sonidos de Letras Correctas

SAMPLE \# 3: Fluídez en la Lectura Oral

## APPENDIX \# 1

## Fluídez en la Segmentación de Fonemas-Todas las Partes

SAMPLE: Segmenting and Counting Syllables, Phonemes: Clap the Sounds

- Say: I am going to say a word that begins whit /k/. Listen: ki-wi. Ask children to repeat with you, as they clap each syllable (/ki/ /ooi/).
- Ask: What is the word? (kiwi) How many syllables are in kiwi? (two) Repeat for the words: karate, kilo, Kike.

Now, tell children that they are going to count the sounds in kiwi.

- Model how to say the separate sounds and them say the complete word: /k/ /i/ /oo/ /i/, kiwi.
- Have children clap once for each sound and tell you how many times they clapped: After clapping the sounds in kiwi, children said (Four!).

Repeat with the words: karate, kilo, Kike.

## APPENDIX \# 2

## Fluídez en las Palabras sin Sentido-Total de Sonidos de Letras Correctas

## SAMPLE: Phonic/Decoding Strategy

Distribute the Biblioteca fonética story !Un perro enorme!
Teacher/Student modeling
Ask children to tell how they read words. Use Cartel de Fonética/Decifrar palabras to review the steps of the strategy. Choose someone to read the story title and tell how they read it. Assign children to read the story.

Reading the Decodable Book
If children have difficulty decoding words such as animal on their own, coach them with prompts such as the following:

- Look at the letters. What sounds does each letter stand for? (/a/, /n/, /i/, /m/, /a/, /l/)
- How can you sound out the word? (blend) the sounds of each syllable /a/, /aaa/, a; /n/ /i/, /nnniii/, ni; /m/ /a//l/, /mmmaaalll/; mal. Then blend the syllables. A, ni, mal; animal).
- Does the word animal make sense in the story?


## APPENDIX \# 3

## Fluídez en la Lectura Oral

SAMPLE: ¡No se hace, Máximo!
Wili llega a la escuela. A menudo su perro Máximo o su gatito Kiko lo recibe. Pero hoy Máximo no lo recibe. ¡Qué raro! -
¿Y Máximo, Mamá?-dice Wili. -Hace rato que no sé nada de él - dice Mamá. -¿Se hizo daño mi perro? - dice Wili. -Seguro que no -dice Mamá. Wili se mete en el carro. -No, Wili -dice Mamá--. Camina por la acera. Wili camina con su mamá. Kiko lo sigue. -Paco, ¿por aquí pasó mi perro? -dice Wili. -No, Wili, tu perro no ha pasado por aquí -dice Paco--. Pero seguro que Kitona sabe. - Kitona, ¿por aquí pasó mi perro? - dice Wili. -No, Pili, tu perro no ha pasado por aquí dice Kitona--. Pero seguro que Yeyo sabe. Wili oye un corre-corre. -Apúrate, Mamá. ¡Máximo esta por aquí! Máximo corre de lado a lado. Máximo deja todo regado. Y Yeyo ya está enojado. ¿Qué ha pasado? --¡Párate, perrito! -le dice Yeyo agotado. - ¡Máximo, Máximo, por fin te hallé! -dice Pili y le pasa la mano. -Yo te ayudo, Mamá - dice Wili. En un rato todo queda bonito. - Toma, un libro para ti. En la primera página hice un dibujo de Máximo - dice Yeyo. -¡Maravilloso! -dice Wili --. Un libro es mi regalo favorito.

