

Spring 1-1-2014

An Investigation into English Language Learner Home Literacy Environments

Jared Paul Schwartz

University of Colorado Boulder, jasc8809@colorado.edu

Follow this and additional works at: http://scholar.colorado.edu/ling_gradetds

 Part of the [Bilingual, Multilingual, and Multicultural Education Commons](#), and the [Language and Literacy Education Commons](#)

Recommended Citation

Schwartz, Jared Paul, "An Investigation into English Language Learner Home Literacy Environments" (2014). *Linguistics Graduate Theses & Dissertations*. 32.

http://scholar.colorado.edu/ling_gradetds/32

This Thesis is brought to you for free and open access by Linguistics at CU Scholar. It has been accepted for inclusion in Linguistics Graduate Theses & Dissertations by an authorized administrator of CU Scholar. For more information, please contact cuscholaradmin@colorado.edu.

AN INVESTIGATION INTO ENGLISH LANGUAGE
LEARNER HOME LITERACY ENVIRONMENTS

by

JARED PAUL SCHWARTZ

B.S. University of Georgia, 2008

A thesis submitted to the
Faculty of the Graduate School of the
University of Colorado in partial fulfillment
Of the requirement for degree of
Master of Arts in Linguistics

2014

This thesis entitled:
An Investigation into English Language Learner Home Literacy Environments
written by Jared Paul Schwartz
has been approved for the Department of Linguistics

Maria Thomas-Ružić, Ph.D.

Patricia Mosele Ph.D.

Date _____

The final copy of this thesis has been examined by the signatories, and we
Find that both the content and the form meet acceptable presentation standards
Of scholarly work in the above mentioned discipline.

IRB protocol # 14-0110

Schwartz, Jared Paul (M.A., Linguistics)

An Investigation into English Language Learner Home Literacy Environments

Thesis directed by Professor Maria Thomas-Ružić

English language learners (ELLs) in the United States begin school with a lower proficiency in English written language skills compared with their native-English speaking peers. According to testing data, this difference in proficiency levels is by and large unchanged by the time ELL students reach the eighth grade. The stated goal of ELL literacy research, i.e., research in ELL reading and reading related practices, has therefore long been to reduce the gap in literacy outcomes that exists between ELL and native English speaking students. To this end, ELL literacy researchers have discussed ELL written language skills in terms of linguistic factors. Though linguistic factors certainly play a role in determining ELL literacy outcomes, they are not the only factors that do. Notably, research into first language literacy has shown that certain home literacy environment factors have an association with literacy outcomes of native English speakers. Yet these other factors have yet to be examined within the context of ELL literacy. This paper will explore and investigate literature on first language home literacy. It will then go on to detail how the methods being used to measure associations in first language research could be incorporated into the work being done with ELL subjects. Finally, a preliminary study using these incorporated methods will be presented.

CONTENTS

CHAPTER

I.	INTRODUCTION.....	1
	Definitions and Uses of Key Terms.....	1
	Justification.....	3
	Study Significance.....	3
	The Context of the Research.....	4
	The Background of the Researcher.....	9
	Research Location.....	10
	Study Aims.....	10
	Objectives.....	10
	Research Questions.....	11
	Chapter Summary and Thesis Overview.....	12
II.	REVIEW OF THE LITERATURE.....	13
	First Language Home Literacy.....	14
	ELL Home Literacy.....	20
	Literacy Transfer.....	23
	Summary and Conclusions.....	26

III.	METHODS OF PRESENT STUDY.....	29
	Location and Participants.....	29
	Materials.....	30
	Procedure.....	31
	Method of Data Analysis.....	32
	Current State of the Study.....	33
IV.	RESULTS.....	34
V.	DISCUSSION.....	35
	Limitations of the Study.....	35
	Suggestions for future research.....	37
	BIBLIOGRAPHY.....	38
	APPENDIX	
	A. SURVEYS TO BE DISTRIBUTED IN THE PRESENT STUDY.....	43
	B. A GLOSSARY OF TESTING TECHNIQUES.....	47
	FIGURES	
	FIGURE	
	1. General findings of first language and ELL home literacy research.....	28

CHAPTER I

INTRODUCTION

Definitions and Uses of Key Terms

Reading and literacy are two terms whose meanings vary greatly dependent on context and source in which they appear. At times, they are used interchangeably. Rueda (2011) has proposed that future research into reading and literacy define each term in an agreed upon manner. For the purposes of this paper, I will follow Rueda's proposed definitions. Accordingly, *reading* will be used to mean "the use of the products and principles of the writing system to get at the meaning of a written text" (as Rueda, 2011, credits to Snow, Burns and Griffin, 1998, p. 42). On the other hand, I will use the term *literacy* more broadly. It will include reading as well as other factors that are associated with reading such as attitudes and beliefs about reading, the social practices of literate individuals, and the various settings and situations in which reading occurs (this definition is supplied by Pearson and Raphael, 2003, through Rueda, 2011).

Education research often seeks to quantify literacy in terms of measures of reading abilities such as fluency, phoneme awareness, vocabulary knowledge, and comprehension, among others¹. Using the previously stated definitions of reading and literacy, all reading ability measures are considered *literacy outcomes* (Sénéchal and LeFevre, 2002; Sénéchal, 2006). In other words, an individual's score in a reading ability measure can be thought of as the combined effect of that individual's literacy experiences throughout his or her lifetime. *Literacy factors*, that is, a contributor to or affecter of literacy outcomes, include all

¹ Appendix B of this paper contains a glossary of assessment measures.

experiences with literacy in which an individual participates or observes. Literacy factors can come from a variety of sources; for instance, home, school, parents, teachers, friends, relatives, the community, society, culture, and so on. Further, or at least as far as educational research in the United States can show, literacy factors are equally associated with literacy outcomes no matter what the individual's linguistic or cultural background may be (Snow, 2008). That is, any factor shown to influence one individual's literacy outcomes is a potential factor in any individual's literacy outcomes.

In this paper, and the present study, I will examine one particular group of literacy factors: the home literacy environment at the pre- and early-literacy levels. Home literacy environment factors have long been associated with various language and literacy outcomes in research, and are considered to have particularly strong associations with outcomes at the preschool to early grade levels (McCormick, 1983; Anderson, 1985; Snow, et al., 1991; Sénéchal, et al., 1998; Lesaux and Geva, 2006; Snow, 2008). This paper will concern itself primarily with an investigation into what factors are present in the homes of young, preschool to early grade level English language learners². As such, home literacy environments will be discussed within the context of home literacy factors generally as well as within the context of specific home literacy factors that have been observed in the home literacy environments of English language learners. In the course of performing the present study, I have also developed a questionnaire tool which will elicit descriptive data pertaining to English language learner home literacy environments.

² English language learner (ELL) is a term used to describe any child whose English language abilities are developing, but at present are limited to the extent such that the child has difficulty understanding instruction in a classroom where English is the language used to deliver that instruction. The term ELL itself is noted in the literature for perceiving the children it describes too narrowly; it emphasizes the fact that the child is learning English while downplaying the idea that the child's native language may be used as an asset (Escamilla and Hopewell, 2010). With that said, I have found that the school district involved in the present study is currently using the term ELL, and as such I have decided to use ELL in this paper as well..

Justification for the Study

It is often thought that children begin school at different levels of “readiness” for literacy acquisition. This differentiation in readiness can create disadvantages for some students leading to long term academic problems and struggles with reading. A major factor in determining readiness for literacy acquisition is the child’s home literacy environment. However, for some groups of children – namely English language learners – the home literacy environment remains an area of research that is insufficiently studied. The present study will seek to make a contribution to the understanding of English language learner home literacy environments.

Study Significance

In the United States, the number of school-age children (ages 5 – 17) who spoke a language other than English at home increased from 3.8 million to 10.8 million in the years between 1979 and 2006. This constituted a change from 9 percent to 20 percent of the total school-age population in the country (Livingston, 2008). This segment of the student population, at present classified as English language learners (hereafter ELLs), is often noted to have a sizable performance gap compared to their native English speaking peers when assessed in measures of literacy outcomes. On average, ELLs score about 50 percent lower than native English speaking students on national literacy tests administered in the fourth and eighth grade (National Center for Education Statistics, 2012).

The above-described performance gap is frequently discussed in education research regarding ELL literacy. In some cases, it is said that researchers have a moral imperative to

help close the gap (Goldenberg, 2010). As an explanation for why the gap exists, researchers have pointed to linguistic factors. After all, ELLs often begin school with little development in terms of their English language skills. Given this, they must learn with enormous efficiency if they are to catch up to their native English-speaking peers. Many are not able to do so (Lesaux and Geva, 2006). However, researchers also note that a solely linguistic explanation for the ELL/native-English speaking student performance gap is insufficiently elaborate. They often call for more research to be conducted regarding other factors affecting ELL literacy outcomes, especially home and community factors (Goldenberg, Rueda and August, 2008; Koda and Shanahan, 2008; Snow, 2008; Goldenberg, 2010). The present study hopes to make a contribution towards furthering the discussion of ELL literacy by investigating ELL home literacy environments.

The Context of the Research

The present study is contextualized within a few areas of current research. The first of these areas is first language home literacy research. This area includes any research into literacy that has been conducted on monolingual children who attend school and receive instruction in the same language they speak at home. Education researchers first began to pay attention to home literacy environments in the late 1970's and early 1980's when a growing body of work revealed that students who had early experiences of being read to by parents largely outperformed their peers in reading assessments (McCormik, 1983). At this time, it was also noted that these experiences of child being read to by parent varied from home to home in terms of quality (e.g., how often a parent actively discusses the story or vocabulary with the child during reading) and quantity (e.g., the reported number of times per week parents read to children or how many repeated readings of the same book take

place). Children who received more active and frequent literacy experiences at a preschool age were shown to perform higher than their peers on reading assessments during elementary school (Anderson, 1985).

Following these findings, researchers began to separate and identify different types of early home literacy experiences children might undergo, and to observe what correlation such experiential factors might have with differentiated literacy outcomes. This work was first conducted in the school setting, where studies revealed that a child's experience of being read to in the classroom environment had no association with measures of literacy outcomes such as spelling and print concept abilities, but did have an association with measures of such language outcomes as listening comprehension and vocabulary knowledge. On the other hand, instructional time spent teaching letter and word decoding skills was shown to have an association with measures of literacy outcomes such as spelling and print concept abilities, but no association with measures of language outcomes such as listening comprehension or vocabulary knowledge (Meyer et al., 1994; Whitehurst et al., 1994). Sénéchal et al. (1998) reproduced these findings in the home literacy environment, where it was shown that experiential factors such as the child being read to and discussing story ideas with the parent had an association with measures of language outcomes (i.e., vocabulary knowledge, listening comprehension, and phonological awareness) but not literacy outcomes (i.e., print concepts, alphabet knowledge, invented spelling ability, and word decoding ability). At the same time, explicit instruction by parent to child regarding letter names and sounds was shown to associate with literacy outcomes, but not language outcomes. Sénéchal et al.'s (1998) results have been replicated in studies conducted on first language home literacy environments by Evans, Shaw and Bell (2000), De Jong and Leseman (2001), Burgess, Hecht and Lonigan (2002), Sénéchal and LeFevre (2002), and Sénéchal, (2006).

The above findings have led to the categorization and terming of two distinct types of home literacy experiences, what Sénéchal and LeFevre (2002) call informal and formal home literacy experiences, but what may elsewhere be called passive and active (Burgess et al. 2002) or outside-in and inside-out (Evans et al., 2000, citing Whitehurst and Lonigan 1998) experiences. For the purposes of this paper and the present study, the terms informal and formal home literacy experiences will be used. *Informal home literacy experiences* are those in which the child is exposed to written text, but only in a passive and indirect sense. This includes experiences in which the child observes the literacy activities of others in his or her household, is read aloud to, or is involved in discussion regarding different aspects of storybook content or vocabulary. *Formal home literacy experiences* are those in which the child's focus is placed on the written text itself, and he or she gains some insight into the structure of the letters or words. Such experiences include the child being taught the names of letters, how to print letters, or engaging with preschool workbooks. An important part of these definitions is that the two types of experiences have been shown to affect language and literacy outcomes differently. Informal experiences have been associated with measures of language outcomes such as listening comprehension and vocabulary knowledge. Formal experiences have been shown to associate with measures of literacy outcomes such as word decoding, spelling, and alphabet knowledge (Sénéchal and LeFevre, 2002 contains the most detailed explanations of informal and formal literacy experiences, but see also Sénéchal et al., 1998 and Sénéchal, 2006).

The second area of research in which this paper is contextualized is in regards specifically to ELL home literacy. ELL home literacy research has followed a different trajectory than first-language home literacy research, and will therefore be discussed independently here. The body of work in ELL home literacy, in comparison to that of first

language home literacy, is relatively small. Primarily, current work is a continuation of that started by Snow, Burns and Griffin (1998), who identified four key home-based contributors to ELL literacy success: 1. The value placed on literacy in the household, 2. The amount pressure placed on the child for success, 3. Child access to reading materials, and 4. Parent/child shared book reading experiences. In more recent studies, researchers have shown that Snow et al.'s (1998) four factors, even when they occur in the child's home language, can successfully be used to predict general reading achievement (Reese et al., 2000), vocabulary knowledge (Roberts, 2008; Quiroz et al. 2010), and oral language proficiency (Gonzalez and Uhing 2008) in English (as well as in the child's home language). Reese et al. (2000) took these results to mean that "early literacy experiences support subsequent literacy development, regardless of language."

The findings described by ELL home literacy research are in many ways related to a third area of research relevant to the present study, and that third area of research is the work being done on what has been termed *language transfer*. Research in the area of language transfer concerns itself with the extent to which skills learned in an individual's first language do not need to be relearned, and are immediately available for use when needed in a second language. When such is the case, the skills available across languages are said to have undergone a transfer from first language to the second. In the case that research is to be done on ELL home literacy, then the researcher must acknowledge that the ELL's home literacy experiences will most likely take place in the home language. As such, the extent to which these first language experiences can be expected to support the acquisition of skills in the second language (English) must be discussed to some extent.

Research concerned with language transfer is often detailed and specific to certain skills or processes, either oral or written. This paper will concern itself in the way this area

of research is related to literacy outcomes. In this sense, it can be stated generally that the acquisition of literacy skills in a first language has been shown to be beneficial for the process of literacy acquisition in a second language (Grabe, 2009). More specifically, research has shown that transfer is observable in measures of second language literacy outcomes such as phonological awareness and word decoding (Verhoeven, 2000; Droop and Verhoeven, 2003). As such, it can be said that ELLs who acquire literacy in English following having done so in their first language have an advantage over those ELLs who acquire literacy for the first time in English. It can be said that ELLs who have gained some literacy ability in their first language do not need to “start over” when learning how to read in English (Garcia, 2003).

The context of the present study is thought to exist at the cross-section of all of the above described research areas as well as the supplied ELL demographic and testing data. For one, it is noted that in the United States there exists a performance gap in measures of literacy outcomes between ELLs and native-English speaking students. Along with this, there is an acknowledgement that the performance gap is observable even from the start of schooling, and that it is not attributable to solely linguistic factors. Research into mainstream language home literacy provides some clues as to what other factors may be at play in creating the performance gap. Namely, informal and formal home literacy experiences have been shown to have associations with the language and literacy outcomes of monolingual children. In ELL home literacy research, these same associations have been shown to exist for informal literacy experiences, but an investigation into the formal home literacy experiences of ELLs has yet to be conducted. Meanwhile, research into language transfer suggests that the literacy outcomes associated with formal home literacy experiences are representative of skills which are transferrable between first and second language. Any literacy skills acquired by an ELL during a formal home literacy experience in his or her first

language should also be available to him or her in English. Given this context, the study to be described in this paper will investigate home literacy environments in terms of informal and formal home literacy experiences in groups of both ELLs and native-English speaking students.

Background of the Researcher

My interest in the study of literacy factors stems in part from my personal attitudes and beliefs about literacy in general. I consider myself an avid reader, one who enjoys literature across all types and genres. Through study of education research, I have come to understand that the experiences which contributed to my becoming an avid reader most likely started well before I ever attended school. I believe that the circumstances of my own home literacy environment led to favorable literacy outcomes for myself. I never struggled in learning how to read.

In my experience with tutoring and teaching, I have often had the opportunity to work one-on-one with students who were considered “behind” in their reading skills. These students were typically aged from Kindergarten to 3rd grade, and classified as English Language Learners; that is, they came from a language background other than English, but attended a school in which English was the language of instruction. Through my experience, I came to believe that these students’ struggles with learning to read in English were not due to intelligence or linguistic factors. In fact, I frequently observed these students to be quite smart and to communicate well in English. From this, I must conclude that other factors are at play, and this is what motivates my want to investigate the literacy factors contained in home literacy environments.

Research Location

The study discussed in this paper will take place within the Boulder Valley School District in Boulder, Colorado. The Boulder Valley School District has a student enrollment of 29,544, including 13,423 students at the elementary level. Of this population, 8.2 percent are classified as ELLs. The study will make investigations into the home literacy environments of both ELL and native-English speaking students in the district. The location and sample to be involved in this study are discussed to further detail in Chapter III of this paper.

Study Aims

The aim of this study is to investigate and describe tendencies in the home literacy environments of ELLs in a particular school district, and to do so in a manner that takes into account both formal and informal home literacy experiences. These descriptions may contribute to an overall understanding of factors that influence ELL literacy outcomes.

Objectives

In order to work towards the above aim, the study will seek to fulfill the following objectives:

- To design a survey that will be completed by parents and which will serve to describe the home literacy environments of any student in the school district, including both ELL and native-English speaking students

- To distribute the survey to a random sample of parents whose children attend one of six selected schools across the school district
- To obtain descriptions of the various home literacy environment factors which are associated with literacy outcomes, including but not limited to the frequency of both informal and formal home literacy activities
- As a primary objective, to analyze the descriptions generated by the survey and to describe observable tendencies found in ELL home literacy environments
- And if possible, to compare tendencies of the home literacy environments of ELL and native-English speaking students along the lines of language background

Research Questions

In order to guide data collection and analysis, the following research questions have been developed.

Research Question 1: What informal home literacy experiences do ELLs in the Boulder Valley School District tend to have?

Research Question 2: What formal home literacy experiences do ELLs in the Boulder Valley School District tend to have?

Research Question 3: Is it possible to compare the above home literacy experience tendencies of ELLs with those of native-English speaking students in the Boulder Valley School District?

Chapter Summary and Thesis Overview

The preceding chapter has served to create a background for the paper and study that follow. In the course of this, several terms pertinent to the research have been defined, and

the study itself has been described in the way that it is justified and significant within current areas of research. The design of research, aims, and objectives have also been discussed along with some background information on the researcher.

What follows is a further elaboration on all of the above. The literature review contained in Chapter II will describe in detail the lines of various areas of research that have served to contextualize the present study. This will include summaries of all relevant research that was reviewed. Chapter III will contain a detailed description of this paper's study, including full details about the methods, location, and participants to be used in the study. Chapter IV is intended to contain the results of the present study, but is left blank as these results are pending. Chapter V will discuss this researcher's general conclusions regarding this paper as well as some limitations of the present study and suggestions for future research.

CHAPTER II

REVIEW OF THE LITERATURE

Studies of ELL literacy often cite several United States demographical statistics in order to establish motivation for their research. Such demographical statistics show growth rates among different racial or ethnic groups in the country. In the years between 1966 and 2006, the United States population grew in total by 100 million inhabitants. The racial or ethnic group contributing the most to this growth was the Hispanic population, which grew from 8.5 million people in 1966 to 44.7 million people in 2006. This accounts for 36 percent of the total growth. In the same time period, the White population of the United States grew from 167.2 million people in 1966 to 201.0 million people in 2006, or 34 percent of the total growth. The Black population went from 22.3 million people in 1966 to 38.7 million people in 2006, accounting for 16 percent of the total growth. The Asian and Pacific Islander population increased from 1.5 million people in 1966 to 14.3 million people in 2006, or 13 percent of the total growth (Pew Hispanic Center, 2006).

In line with the above general population changes, the composition of student populations in United States schools changed as well. Specifically, the number of students who spoke a language other than English at home increased from 3.8 million students to 10.6 million students between 1979 and 2005. This marked a change from 9 percent to 20 percent of the total school population (Livingston, 2008). These language minority students, today usually classified as ELLs, are noted to enter school with a gap in both oral language and literacy (Lesaux and Geva 2006). Students identified as ELLs in the United States typically perform around 50 percent worse on language proficiency tests compared with native-English

speaking students (National Center for Education Statistics, 2012). This large performance gap is thought to partly be due to a lack of English language ability, but it is noted that other factors contribute to the gap as well (Goldenberg, 2010).

This chapter will review literature relating to a non-language factor thought to contribute to the ELL performance gap: the home literacy environment. In the first section of this chapter, the findings of home literacy research conducted on first-language learners will be discussed. After this, a discussion of the direct research into ELL home literacy will take place. Finally, section 2.3 will discuss the area of research concerned with language transfer.

First Language Home Literacy

In order to study ELL home literacy environment, it is necessary to take into account work that has been done on the home literacy environments of monolingual children. In this research, *Home Literacy Environment* is a term used to describe the household-based reading exposure a child in the early stages of literacy might have. It is usually defined by factors such as the number of resources available (e.g., storybooks, educational videos, preschool workbooks) in addition to less quantifiable, experiential aspects (e.g., the child's observation of a parent or older sibling reading, the amount of time spent by the child being read to or learning basic reading skills). Though the exact weight or importance of each component present in the HLE has not yet been determined, researchers currently agree that every such exposure does contribute in some way to the literacy of the child (Burgess et al., 2002 contains discussion on this).

Researchers first became interested in the home literacy environment as a means of explaining differences in student ability at the outset of schooling. At one point, it may have

been assumed that so-called “early readers” – those who began school already with some ability to read – achieved their status as a result of having high intelligence. Durkin (1966) challenged this assumption, though, when she studied early readers using a number of variables. During her study, Durkin found that high intelligence was not a common variable amongst early readers, but early literacy experiences in the home environment were. Prior to attending school, every early reader in her study had been read to by a parent or older sibling.

The specific effects of read-aloud type activities on language outcomes were later studied. Burroughs (1970) conducted an experiment on 3 year olds from low socio-economic status homes. She separated the 3 year olds into two groups: an experimental group to whom books were read aloud daily for a period of three months, and a control group to whom no books were read during the same period. At the end of the three month period, the two groups were assessed with measures of receptive vocabulary, expressive vocabulary, length of sentences used, and a picture vocabulary test. In all measures, the experimental group scored significantly higher than the control group. Chomsky (1972) studied various home literacy factors in comparison with measures of language outcomes. She found that young “prereaders” who displayed the highest stages of linguistic development also had more books read aloud to them each week than those prereaders who displayed lower stages of linguistic development. Hoskins (1977) investigated home literacy environment factors and their effect on academic readiness. He found that children entering kindergarten who had been read to at least sixty minutes a week during the three months prior to starting school scored significantly higher on tests of academic readiness than their peers who had not been read to for at least sixty minutes a week in the three months prior to starting school.

In a major review of the home literacy research available at the time, Anderson (1985) concluded that “the single most important activity for building the knowledge required for

eventual success in reading is reading aloud to children” (p. 23). However, Anderson suggested that read-aloud type activities are not the only contributors to a child’s eventual success in reading. He recommended that parents also instruct their children to read and write letters and words (p. 123).

Following Anderson’s (1985) review, researchers began to describe home literacy factors in more detail. Teale (1986) conducted an observational study in the homes of low-income families with preschool aged children. He noted two types of activities in which parents and their children interacted with text. In one type of activity, parents read a storybook aloud to their child. In the other type of activity, parents directly instructed their child on how to read: for instance by teaching the child about the names or sounds of individual letters. Teale considered these two types of activities to be different domains of home literacy experiences, each potentially having a different effect on literacy outcomes.

Teale (1986)’s idea that types of literacy activities be considered within different domains was supported by Meyer et al. (1994), who compared different types of home literacy activities with measures of child text-processing ability. The Meyer et al. study found that instructional activities directly related to the reading process, for instance practicing letter sounds and teaching children to sight-read words, had a positive effect on reading achievement. However, no relationship was found between the amount of time parents spent reading to their children and reading achievement. At the time, these findings were considered contrary to popular belief, and Meyer et al. noted that many educators insisted that the activity of reading to children did affect reading achievement positively.

Whitehurst et al. (1994) suggested that past research into home literacy may have over-emphasized the effect of shared reading experiences in households. They attributed this over-emphasis to the idea that conceptualizations of home literacy experiences were, until that point, too holistic in nature. These holistic conceptualizations were described as viewing

all home literacy experiences as a single factor when in reality different types of home literacy activities were having different effects on literacy outcomes. Accordingly, Whitehurst et al. proposed a more complex conceptual model of home literacy experiences. In this model, home literacy activities were differentiated as being one of two types: the first type including activities in which the focus was on reading to the child, and the second type including activities in which the focus was on the letters and sounds of the text itself.

Sénéchal et al. (1998) presented a study in which the effects of home literacy activities were assessed using Whitehurst et al. (1994)'s differentiated model. The study was conducted in two phases. The first phase used a survey-based approach in order to elicit descriptions of a group of young learners' home literacy environments. The survey included items pertaining to the frequency of parent-child reading activities, the number of storybooks contained in the household, the age at which the parent began reading to the child, and the frequency at which the parent taught the child how to read or write. Per the Whitehurst et al. model, the experiences described in the survey data were differentiated based on type. The first type of experience was referred to as *informal home literacy experiences*. Informal home literacy experiences were said to be those in which the child was involved with reading, but not actively engaged in the process of sounding out text. Such experiences included activities of parent reading to child. The second type of experience described in the Sénéchal et al. study was termed *formal home literacy experiences*. Formal home literacy experiences were said to be those in which the child was directly instructed in the process of sounding out or writing text. Such experiences included parent teaching child how to read or write.

The second phase of the Sénéchal et al. (1998) study involved a comparison of the survey-elicited home literacy environment descriptions with formal assessments of skills related to reading. The assessed skills pertained to vocabulary knowledge, listening comprehension, phonological awareness, print concepts, alphabet knowledge, invented

spelling and word decoding ability. Through the course of comparison, Sénéchal et al. found informal home literacy experiences to be significantly correlated with outcomes in assessments of vocabulary knowledge, listening comprehension, and phonological awareness. These results were termed *language outcomes*. Meanwhile, formal home literacy experiences were found to be significantly correlated with outcomes in assessments of print concepts, alphabet knowledge, invented spelling, and word decoding ability. These results were termed *literacy outcomes*.

Additionally, the results of Sénéchal et al. (1998) pertaining to language and literacy outcomes have been replicated or echoed in several studies since. Evans, Shaw and Bell (2000), working with French-speaking children, found no association between home book reading and literacy outcomes, but did find activities in the home that involved the child learning about letters to predict statistically significant amounts of variance in literacy skill assessments. Burgess, Hecht and Lonigan (2002) found that formal home literacy experiences were more likely than informal home literacy experiences to be related to literacy development in a statistically significant manner. They went on to suggest that any parent who wishes to improve the reading ability of his or her child should do so with formal home literacy experiences as opposed to other types of experience. Jordan, Snow and Porche (2000) found a relation between parent-child shared reading activities and oral language skills, but not between shared reading and written language skills. Sénéchal and LeFevre (2002) followed up with the group of subjects of the Sénéchal et al. (1998) study and found that the home literacy factors observed in the (1998) study to still have the same relation to language and literacy outcomes at the third grade level.

The above work has led to a shift in the way researchers conceptualize the literacy factors present in home environments. What Whitehurst et al. referred to as “holistic

models,” those in which home literacy experiences are together considered a single factor, are generally no longer accepted. Instead, most recent research has used differentiated conceptual models of home literacy, and these models categorize home literacy experiences along the lines of informal and formal home literacy experiences³. Generally speaking, these differentiated types of experiences are said to affect different types of outcome measures. Exposure to books through informal home literacy experiences is thought to be related to language outcomes whereas parent involvement in teaching children about reading through formal home literacy experiences is thought to be related to literacy outcomes.

Although the above findings indicate that the activity of parent reading to child is perhaps not as beneficial as was once thought, this should not be interpreted to mean that informal home literacy experiences are wholly unbeneficial. Quite the contrary, the language outcomes shown to be influenced by practices such as home book reading are important to a child’s language development generally. In addition, outcomes such as vocabulary knowledge will in many ways facilitate reading and meaning-making through text, just not directly (Sénéchal, 2006).

It is also worth pointing out that although the above cited studies have been conducted using subjects from more than one language background, studies involving children who have literacy skills in more than one language have yet to be discussed. Specifically, this paper is

³ It should be noted that although differentiated models of home literacy environments across the current research mostly agree on their definitions (though see Burgess, Hecht and Lonigan, 2002 for a discussion on other possible conceptualizations), there is not yet a universally adhered to use of terms. What Senechal et al. (1998) referred to as informal and formal literacy experiences have elsewhere been called outside-in and inside-out experiences (Whitehurst and Lonigan 1998) and passive and active experiences (Burgess, Hecht and Lonigan, 2002). For the sake of simplicity, informal and formal home literacy experiences will be the terms used in this paper.

interested in home literacy studies of ELLs, those children in the United States who speak a non-English language at home, but who learn to read in English at school. This area of research is discussed in the next section of this review.

ELL Home Literacy

The body of research focused specifically on the home literacy environments of ELLs is considerably smaller than that of first-language learners. However, notable work has been accomplished in this area. Snow et al. (1991) first took an interest in ELL home literacy as part of a broader study on the home literacy environment factors of low-income students. The study gathered interview and observational data on a number of home literacy factors including number of books in the home, time spent by parent reading to the child, parental educational expectations of the child, and amount of time the parent spent helping child with homework. This data was then compared to measures of word recognition, reading comprehension, vocabulary knowledge, and writing production. The results of the study found that the described home literacy factors correlated significantly to measures of word recognition and vocabulary knowledge, but not to measures of reading comprehension or writing production.

Snow et al. (1991)'s lack of statistically significant findings in the outcomes of reading comprehension and writing production were attributed to the inherent complexity of those two outcomes. The researchers suggested that a child's reading comprehension and writing production abilities were the result of several factors which were not measured in the study. Namely, it was said that these abilities were perhaps more likely to be affected by school and instructional factors rather than home environment factors. These suggestions led Snow, Burns and Griffin (1998) to conceptualize the home literacy environment in terms of four

specific factors (the original identification of which is credited to Hess and Holloway, 1984). The first of these is *value placed on literacy*. Value placed on literacy was defined by the extent to which parents themselves read and therefore convey a sense that reading is valuable to their children. The second factor, *press for achievement*, was defined as the frequency with which parents communicate their expectations of achievement to their children, respond to their children's reading requests, or provide reading instruction to their children. The third factor identified was the *availability and instrumental use of reading materials*, the number of reading and writing materials present in the home. The fourth factor, *reading with children*, was defined as the frequency with which the parents read to their children.

The Snow, Burns and Griffin (1998) home literacy environment conceptualization has been frequently used and repeated within the area of ELL home literacy research. Reese et al. (2000) conceptualized the ELL home literacy environment along similar lines, and conducted interviews with parents of Spanish-speaking students in the United States in order to gather data about family literacy practices, parental use of literacy, and whether the parents read to their child. The data obtained in these interviews was then compared to English language and literacy outcome measures at the kindergarten level. The study found that the factors of home literacy used were predictive of English language outcomes such as vocabulary knowledge, but not of outcomes measured on an English literacy test. These results were taken to mean that early literacy experiences would support English vocabulary development regardless of home language.

Roberts (2008) conducted a survey-based study using Hmong- and Spanish-speaking families in the United States as a sample. The survey involved in the study contained items pertaining to number of storybooks in the home, frequency of parent to child reading, and the language spoken in the home. The information gathered by these surveys was then compared

to measures of English language and literacy outcomes. The factors of number of storybooks in the home and frequency of parent to child reading were shown to have a significant association with English vocabulary scores, but no other outcome measures were shown to have such an association with the survey data.

Gonzalez and Uhing (2008) performed another survey-based study on the home literacy environments of Spanish-speaking children in the United States. Their survey looked at home literacy environment factors such as library use by family, parental modeling of reading, and use of reading in the home for applied purposes. The data gained through use of this survey was compared to assessments of Spanish and English language and literacy outcomes at the pre-literacy level. Results of this study showed that the described home literacy factors predicted outcomes in both Spanish and English language skill measures. However, the described home literacy factors were not found to be predictive of either Spanish or English literacy outcome measures.

The above findings have made an important contribution to home literacy environment research generally. Previous studies of first-language learner home literacy environments were limited in that they could only draw conclusions regarding a situation in which the language used during home literacy experiences and the language used during school instruction were the same. However, research into ELL home literacy environments has shown that the same informal home literacy factors that predict the language outcomes of first-language learners can also be used to predict the language outcomes of ELLs. This seems to be true regardless of the fact that the language used in the home literacy environment is different than the one in which the outcome measures are assessed. From this, it can be concluded that the factors which influence English language outcomes are the same for both ELLs and native-English speaking children (Snow, 2008).

It should be noted, though, that the conceptualizations of the home literacy environment used thus far in ELL home literacy research lack the differentiation found in the conceptualizations used in first-language home literacy research. As they stand now, the conceptualizations of ELL home literacy environments are still the sort that Whitehurst et al. (1994) described as being too holistic. In other words, these conceptualizations have yet to differentiate between informal and formal home literacy experiences. Just as was the case in first-language home literacy research before this differentiation was made, ELL home literacy research has yet to find any factors which predict literacy outcomes among its subjects. In all of the surveys used in the above ELL home literacy studies, no questions directly pertaining to formal home literacy experiences have been asked. It remains to be seen, then, whether formal home literacy experiences in a first language affect literacy outcomes in a second language.

Literacy Transfer

The present study will investigate the ELL home literacy environment by taking into account factors of informal and formal literacy experiences. It is posited that these experiences are beneficial to the ELL in terms of his or her English language and literacy outcomes, respectively. However, research supporting the latter claim – that ELL formal home literacy experiences support literacy outcomes – could not be found in the literature. In order to establish motivation for this position, then, this paper now turns to a brief review of research in the area of literacy transfer. This area of research is concerned with the extent to which literacy skills present in a first language are immediately available when learning to read in a second language. These specific skills are considered to be *transferrable*; that is,

available when reading in any language after being acquired in one. Though most of the research in this section was conducted without consideration given to the home literacy environment, it is thought that skills acquired outside of the home, if shown to be transferrable, would be equally transferrable if acquired inside the home.

In considering transfer of literacy skills, one should keep in mind that in addition to reading, literacy is also a higher order implementation of conceptual knowledge. The types of concepts covered by this knowledge might include the fact that a reader understands that words have meanings, and that some of these meanings “make sense” while other do not. The reader also understands that the symbols contained by a page correspond with sounds or words, whether he or she is familiar with the sounds or words or not. Knowledge of these concepts, among others, is present within every literate individual, and when an individual who is literate in his or her first language begins to read in a second, it is thought that such concepts need not be re-learned. Although this is not the full extent to which literacy transfer can occur, it is an important part of the total transfer process (Hancock, 2002).

Within the United States school setting, several researchers have found that providing storybooks written in an ELL’s native language promotes literacy skills and language acquisition in that language. Additionally, ELLs who engage with native-language texts in school have been shown to perform better on early measures of English literacy outcomes when compared with ELLs who engage only with English texts in school (Tinajero, Hurley, and Lozano, 1998; Lapp, Fisher, and Flood, 1999; Krashen 2000). The use of home language literacy materials in the classroom is therefore thought to provide an advantage to ELLs over the use of English literacy materials (Garcia, 2003).

There is also some evidence that the effects of language transfer can be seen even when the engagement with home language storybooks takes place outside of the school.

Hancock (2002) conducted a study in which kindergarten students were provided with storybooks to take home, and their parents were encouraged to engage the students with the storybooks. The students in the study were divided into three groups. The first group was made up of native Spanish-speaking students and were given Spanish language storybooks. The second group was made up of native Spanish-speaking students and were given English language storybooks. The final group was made up of native English-speaking students and were given English language storybooks. This practice of sending different books home took place over the course of a semester. Students were assessed in measures of English literacy outcomes both prior to the study in a pre-test, and following the study in a post-test. The results of the study showed that the native Spanish-speaking students exposed to Spanish language storybooks improved their scores on English assessments at a significantly higher rate than did their native Spanish speaking classmates who were exposed to English language storybooks. Perhaps more notably, the improvements in scores achieved by the first group of Spanish-speaking children – those who were exposed to Spanish language storybooks – did not differ significantly from the improvements made by the native English-speaking student group.

Verhoeven (2000) has reviewed the effects of literacy transfer in terms of specific outcomes. He has concluded that transfer effects are undeniably shown within domains of phonological awareness, word decoding, reading strategies, metacognitive awareness, and pragmatic skills no matter what two languages are involved. However, similar conclusions cannot be drawn for domains such as vocabulary knowledge, morphosyntactic knowledge, listening comprehension, or orthographic script processing. In this second set of domains, effects of transfer have sometimes been observed, but are at other times absent. It has been suggested that transfer in this second set of domains may be dependent on language-specific

factors. For instance, two languages which use a similar script may allow for transfer in the domain of orthographic processing (Koda, 1995).

The primary conclusion within this area of research is that within the school setting, teaching ELLs to read in their home language promotes later reading achievement in English to a further extent than teaching ELLs to read in English exclusively (Francis, Lesaux and August, 2006). This being the case, it should follow that within the home setting, teaching ELLs to read in the home language would promote reading achievement in English as well. The present study is designed to investigate whether or not these teaching practices are taking place in the home literacy environments of ELLs.

Summary and Conclusions

The above areas of research, though topically related, have not seen much interaction in terms of influence on one another. As such, first language home literacy, ELL home literacy, and language transfer were all discussed separately in this review. When one begins to consider the three areas together, though, a question begins to form which has motivated the present study. The logic leading to this question will be summarized briefly here.

Researchers interested in ELL literacy often convey a sense of urgency in their writing. This urgency is said to be motivated by a large literacy performance gap between ELLs and native-English speaking students within the United States. It is also agreed upon that although this gap is partly attributable to the simple fact that ELLs are not native-English speakers themselves, there are more factors at play than language alone. One such other factor is thought to be the home literacy environments of the ELL population.

In first language home literacy environment research, studies have shown that informal and formal home literacy experiences will each have a different effect on the eventual development of a child. The informal home literacy experiences that a child has will have an impact on language development, and the formal home literacy experiences that a child has will have an impact on literacy development. ELL home literacy environment research has shown similar results in domain of informal home literacy experiences. In this research, informal home literacy experiences in the ELL's home language have been shown to have an impact on English language outcomes. Given this, the association between informal home literacy experiences and language outcomes appears to be the same for a first language learner as it is for an ELL.

The basic position of the present study is that formal home literacy experiences should also have the same association in ELL home literacy research as they do in first language home literacy research. However, this position has yet to be investigated in research. What is currently known about the associations between the home literacy experiences of first language learners and ELLs may be represented in the Figure 2.1. As a preliminary study of ELL formal home literacy experiences, the present study is one which seeks to investigate, describe, and compare the home literacy environments of a group of ELLs and native-English speakers.

In First Language Home Literacy Research:

**Informal Home
Literacy Experiences**

have been shown to affect



**Formal Home
Literacy Experiences**

have been shown to affect



In ELL Home Literacy Research:

**Informal Home
Literacy Experiences**

have been shown to affect



**Formal Home
Literacy Experiences**

have yet to be studied in terms of



Figure 1 shows the general findings of first language and ELL home literacy research, respectively.

CHAPTER III

METHODS OF PRESENT STUDY

Taking into account the research context presented in Chapter II, a study has been designed. The aim of this study is to investigate potential differences in tendencies between home literacy environment factors of elementary school-age ELL and native-English speaking students within a single school district. If differences in tendencies can be found by this study, future research into the effect of these differences on outcome measures will be motivated. For this reason, the nature of this study is considered to be preliminary.

The details of this preliminary study are presented in this chapter. The first set of details to be discussed is the location and participants of the study. After this is a description of the materials to be involved in the study. Next, the procedure that will be taken by the researcher in conducting the study will be described. Following this, the process of data analysis in the study will be discussed. Finally, this chapter contains information about the status of the present study.

Location and Participants

The present study is set to be conducted within the Boulder Valley School District, located in the state of Colorado along the foothills of the Rocky Mountains. The district includes urban, suburban, and remote mountain areas. The cities, townships, and communities that make up the district include Boulder, Broomfield, Louisville, Lafayette,

Superior, Nederland, Gold Hill, Jamestown, and Ward. The district has a total of 54 schools, including all levels from pre-kindergarten through high school.

In 2011, the Boulder Valley School District had 294,567 residents. Of these residents, 87 percent were Caucasian and 13 percent were a minority population, primarily Hispanic. 16 percent of this population is said to speak a language other than English at home. The enrollment in the district's schools was 29,544 students in 2011, and 8.2 percent of those students are classified as ELLs (Boulder Valley School District, 2012).

In order to gather participants for the present study, surveys will be mailed to the homes of students from five or six elementary schools, to be selected by the Boulder Valley School District. The total number of surveys to be mailed is 800. Any parent who completes the survey and returns it will be considered a participant in the study. The school district will handle the mailing procedures. The participants of the survey will be anonymous from the perspective of the researcher, but will be identifiable in terms of language background.

Materials

A short, one page survey has been designed for the purposes of this study. The survey contains nine total items. These items are designed to elicit information from the participants about their children in regards to which family members read to the child, the frequency with which parent to child reading activities take place, the number of children's books available in the household, the age at which the parent began reading to the child, and the frequency with which parent to child direct reading or writing instruction occurs. The data to be collected from this survey will be considered descriptive in nature. The items contained on the survey are all indicators that have been used in past research for descriptive purposes (e.g., Chaney, 1992; Sénéchal et al., 1998; Sénéchal and LeFevre, 2002). The survey is

available in two languages, Spanish and English. It is able to be completed in less than five minutes. Appendix A contains both versions of the survey.

Procedure

The above-described survey will be mailed to the 800 home sample to be involved in the study. Upon receipt of the survey, the parents in each home will have the option of filling out the survey and returning or not. For those who wish to return the survey, a pre-paid mailing envelope will be provided. Those surveys which are completed and returned will be forwarded to the researcher.

Organization of the obtained descriptive data will be handled by the researcher. The data will be entered into electronic spreadsheets. For this purpose, two spreadsheets will be maintained. One spreadsheet will be used for the data obtained from non-English speaking homes, and a separate spreadsheet will be used for the data obtained from English speaking homes. Each participant in the study will be represented by a numbered row in the spreadsheet.

The data will be quantified in terms of five variables. Each variable will be represented by a column in the spreadsheets, and every participant will be assigned a numerical value for each variable based on the survey data. The variables to be considered are 1. Frequency of storybook reading in terms of number of reported reading sessions per week, 2. Availability of reading materials in the home in terms of the number of books reported, 3. The age at which the parent (or other family member) first read to the child in terms of the age reported, 4. Frequency at which the parent (or other family member) teaches the child to read words in terms of the number of teaching sessions reported per week, and

5. Frequency at which the parent (or other family member) teaches the child to write words in terms of the number of teaching sessions reported per week. For each participant in the study, a list naming the members of the family who read to the child will also be maintained.

Method of Data Analysis

The primary analysis of the above variables will be descriptive in nature and pertain solely to the data gathered from the non-English speaking participants in the study. This data will first be divided between those variables which describe informal home literacy experiences and those variables which describe formal home literacy experiences. Variables which describe informal home literacy experiences will include the frequency of storybook reading, availability of reading materials in the home, and the age at which the parent (or other family member) first read to the child. Variables which describe formal home literacy experiences will include the frequency at which the parent (or other family member) teaches the child to read words and frequency at which the parent (or other family member) teaches the child to write words.

The given informal and formal home literacy experience categories of data will be described and analyzed for non-English speaking homes in terms of the ranges of these variables as well as their averages. General statements will also be given in terms of which family members are involved in these experiences. In this manner, the general tendencies of ELL home literacy environments in the Boulder Valley School District will be described. In order to answer Research Questions 1 and 2, as posed by this paper, the informal home literacy experiences and formal home literacy experiences will be described separately.

For the data obtained from English speaking homes, variables will be similarly categorized in terms of informal and formal home literacy experiences. The numerical data for each variable will be averaged. In order to answer Research Question 3, as posed by this paper, the averages obtained from the English speaking homes will compared to the averages obtained from the non-English speaking homes.

Current State of the Study

At the time of this writing, the present study has not been completed. Currently, approval from both the Boulder Valley School District and the University of Colorado's Institutional Review Board has been received. In addition, funding has generously been promised from the Linguistics department at the University of Colorado, Boulder. The next step will involve the Boulder Valley School District identifying potential members of the sample. Once these potential members have been identified, the surveys will be mailed.

Chapter IV

Results

Results of the present study are forthcoming. This section is intended as a placeholder, and will be filled as results become available.

CHAPTER V

Discussion

Although results for the present study are still pending, some further discussion is still possible. For one, there are certain limitations inherent to the methods used in the study that will need to be brought to the forefront. Also, regardless of what the results may be in the present study, some suggestions for future research can already be made.

Limitations of the Present Study

The present study has been designed to provide descriptions of both ELL and native-English speaking student home literacy environments in the Boulder Valley School District. These descriptions will be compared along the lines of language background. If differences between ELL and native-English speaking student home literacy environments are found, a question will arise as to what the potential causes of these differences are. As an example, one may consider the factor of number of books in the home. Can the home language be a cause in determining this number? In some cases, it may be. For instance, if storybooks written in a certain language are not readily available for purchase or borrowing in the area, this may help to explain a smaller number in the home. Barriers to access of non-English reading materials in the United States, including Spanish-language materials, have been noted in the literature (Tse, 2001).

Outside of home language, though, there will potentially be other causes that play a role in determining the home literacy environment factors of the two language groups involved in the study. One possible cause will be the socio-economic status of the participants

in the study. Demographic reports of the Boulder Valley School District have noted that many of the students classified as ELLs in the district are also those who qualify to receive free or reduced lunch prices (Eakins and Sterling, 2009). From this, it may be concluded that ELL students in the district are often from homes of a lower socio-economic status than the native-English speaking students are. The literacy environments of low socio-economic status homes often contain fewer storybooks due to the high cost of reading materials. Parents in low socio-economic status homes are also more likely to work longer or later hours than parents in high socio-economic status homes. This makes it more difficult for parents in low socio-economic status homes to engage with their children in literacy activities (Snow et al., 1991; Snow, Burns and Griffin, 1998). This situation makes it hard to disentangle language factors from socio-economic factors. This is a noted problem of ELL home literacy research nationally (Kieffer, 2012).

Another possible cause of differences between the home literacy environments of the two language groups involved in the present study will be culture. Though an exact definition of culture and cultural factors involved in literacy would be considered outside the scope of the present study, it is important to consider that many studies of ELL home literacy, the present one included, conceptualize “ideal” home literacy environments in principles which originate from mainstream, Anglo-American culture. It is thought by some researchers that these idealized principles are incompatible or discontinuous with those found in the home or community cultures of many ELLs. Such incompatibilities may serve to partially explain any differences in literacy environments found in the homes of ELLs and native-English speaking students (Heath, 1983; Goldenberg, 1987; Brooker, 2002).

It is clear, then, that the causes of any results found in the present study will be difficult to identify in a straightforward manner. This is not to say that the results of the

present study will be invalid, however, just that their discussion must be handled carefully, and with attention paid to the complex nature of the various causes involved.

Suggestions for Future Research

The present study has been designed to collect descriptive data on the home literacy environments of ELLs and native-English speaking students. Although the aim of the present study – to make a comparison of these two types of home literacy environments – is achievable using descriptive data, there are other potential aims whose achievement would require additional data. It is the opinion of this researcher that the home literacy experiences of ELLs should be studied as they relate to measures of language and literacy outcomes. Future research into this area should involve the collection of descriptive data using a survey such as the one used in the present study. It should then go a step further, though, and compare the data collected from the survey to measures of language and literacy outcomes. Measures of language outcomes should include at the least assessments of receptive vocabulary, listening comprehension, and phonological awareness. Measures of literacy skills should include at the least assessments of print concepts awareness, alphabet knowledge, invented spelling, and word decoding. Adding measures of language and literacy outcomes such as these is considered the next logical step in the present study. Doing so would cause the study to closely resemble current research being done in the area of first language home literacy.

Bibliography

- Anderson, R. C. (1985). *Becoming a Nation of Readers: The Report of the Commission on Reading*.
- Au, K. H., & Kawakami, A. J. (1994). Cultural congruence in instruction. *Teaching diverse populations: Formulating a knowledge base*, 24.
- August, D., & Shanahan, T. (2006). Developing literacy in second-language learners. *Report of the National Literacy Panel on Language-Minority Children and Youth*, Mahwah, Lawrence Erlbaum.
- Bloome, D., Katz, L., Solsken, J., Willett, J., & Wilson-Keenan, J. A. (2000). Interpellations of family/community and classroom literacy practices. *The Journal of Educational Research*, 93(3), 155-163.
- Boulder Valley School District. "Boulder Valley School District Profile." *District Profile*. Boulder Valley School District, 2012. Web. 09 Feb. 2014.
<<http://bvsvd.org/grants/Documents/DistrictProfile2012%20copy.pdf>>.
- Brooker, L. (2002). 'Five on the first of December!': What can we learn from case studies of early childhood literacy?. *Journal of Early Childhood Literacy*, 2(3), 291-313.
- Burgess, Stephen R., Steven A. Hecht, and Christopher J. Lonigan. "Relations of the home literacy environment (HLE) to the development of reading-related abilities: A one-year longitudinal study." *Reading Research Quarterly* 37.4 (2002): 408-426.
- Boroughts, M. C. (1970). *The Stimulation of Verbal Behavior in Culturally Disadvantaged Three-Year-Olds*.
- Chaney, C. (1992). Language development, metalinguistic skills, and print awareness in 3-year-old children. *Applied Psycholinguistics*, 13(04), 485-514.
- Clay, M. M. (1979). *Stones: The concepts about print test*. Heinemann.
- Chomsky, C. (1972). Stages in language development and reading exposure. *Harvard Educational Review*, 42(1), 1-33.
- De Jong, P. F., & Leseman, P. P. (2001). Lasting effects of home literacy on reading achievement in school. *Journal of School Psychology*, 39(5), 389-414.
- Droop, M., & Verhoeven, L. (2003). Language proficiency and reading ability in first-and second-language learners. *Reading research quarterly*, 38(1), 78-103.
- Durkin, D. (1966). *Children who read early* (Vol. 966). New York: Teachers College Press.
- Eakins, B., & Sterling, D. (2009). Metrics to Assess Destratification Efforts in BVSD Schools. *DAC Accountable Programs subcommittee report*.
- Escamilla, K., & Hopewell, S. (2010). Transitions to biliteracy: Creating positive academic trajectories for emerging bilinguals in the United States. *International perspectives on bilingual education: Policy, practice, and controversy*, 69-93.

- Evans, M. A., Shaw, D., & Bell, M. (2000). Home literacy activities and their influence on early literacy skills. *Canadian Journal of Experimental Psychology/Revue canadienne de psychologie expérimentale*, 54(2), 65.
- Francis, D. J., Lesaux, N., & August, D. (2006). Language of instruction. Developing literacy in second-language learners, 365-413.
- Frijters, J. C., Barron, R. W., & Brunello, M. (2000). Direct and mediated influences of home literacy and literacy interest on prereaders' oral vocabulary and early written language skill. *Journal of Educational Psychology*, 92(3), 466.
- Garcia, G. E. (2003). The reading comprehension development and instruction of English-language learners. *Rethinking reading comprehension*, 30-50.
- Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice*. Teachers College Press.
- Goldenberg, C. N. (1987). Low-Income Hispanic Parents' Contributions to Their First-Grade Children's Word-Recognition Skills. *Anthropology & Education Quarterly*, 18(3), 149-179.
- Goldenberg, C. (2011). Reading instruction for English language learners. *Handbook of reading research*, 4, 684-710.
- Goldenberg, C., Rueda, R. S., & August, D. (2008). Sociocultural contexts and literacy development. *Developing reading and writing in second-language learners*, 95-129.
- Gonzalez, J. E., & Uhing, B. M. (2008). Home Literacy Environments and Young Hispanic Children's English and Spanish Oral Language A Communal Analysis. *Journal of Early Intervention*, 30(2), 116-139.
- Grabe, W. (2009). *Reading in a second language: Moving from theory to practice*. Ernst Klett Sprachen.
- Hammer, C. S., Miccio, A. W., & Wagstaff, D. A. (2003). Home Literacy Experiences and Their Relationship to Bilingual Preschoolers' Developing English Literacy Abilities An Initial Investigation. *Language, Speech, and Hearing Services in Schools*, 34(1), 20-30.
- Hancock, D. R. (2002). The effects of native language books on the pre-literacy skill development of language minority kindergartners. *Journal of Research in Childhood Education*, 17(1), 62-68.
- Heath, S. B. (1983). *Ways with words: Language, life and work in communities and classrooms*. Cambridge University Press.
- Hess, R. D., & Holloway, S. D. (1984). FAMILY AND SCHOOL AS EDUCATIONAL-INSTITUTIONS. *Review of child development research*, 7, 179-222.
- Hoskins, K. F. (1977). *The effects of home reading experiences on academic readiness for kindergarten children* (Doctoral dissertation, ProQuest Information & Learning).

- Jordan, G. E., Snow, C. E., & Porche, M. V. (2000). Project EASE: The effect of a family literacy project on kindergarten students' early literacy skills. *Reading Research Quarterly, 35*(4), 524-546.
- Kieffer, M. J. (2012). Early oral language and later reading development in Spanish-speaking English language learners: Evidence from a nine-year longitudinal study. *Journal of Applied Developmental Psychology, 33*(3), 146-157.
- Koda, K. (1995). Cognitive consequences of L1 and L2 orthographies. In *Scripts and literacy* (pp. 311-326). Springer Netherlands.
- Koda, L. S. S., & Shanahan, T. (2008). Development of Literacy in Second-Language Learners. *Developing Reading and Writing in Second-language Learners: Lessons from the Report of the National Literacy Panel on Language-Minority Children and Youth, 27*.
- Krashen, S. (2000). Bilingual education, the acquisition of English, and the retention and loss of Spanish. *Research on Spanish in the US, 432-444*.
- Lapp, D., Flood, J., & Fisher, D. (1999). Intermediality: How the use of multiple media enhances learning. *The Reading Teacher, 52*(7), 776-780.
- Lesaux, N. K., & Geva, E. (2006). Synthesis: Development of Literacy in Language-Minority Students.
- Livingston, A. (2008). The Condition of Education 2008 in Brief. NCES 2008-032. *National Center for Education Statistics*.
- McCormick, S. (1983). Reading aloud to preschoolers age 3-6: A review of the research. *Reading Horizons, 24*(1), 1.
- Meyer, L. A., Wardrop, J. L., Stahl, S. A., & Linn, R. L. (1994). Effects of reading storybooks aloud to children. *The Journal of Educational Research, 88*(2), 69-85.
- National Center for Education Statistics. (2012). The nation's report card. Retrieved from <http://www.nces.ed.gov/nationsreportcard>.
- Pearson, P. D., & Raphael, T. E. (2003). Toward a more complex view of balance in the literacy curriculum. *Best practices in literacy instruction, 2*, 23-39.
- Pew Hispanic Center. (2006). From 200 million to 300 million: The numbers behind population growth. *Pew Research Center Fact Sheet*.
- Quiroz, B. G., Snow, C. E., & Zhao, J. (2010). Vocabulary skills of Spanish—English bilinguals: impact of mother—child language interactions and home language and literacy support. *International Journal of Bilingualism, 14*(4), 379-399.
- Reese, L., Garnier, H., Gallimore, R., & Goldenberg, C. (2000). Longitudinal analysis of the antecedents of emergent Spanish literacy and middle-school English reading achievement of Spanish-speaking students. *American Educational Research Journal, 37*(3), 633-662.

- Roberts, T. A. (2008). Home storybook reading in primary or second language with preschool children: Evidence of equal effectiveness for second-language vocabulary acquisition. *Reading Research Quarterly*, 43(2), 103-130.
- Rueda, R. (2006). MOTIVATIONAL AND COGNITIVE ASPECTS OF CULTURALLY ACCOMMODATED INSTRUCTION. *Effective schools*, 6, 135.
- Rueda, R. (2011). Cultural perspectives in reading: theory and research. *Handbook of reading research IV*, 84-104.
- Sénéchal, M. (2006). Testing the home literacy model: Parent involvement in kindergarten is differentially related to grade 4 reading comprehension, fluency, spelling, and reading for pleasure. *Scientific studies of reading*, 10(1), 59-87.
- Sénéchal, M., Lefevre, J. A., Thomas, E. M., & Daley, K. E. (1998). Differential effects of home literacy experiences on the development of oral and written language. *Reading Research Quarterly*, 33(1), 96-116.
- Sénéchal, M., & LeFevre, J. A. (2002). Parental involvement in the development of children's reading skill: A five-year longitudinal study. *Child development*, 73(2), 445-460.
- Slavin, R. E., & Cheung, A. (2005). A synthesis of research on language of reading instruction for English language learners. *Review of Educational Research*, 75(2), 247-284.
- Snow, C. (2008). Cross-cutting themes and future research directions. *Developing reading and writing in second-language learners*, 275-300.
- Snow, C. E., Barnes, W. S., Chandler, J., Goodman, I. F., & Hemphill, L. (1991). *Unfulfilled expectations: Home and school influences on literacy*. Harvard University Press
- Snow, C. E., Burns, M. S., & Griffin, P. (Eds.). (1998). *Preventing reading difficulties in young children*. National Academies Press.
- Teale, W. H. (1986). Home background and young children's literacy development. *Emergent literacy: Writing and reading*, 173-206.
- Tinajero, J. V., Hurley, S. R., & Varela Lozano, E. (1998). Developing language and literacy in bilingual classrooms. Gonzalez, AL, Huerta-Macias, A., & Tinajero, JV *Educating Latino students: A guide to successful practice*. Lancaster, PA: Technomic Publications. *writing experience through dialogue*. In D. Carmine & E. Kammeenui (Eds.), *Higher order thinking*, 107-136.
- Tse, L. (2001). Heritage language literacy: A study of US biliterates. *Language Culture and Curriculum*, 14(3), 256-268
- Street, J. C., & Street, J. (1991). The schooling of literacy. *Writing in the community*, 143-166.
- Verhoeven, L. (2000). Components in early second language reading and spelling. *Scientific Studies of reading*, 4(4), 313-330.

Whitehurst, G. J., Epstein, J. N., Angell, A. L., Payne, A. C., Crone, D. A., & Fischel, J. E. (1994). Outcomes of an emergent literacy intervention in Head Start. *Journal of Educational Psychology, 86*(4), 542.

Whitehurst, G. J., & Lonigan, C. J. (1998). Child development and emergent literacy. *Child development, 69*(3), 848-872.

APPENDIX A

SURVEYS TO BE DISTRIBUTED IN THE PRESENT STUDY

Thank you for taking the time to look at this questionnaire. Current research into child literacy suggests that the reading experiences of children outside of school – however big or small – can have an impact on academic ability and test scores. This survey is intended to get a general description of the home reading experiences of your child. It is completely optional and anonymous. The results of this survey will inform instructional planning. Your filling out of the survey will be greatly appreciated.

Family members who read with child

Please check all family members who read with your child regularly.

- | | |
|--|--------------------------------------|
| <input type="checkbox"/> Mother | <input type="checkbox"/> Aunt |
| <input type="checkbox"/> Father | <input type="checkbox"/> Uncle |
| <input type="checkbox"/> Older brother | <input type="checkbox"/> Grandfather |
| <input type="checkbox"/> Older sister | <input type="checkbox"/> Grandmother |
| <input type="checkbox"/> Cousin | <input type="checkbox"/> Other: |

Frequency of storybook reading

How often do you, or other members of the family, read to your child in a typical week?

At bedtime:

__ never __ once __ 2 __ 3 __ 4 __ 5 __ 6 __ 7 times __ more, please estimate:

Other times:

__ never __ once __ 2 __ 3 __ 4 __ 5 __ 6 __ 7 times __ more, please estimate:

Frequency of reading requests

During a typical week, how often does your child ask to be read to? Choose a number from 1 to 5, where 1 means never and 5 means very often.

Never Seldom Sometimes Often Very often

My child asks to be read to: 1 2 3 4 5

Frequency of child library visits

Please circle the number that you think best describes you and your child's behavior. Choose a number from 1 to 5, where 1 means never and 5 means very often.

	Never	Seldom	Sometimes	Often	Very often
My child goes to the library	1	2	3	4	5

Number of children's books

Please estimate the number of children's books that are available in the household:

__none __1-20 __21-40 __41-60 __61-80 __more, please estimate:

Reading onset

How old was your child when you started reading picture books to him or her?

(please estimate age)

Frequency of parent teaching

During a typical week, how often do you engage in the following activities. Choose a number from 1 to 5, where 1 means never and 5 means very often.

	Never	Seldom	Sometimes	Often	Very often
I teach my child:					
how to print words:	1	2	3	4	5
how to read words:	1	2	3	4	5

What is the language used most often in your household? _____

What is the language used most often to read to your child? _____

Thank you again for taking the time to answer this survey. Your participation is much appreciated.

Gracias por tomarse el tiempo para ver este cuestionario. La investigación actual en la alfabetización infantil sugiere que las experiencias de lectura de los niños fuera de la escuela - ya sea grande o pequeña - pueden tener un impacto en la capacidad académica y resultados de exámenes. Esta encuesta pretende obtener una descripción general de las experiencias de lectura en casa de su hijo. Es completamente opcional y anónima. Los resultados de esta encuesta serán informar la planificación instruccional. Su cumplimentación de la encuesta será muy apreciada.

Miembros de la familia que lean con niño

Por favor, compruebe que todos los miembros de la familia que lee con su hijo regularmente.

- | | |
|---|---------------------------------|
| <input type="checkbox"/> Madre | <input type="checkbox"/> Tía |
| <input type="checkbox"/> Padre | <input type="checkbox"/> Tío |
| <input type="checkbox"/> El hermano mayor | <input type="checkbox"/> Abuelo |
| <input type="checkbox"/> La hermana mayor | <input type="checkbox"/> Abuela |
| <input type="checkbox"/> Primo | <input type="checkbox"/> Otros: |

Frecuencia de lectura de cuentos

¿Con qué frecuencia leen usted, u otros miembros de la familia, a su hijo/a en una semana normal?

A la hora de dormir :

__nunca __una vez __ 2 __ 3 __ 4 __ 5 __ 6 __ 7 veces __más, por favor estimar:

A otras horas:

__nunca __una vez __ 2 __ 3 __ 4 __ 5 __ 6 __ 7 veces __más, por favor estimar:

Frecuencia de peticiones de cuentos

Durante una semana típica, ¿con qué frecuencia pide su hijo/a que le lean? Escoja un número del 1 al 5, donde 1 significa nunca y 5 significa muy a menudo.

	Nunca	Rara vez	A veces	A menudo	Muy a menudo
Mi hijo/a pide que le lean:	1	2	3	4	5

Frecuencia de visitas a la biblioteca

Marque con un círculo el número que mejor describe la conducta suya y de su hijo/a. Escoja un número del 1 al 5, donde 1 significa nunca y 5 significa muy a menudo.

	Nunca	Rara vez	A veces	A menudo	Muy a menudo
Mi hijo/a va a la biblioteca :	1	2	3	4	5

Número de libros infantiles

Por favor estime el número de libros infantiles que están disponibles en el hogar :

__ninguna __ 1-20 __ 21-40 __ 41-60 __ 61-80 __ más, por favor estimar:

Inicio de lectura

¿Qué edad tenía su hijo/a cuando usted comenzó a leer libros ilustrados para él o ella?

(por favor, estimar la edad)

Frecuencia de la enseñanza de los padres

Durante una semana típica, ¿con qué frecuencia participa usted en las siguientes actividades. Escoja un número del 1 al 5, donde 1 significa nunca y 5 significa muy a menudo.

	Nunca	Rara vez	A veces	A menudo	Muy a menudo
Le enseño a mi hijo/a:					
cómo escribir palabras:	1	2	3	4	5
cómo leer palabras:	1	2	3	4	5

¿Cuál es el idioma que se utiliza con mayor frecuencia en su hogar? _____

¿Cuál es el idioma que se utiliza con mayor frecuencia para leer a su hijo? _____

Gracias de nuevo por tomarse el tiempo para responder a esta encuesta. Su participación es muy apreciada.

APPENDIX B

A GLOSSARY OF TESTING TECHNIQUES

Throughout this paper, several kinds of outcome assessment measures are named without a formal description attached. This glossary is intended to act as a reference in the case that a reader of this paper is unfamiliar with a certain type of assessment. If there is a specific test that is typically used for an assessment, it will be named and described. This should give some idea as to what kind of data each assessment generates. The listing below is in alphabetical order.

Alphabet Knowledge Measure

To test the student's alphabet knowledge, a letter identification test is typically used. The test could be administered by presenting the student with a sample or entire set of capital and lower-case letters in random order and prompting the student to identify each one. Each correctly identified letter earns the student one point, and a tally of total correct identifications serves as an overall score.

Invented Spelling Measure

A measurement of a student's ability to invent spellings is typically used by Monique Sénéchal and her colleagues in home literacy research. Sénéchal et al. (1998) described the technique by which invented spelling ability was measured. In this technique, the student is asked

to print certain words spoken by the test-giver. The student is instructed to write the words as best as he or she can, and told to include in the spelling as many of the sounds as possible. Points are awarded based on how many of the sounds are represented in the invented spelling, and full credit is given as long as the correct sound is represented (as opposed to the correct letter). A total score is formed by adding the individual points earned in the invented spelling of each word.

Listening Comprehension Measure

In order to measure for listening comprehension, a test such as Listening to Words and Stories – included as part of the Stanford Early School Achievement Test – is typically used. In this test, a number of short (one to five sentence) stories is played for the student and followed with a question checking for comprehension of each. The questions target either factual or inferential comprehension, and are answered by picture selection from a set on the part of the student. Each correct answer earns one point, the total of which represents the student's final score.

Phonological Awareness Measure

In order to measure for phonological awareness, a test such as The Sounds/Letters subtest of the Stanford Early School Achievement Test is typically used. The test is administered by the test-giver producing a spoken word, and then asking the student to identify an image of a word that has either the same sound in its onset or in its rime. As in the previous two measures, the image is selected from a set of alternatives, and each correct answer is awarded one point to contribute to an overall score.

Print Concepts Measure

In order to test for the student's knowledge of print concepts, the Clay (1979) Concepts About Print test is typically used. The test is performed by presenting a storybook to the student and asking such questions as where does one start reading, what direction does one read in, where is the front of the book, and other such conceptual inquiries. Each question answered correctly earns the student one point and these points are added together to form an overall score.

Receptive Vocabulary Knowledge Measure

In order to measure for receptive vocabulary, the Peabody Picture Vocabulary Test-Revised – last released as the PPVT-IV in 2007, though with several prior releases – is typically used. The test is administered by presenting the student with a series of cards each containing a set of four distinct images. The student is asked orally by the test-giver to identify the image of one target word contained in each set. By making a correct identification, the student earns one point and is scored accordingly.

Text or Word Decoding Measure

Measurements of Text or Word Decoding typically involve a task in which the student is asked to read a number of practice words. The chosen words are typically simple ones with which the student is thought likely to be familiar (perhaps the student's name, mom, dad, dog, etc.). For each letter that the student sounds out correctly, he or she is rewarded a point, and receives one additional point if in addition to pronouncing all three letter sounds, the student is able to blend the sounds together properly. The combined scores from the target words forms the overall score in this test.