An Examination of the Validity of State Standardized Testing of English Language Learners

A Dissertation

Presented in Fulfillment of the Requirements for the

Degree of Doctor of Education with

a

Major in Educational Leadership in the

Department of Graduate Education

Northwest Nazarene University

by

Arturo Gonzalez

April 2016

Major Professor: Heidi Curtis, PhD

AUTHORIZATION TO SUBMIT DISSERTATION

This dissertation of Arturo Gonzalez, submitted for the degree of Doctor of Philosophy in Education with a major in Educational Leadership and titled "An Examination of the Validity of State Standardized Testing of English Language Learners," has been reviewed in final form. Permission, as indicated by the signatures and dates given below, is now granted to submit final copies.

Committee Chair	Heidi Curtis Dr. Heidi Curtis	Date 4-11-16
Committee Members	 Dr. William Fritz	Date 5/9/16
	Gene Sharratt Dr. Gene Sharratt	Date 5/2/16
Doctoral Program Director	Heidi Curtis Dr. Heidi Curtis	Date 4-11-16
College of Adult and Graduate Studies, Dean	Paula D Kellerer Dr. Paula Kellerer	Date 4-11-16

ACKNOWLEDGEMENTS

My greatest gratitude is reserved for my Committee Chair, Dr. Heidi Curtis, who has now experienced the concept of time from a very deeply embedded Mexican perspective-a cyclical concept of time adds so many more challenges to the dissertation process! Your knowledge, encouragement and directing me to find the answers helped me to own the process more than I thought I could. Thank you for being so good at what you do! Appreciation is undoubtedly extended to the true professionals that comprised the committee: Dr. William Fritz and Dr. Gene Sharratt. I have Dr. Fritz to thank for providing the feedback that yielded the necessary formal structure to my data analysis process- without your help I may still be carrying my findings and research. Unbeknownst to Dr. Gene Sharratt, he is the educator who has most inspired me along my professional journey in education and as a professional. Since my first year teaching, his keynotes and professional interactions have resulted in my pursuit of continuing to work towards being better at what I do.

DEDICATION

I have always been privileged and blessed to experience successes and accomplishments with the support and encouragement of others. For me it all begins at home with the patience and understanding of my family. Celestina, you have always been supportive, patient, and most importantly, you continue to remind me that the answer to everything, including a dissertation, is prayer. My wonderful daughters: Olivia, Luciana, Gabriela, and Alanna; your acceptance and understanding of the time required for this research made the process so much easier.

My parents, Salvador and Juanita Gonzalez, for their constant reinforcement and belief that the answer to a successful life includes a quality education-I'm so grateful to have listened. To my in-laws, Ray and Connie Haigh, who have been understanding as I have been excused to be away working on research.

A Dios, gracias.

ABSTRACT

The purpose of this study was to determine the validity of state standardized testing English Language Learners are required to participate in as part of the Elementary and Secondary Education Act (ESEA). Although policymakers continue to debate the minutia of the academic accountability for English Language Learners, the over-arching question of test validity has continued to be ignored. Current federal requirements identify participation in state standardized testing of all English Language Learners who have been in country more than one academic year. Data collected for analysis included English Language Learners' level of English proficiency, and state standardized testing scores in reading, English language arts, and mathematics. The goal was to determine, using quantitative data, correlations between these variables. The study concludes by highlighting factors to be considered that influence accountability policy at the state and federal level and by making suggestions for future research in the area of assessing English Language Learners for the purpose of increased accuracy for accountability in academic growth and performance.

Through the use of ex-post-facto data, the results of the study identified three findings. The first finding identified that there is a correlation between ELL students' English language proficiency level and performance on state standardized testing in the areas of reading, English language arts, and mathematics. The second finding in the study, using the Washington English Language Proficiency Assessment (WELPA) to identify student English proficiency levels, recognized that there is a threshold between WELPA levels and the ELL students who are passing state standardized tests. The third finding recognized that there was no significant distinction in state standardized testing between the number of reading/English language arts tests and mathematics tests.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Chapter I

Introduction

Our educational system has rightfully acknowledged the richness of the cultures and heritage that our students bring to our schools on a daily basis. This is most evident in our elementary and secondary students who are in the process of learning English as well as the subject-content of their grade level (Nakamoto, Lindsey & Manus, 2012; O'bryon, 2010). However, the teaching and assessment of limited English speakers also brings unique challenges for the teacher, school, and district in terms of high-stakes testing (Izlar, 2010; Mahon, 2006).

Ramon's educational experience helps to paint a very common story that continues to be replicated in some version each year in thousands of schools across the United States. The previous year, Ramon's family migrated from the United States from a rural area outside Mizque, Bolivia. Ramon entered public school as a third grader, qualified for ELL services, and was exempted from participating in the state standardized testing due to having been in the country for less than a year. Although all instruction is in English, during the first two weeks of school, Ramon completed an academic assessment evaluation administered in Spanish by the ELL teacher as part of gathering baseline data; the results indicated that Ramon was at grade level in reading and slightly below grade level in mathematics. Ramon's primary language is Quechua, a native South American language, but he was educated using Spanish. The state approved English language assessment test administered each fall indicates that Ramon's English is increasing and he is able to communicate enough to establish and maintain friendships with classroom peers who do not speak Spanish; his confident manner and inclination toward organized sports contribute to his social success. Well into his second academic year, Ramon continues to have difficulty understanding the curriculum and keeping up with academic

expectations. In addition to receiving ELL services, Ramon also benefits from qualifying for additional support in reading through the school's Title I program. Ramon continues to qualify for ELL services and has progressed to a level 2 in his proficiency of the English language. Having now been in America for a year and seven months, Ramon is expected to participate in the state standardized testing for grade 5 in English Language Arts (ELA) and Mathematics. Ramon does not receive certain adjustments to how the test is administered, such as read-aloud accommodations, since the guidelines identify that will make the test will be invalid. Reviews of the state testing results classify Ramon as performing in the lowest quartile in both ELA and mathematics. Ramon's testing outcome is a very common scenario with ELL students at both elementary and secondary school levels. This study will focus upon the most basic topic; the appropriateness of assessing ELL students under current state testing guidelines as determined by NCLB.

Chapter I will paint a clear picture of what the research identifies as non-negotiable timelines for the acquisition of a second language that is at a level of proficiency reflective of a native speaker and how it impacts, and is impacted by, federal accountability guidelines. An overview of Chapter 1 identifies six distinct components that will be addressed; this includes a Statement of the Problem, Background, Hypothesis, Description of Terms, Significance of the Study, and Overview of Research Methods. The content of this overview will provide the backdrop necessary to understand the conceptual framework associated with this topic.

Statement of the Problem

The practice of assessing all English language learners (ELL) on state standardized testing for content knowledge, regardless of English language fluency level, results in inaccurate data that has a direct academic impact on the individual student as well as potential sanctions for

the school and school district (Abedi & Levine, 2013; Abedi, Carolyn & Lord, 2004; Abella, Urrutia, & Shneyderman, 2005; Dockery, 2013). The ELL group affected by the problem includes elementary and secondary age students who qualify for English Language services using the federal guidelines under NCLB (NCLB, 2002), as determined by each individual state.

The purpose of the study is to identify criteria and accommodations for the testing of English language learners that takes individual students' English fluency level into consideration while meeting Washington State mandated standardized testing obligations. The study will use quantitative data, specifically, student language proficiency scores, to identify a language proficiency level that current research supports as reflective of academic language proficiency. The validity of the identified proficiency level will then be verified through the comparison of student scores and success rates of Washington State's standardized tests from 2012, 2013 and 2015. As a result of the identification of a minimum language proficiency level, the study will be able to provide recommendations for state reporting of ELL academic scores that are more reflective of academic performance and content knowledge while minimizing language variables.

Background to the Study

Much research has been published with regard to the stages and processes that a second language student will progress through in order to reach academic language proficiency at a fluency level reflective of native speakers (Butler & Witt, 2000; Collier & Thomas, 2004; Cummins, 1981; De Avila, 1997; Thomas & Collier, 2002). Researchers have strongly questioned the validity of the practice of standardized testing of ELL students for content knowledge before reaching a mastery level of English (Hakuta, 2001; Holmes & Duron, 2000). Mahon (2006) identifies that there is a correlation between English language proficiency and

academic performance; there is an absence of agreement on what stage ELL students are ready to be assessed using the target language, in this case English. The research has also expanded to recognize that there is a level of discrepancy when applying assessments designed for native English speakers to ELL students (Abedi, 2004; Abedi & Dietel; Council of Chief State School Officers, 2000). There has been a significant lack of studies concerning the implementation of accurate academic standardized assessments for ELL students (August & Hakuta, 1997; Butler, 2001; Coltrane, 2002; Huempfner, 2004; Koyama, 2004).

The acknowledgements that states are under federal government obligation to academically assess ELL students in mathematics and reading as a sub-group emphasizes the need for further research. To more accurately report data and differentiate testing criteria based on research findings of second language acquisition, we need to now focus on applying what is known.

Research Questions

Creswell (2014) states the value of recognizing the intent of a study directed toward addressing critical social research questions calls for "the identification of factors that influence an outcome" (p. 20). Researchers engaged in the academic success and performance of ELL students recognize the precarious dilemma caused by current policy under NCLB (Menken, 2010). The focus of this study on the standardized testing of ELL students will address the following questions:

1. Is there a relationship between English Language Learners' second language proficiency level and performance on state standardized tests in reading and English language arts?
2. Is there a relationship between English Language Learners' second language proficiency level and performance on state standardized tests in mathematics?

The questions will provide guidance in identifying more accurate criteria and accommodations on state standardized testing for ELL students. Variables factored into the considerations will specifically include the application of the developmental stages of language acquisition.

Description of Terms

The following terms are specifically associated in K-12 educational settings with students learning English and state standardized testing. The terms and definitions will help contribute to a more consistent use of terms and alignment of understanding (Creswell, 2014).

Basic Interpersonal Communication Skills (BICS). The language associated with social interactions (Cummins, 1981).

Cognitive Academic Language Proficiency (CALP). The technical language that is associated with academic learning and content (Cummins, 1981).

Common Core State Standards (CCSS). Academic skills that students should know at each grade starting at kindergarten through grade 12 (http://www.corestandards.org/).

Common Underlying Proficiency (CUP). The meta-analysis and academic proficiency associated with academic performance of speakers of two languages (Cummins, 1981).

English language learner (ELL). Students also referred to as Limited English Proficient (LEP), English as a Second Language (ESL) student, and English Learner. A student who has qualified under state guidelines for support programs to receive additional instruction to learn/increase English language proficiency. Second language students enrolled in an elementary or secondary school who were born outside of the United States or whose first language is other than English; students whose oral or written communication in English

negatively impacts the ability to reach proficiency on state assessments, be academically successful in a classroom setting, or negatively impact the accessibility to fully engage in society (No Child Left Behind Act, 2001).

End-of-Course (EOC) Exam Algebra 1. A math assessment for students in grades 9-12 which is used to fulfill math testing requirements for students through the graduating class of 2018.

Native language: The country's language that an individual is born into or is native to (Collins Dictionary, 2014).

Smarter Balanced Assessment Consortium (SBAC): State-level student assessment for students in grades 3-8 and 11, designed to measure career and college readiness as identified by the Common Core State Standards (Smarter Balanced Assessment Consortium, n.d.).

Washington English Language Proficiency Assessment (WELPA): Assessment used by Washington State public schools to determine English language learners' eligibility for English language services.

Target Language: The language that is attempted to be learned (Krashen, 1996).

Significance of the Study

The desire to assure that previously marginalized student populations are being served in K-12 education has resulted in the identification of sub-groups under NCLB; specifically English Language Learners (No Child Left Behind Act, 2001). In an effort to address issues of academic accountability, ELL students are being assessed in the target language (No Child Left Behind Act, 2001). It is interesting to note that testing accommodations designed for special education students have been applied without validating their use with ELL students (Dixon, 2011). For

example, psychologists identified the use of interpreters as both best practice and discouraged practices when assessing ELL students (O'bryon & Rogers, 2010). Challenges that school psychologists face include determining who is responsible for assessing ELL students, language skill level of the proctor to conduct the assessment, and appropriate selection of evaluation measures to be used.

Huggins and Elbaum (2013) used a Score Equity Assessment (SEA) to measure if fifth grade assessment results were similar and equitable with regard to accommodations for student subgroups of Students with disabilities and English Language Learners. The groups either used or did not use test accommodations. The results did identify a pattern of differences between the groups with regard to whether or not accommodations were utilized. The invariance results indicate there are group differences due to the use of accommodations as well as other factors. Measurement comparability was slightly stronger with the group with accommodations than with the group without accommodations. The findings in the study indicate that students are not receiving the needed accommodations to ensure measurement comparability with the overall group. This research addresses the fact that ELL students are being underrepresented in the use of accommodations during standardized testing which means specifically that these students are not able to actually reflect their true learning due to the absence of accommodations.

Five research based accommodations for ELL students have been identified by Willner, Rivera, and Acosta (2009): Teaching of the content, accommodations that meet ELL students' linguistic needs, team decision-making to determine accommodations, individualizing accommodations, and using accommodations prior to assessments. If additional guidance is required to determine accommodations, then the following factors should be considered: English Proficiency Level (ELP), literacy level, age/grade, and language of instruction. There was a

measurable difference in performance between those students who received testing accommodations and those who did not receive accommodations.

Research based decision making has not yet caught up with the current practices implemented in the standardized testing of ELL students for purposes of accountability (Pennock-Roman & Rivera, 2011; Stansfield, 2011). The significance of this study will directly contribute to the limited amount of research literature that addresses the appropriateness of standardized testing for ELL students. The individuals most ready to benefit from this study include state and federal policy makers establishing guidelines for: 1), the testing of ELL students; 2), required adjustments to reporting practices for the purpose of accountability requirements; and, 3), use of accommodations. This study will ultimately result in correcting a gross, but well intentioned error, in the current methods used to gauge the academic progress of limited English speakers in our K-12 educational system. The findings are also applicable to standardized testing practices generated at the local level.

Overview of Research Methods

Data will be collected for ELL students in grades 3, 4, 5, 6, 7, 8 and 11. The data collection will include state standardized test scores and English language proficiency scores. The state standardized test scores will be comprised of the Measurement of Student Progress (MSP) for reading and mathematics, and the Smarter Balanced Assessment (SBA) scores for English language arts and mathematics. The Washington English Language Proficiency Assessment (WELPA) will be used to measure the identified English language proficiency level of ELL students. The study will identify a correlation between ELL students' English language proficiency and successful performance on state standardized testing. For the purpose of validating that standardized testing is measuring student content knowledge rather than second

language ability, the research design includes correlational research visually formatted through the use of a scatterplot. The analysis will include the use of Spearman's rho bivariate correlation between state standardized testing and WELPA scores; the analysis will also assist in addressing the frequency of success on standardized tests by ELL students when their English language proficiency level is identified.

Chapter II

Review of Literature

Introduction

This review of literature provides sufficient evidence of the processes and stages that Second Language Learners (ELL's) must navigate so that proficiency is reached in the target language (Abedi, J., & Levine, H. G., 2013; Collier, 1987; De Avila, 1997; Dockery, 2013; Hakuta, Butler & Witt, 2000; Mahon, 2006; Olmstead, 2009). A relationship can then be established between appropriate assessment methods and students' level of language acquisition. The chapter is concentrated on the following five categories: (a) a theoretical framework for assessing ELL students, (b) how individuals acquire a second language, (c) distinguishing between social and academic language, and (d) current mandated assessment practices from the state and federal level for ELL students. The chapter concludes with an overview statement regarding the validity of current standardized assessment practices of English language learners at the state level and suggestions for future studies.

An Established Paradigm for Second Language Acquisition

The following compilation of research on academic language proficiency will provide the necessary contribution to create an acceptable, shared understanding for the paradigm of acquiring a second language. This will then support the theoretical framework that can be applied to better support ELL students with standardized testing (Cummins, 1986, 2000; Krashen, 1982; Krashen & Terrell, 1983). The paradigm addresses research from Dr. James Cummins and Dr. Stephen Krashen with regard to how language is processed by second language learners. Dr. Cummins' review will focus on the Common Underlying Proficiency Theory and The Four Quadrants, which will later support a more in-depth review of basic

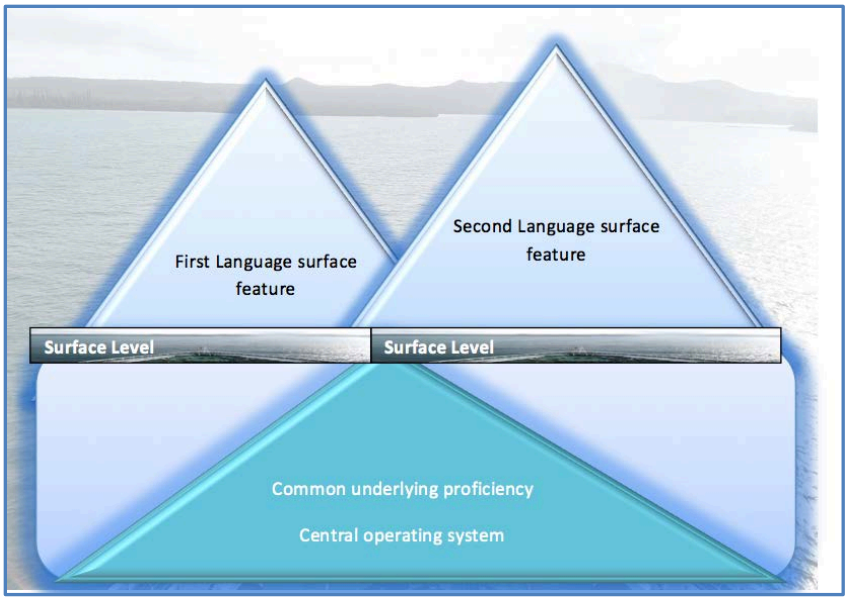
Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALPS). Krashen's (1982) review will be concentrated on his theory of Comprehensible Input and Acquisition-Learning Hypothesis.

The *Common Underlying Proficiency* (CUP) theory asserts that knowledge and proficiency acquired in the first language transfers directly to the second language (Cummins, 1986, 1989). This means that understanding skills, concepts, and having knowledge in one language simply requires the student to learn and apply the vocabulary to the second language without being required to relearn the same subject content. The social vocabulary for both the first and second language is identified as above the surface level, while subject content/concepts are identified as being a part of the CUP (See Figure 1). According to Cummins (2000), the second language is made comprehensible due to the development of conceptual knowledge in the first language. If a student has previously learned the concepts of the westward expansion in his first language, he simply needs to acquire the vocabulary in the second language. The learning is much more difficult if the student must learn both the concept and the vocabulary in the second language (Cummins, 2000; Odo, 2012; Rubinstein-Avila & Fink, 2013). Fan, Ran, Li, Perfetti and Booth (2013) reviewed the assimilation hypothesis, where the brain accesses the native language, and the accommodation hypothesis, where the brain departmentalizes access between the first and second language. The results indicate there is a connection between the first and second language. The connection actually increases with the increase in proficiency level in the target language. The native language and target language both access the same points in the brain for reading when assessing adults. This research addresses the topic of the first language itself being accessed for use and acquisition of the second language; this more recent research supports James Cummins (2000) work regarding the need to learn content only once.

The CUP theory is described as having direct implications on the testing of students in the second language when they have not yet reached what is considered a proficiency level in that second language (Abedi & Dietel, 2004). This may be due to the students not yet having acquired the necessary vocabulary to fully express their response. The result may be an inability to discern whether a student's incorrect response may be due to content knowledge or lack of second language proficiency (Abedi & Dietel, 2004).

Figure 1

Cummins Dual Iceberg on the Common Underlying Proficiency



Tangient. (2014*), Bilingualism Principles*. Wikispaces. Retrieved from http://www.ctserc.org/ell/Summary%20of%20the%20Basic%20Principles%20of%20Second%20Language%20Acquisition.pdf.

The Input Hypothesis (Krashen, 1982), explains how a student develops a second language. The hypothesis states that acquisition, or progress in a second language is made only when the learner receives input that is one step above the learner's linguistic competence (Krashen, 1982). Krashen (1982) describes this as the learner being at input 'i' and the content that is one step beyond the learner as '+1'. Krashen refers to 'i+1' as Comprehensible Input. The

learner is attentive to the meaning rather than the form or structure of the communication; although the learner is able to understand, the competency level to produce will develop later. Individuals indirectly refer to the *Input Hypothesis* when references are made to being able to understand what is being said but are unable to respond because the content is just beyond their linguistic competence (Krashen, 1982). This hypothesis has implications to being able to accurately access ELL students' progress on standardized testing because understanding precedes production when learning a second language (Abedi & Dietel, 2004).

Acquisition-Learning Hypothesis. A clear distinction is made between learning vs. acquiring a second language (Krashen, 1982). Essentially, learning a second language is associated with experiences in a classroom or other formal settings. The student is aware and intentional of the learning that is taking place. The learning includes a methodical approach and examples may include:

- direct instruction in grammar, articulation, intonation, and sentence formation
- form and structure of the language is formally taught
- learner is conscious that intentional second language development is occurring (Krashen, 1982)

In contrast to language learning:

- language acquisition focuses on the characteristics of interest and relevance
- language acquisition is reflective of how children learn a first language
- language acquisition is occurring subconscious without formal teaching
- learner is not focused on the language but rather the event, environment, and communication (Krashen, 1982).

Irrelevant to whether the language learner utilizes an approach of language learning or language acquisition, the research supports that it takes five to seven years for a student to reach academic language proficiency levels reflective of a native speaker (Collier, 1992; Cummins, 1981; De Avila, 1997; Hakuta et al, 2000).

The Process and Stages of Second Language Acquisition

Research findings support the proposal that grammatical structures follow a predictable order of acquisition when learning a second language (Fatham, 1975; Krashen, 1987). This natural order reinforces Krashen's (1982) research that ELL student progress through these stages regardless of age, gender, language instruction, education, conditions of exposure to the second language. Krashen (1982) emphasizes that a language program should not be designed around the arrangement of grammatical acquisition but rather centered on the goal of language acquisition; the focus is on natural communication rather than structure.

Figure 2

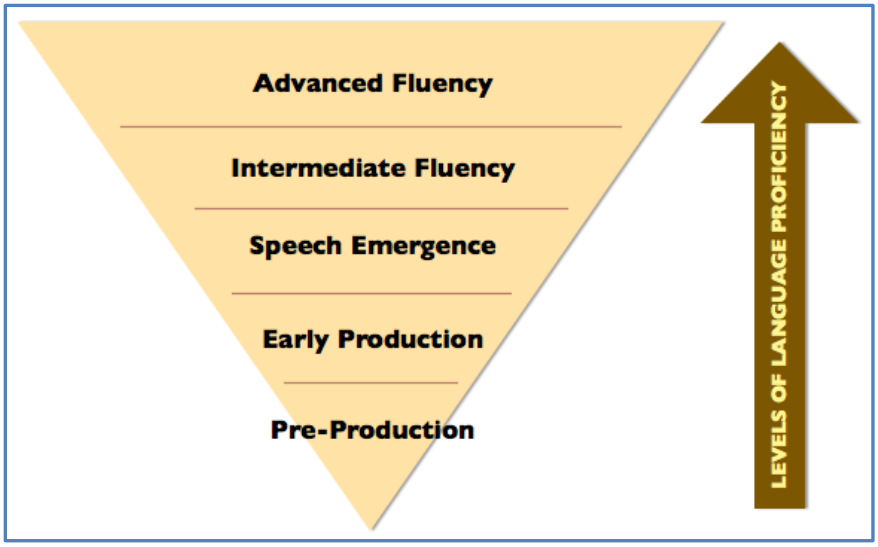
Natural Progression of Language Acquisition

Note. Adopted from "*Second Language Acquisition: Krashen and Cummins*. East Baton Rouge Parish School System. Retrieved from http://esl.ebrschools.org/eduWEB1/1000123/docs/esl-esl_3-second_lang_acq.pdf.

There are five identified common stages to Second Language Acquisition (SLA), according to Krashen and Terrell (1983). Figure 2 illustrates these stages. The stages are sub-divided into additional categories that fall within one of the five stages outlined below. Researchers have also condensed the stages while maintaining the integrity of each stage's characteristics for language development. For example, Cummins (1986) identifies these stages as: 1) Pre-production, 2) Early production (speech emergence), and 3) extended (intermediate) production. The following descriptors of each stage provide a general description of the process that ELL students must master to reach language proficiency (Krashen, 1982), and displayed in Figure 3.

Figure 3

Krashen and Terrell Stages of Language Acquisition



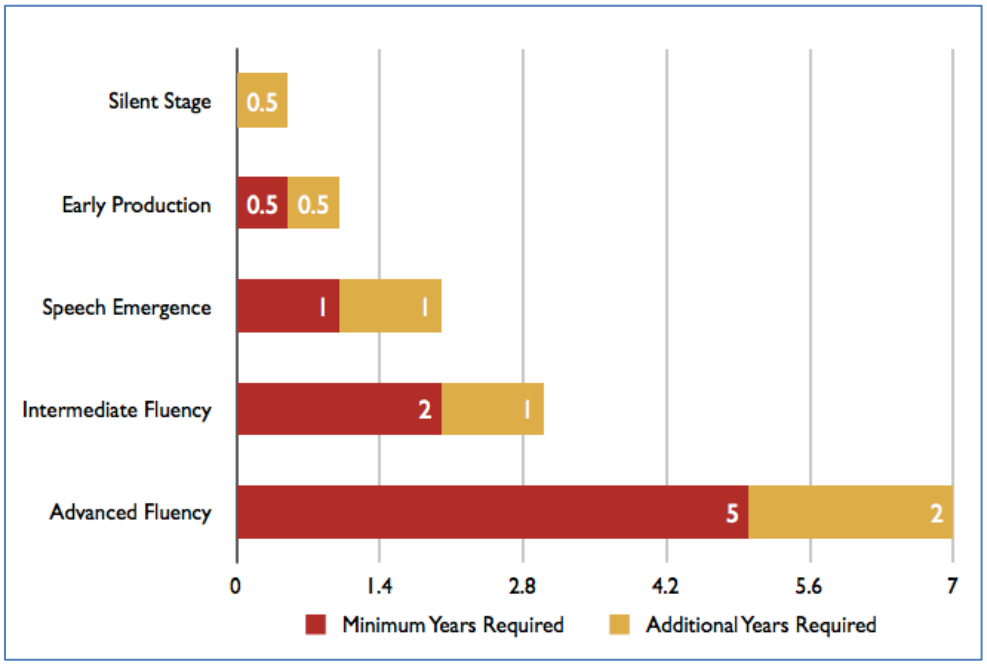
Note. Adopted from "*Second Language Acquisition: Krashen and Cummins*. East Baton Rouge Parish School System. Retrieved from http://esl.ebrschools.org/eduWEB1/1000123/docs/esl-esl_3-second_lang_acq.pdf.

Krashen and Terrell (1983) identified the approximate time commitment to reach native-like language proficiency (See Figure 4). Figure 4 identifies that during Pre-production, the

learner takes in language but does not produce; the comprehension of language precedes use by the learner (Krashen & Terrell, 1983).

Figure 4

Time Required to Reach Proficiency at Each Language Stage



Note. The bar graph displays the range of time needed for ELL students to reach proficiency in each of the language development stages (Krashen & Terrell, 1983).

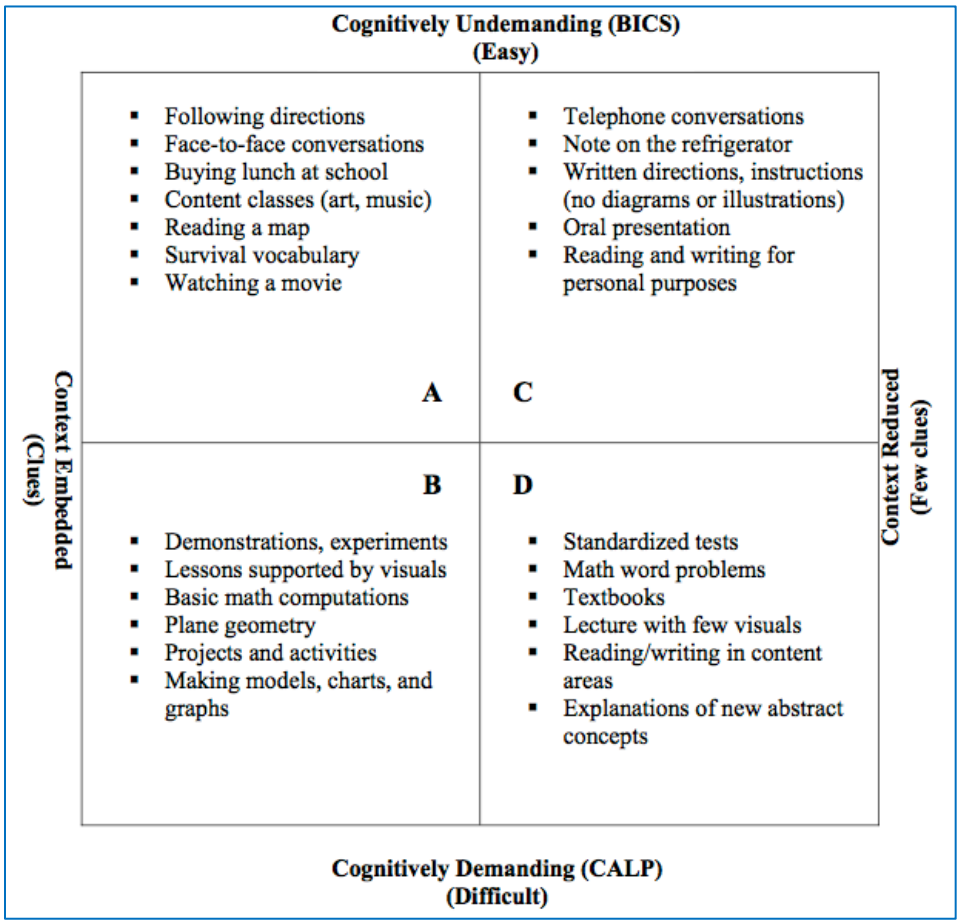
Pre-production is referred to as the "silent period" and may take from approximately a day to six months. Early Production speech is characterized by the learner being able to communicate with few words, comprehension is limited, and grammatical errors are anticipated. Early Production may take between six months to a year. Speech Emergence is characterized by simple sentences, basic dialogue and language functions that are at a concrete/literal level. Speech emergence may last between one and two years. Intermediate Fluency includes full comprehension with few if any grammatical errors and the ability to interact in in-depth conversations. Intermediate fluency may take between two to three years. Advanced Fluency is

indicative of native like fluency by the speaker in both oral communication and academic performance. Mastery of the Advance Fluency stage may take between five to seven years. Krashen (1982) notes that language acquisition is fluid and students will move between stages, dependent upon the cognitive demands of the second language. English language learners need to be able to move into verbal production of the second language at a comfortable speed as they develop their vocabulary (Krashen & Terrell, 1983).

The Academic Language as a Basis for Success: A Theoretical Framework

Now that there is a common understanding with regard to how a second language is acquired, the theoretical framework can be presented and applied to better support ELL students with standardized testing (Cummins, 1986, 2000; Krashen, 1982; Krashen & Terrell, 1983). The theoretical framework is established on James Cummins' Four Quadrant Matrix. The quadrants demonstrate how tasks and activities can be identified as cognitively demanding or undemanding and context-embedded or context-reduced (Cummins, 1989, 2000); these quadrants can be utilized in determining the level of difficulty for a task or activity when working with ELL students (Cummins, 1989, 2000). The quadrants may be applied to non-academic as well as academic tasks that students are assigned within a school day. Context-embedded refers to students receiving strong support and visual cues to understand the meaning of the text content. The information being processed is thus, more comprehensible. Examples include, but are not limited to: incorporating visuals, demonstrating processes, hands-on activities, utilizing manipulatives when introducing or reinforcing concepts, illustrations associated with vocabulary and word problems (Cummins, 1981, 1989). Context-reduced tasks/activities tend to be abstract and contain few, if any, clues to support the oral language or text, which makes the language less comprehensible (Cummins, 1981, 1986, 1989, 2000).

Figure 5



Cummins Quadrant Matrix for Evaluating Language Demands on Content Activities

State Education Resource Center. (2009*), Summary of the Basic Principles of Second Language Acquisition*. Retrieved from http://www.ctserc.org/ell/Summary%20of%20the%20Basic%20Principles%20of%20Second%20Language%20Acquisition.pdf.

Figure 5 illustrates that standardized testing aligns with Quadrant D, which is identified as the most challenging quadrant due to the context-reduced material and teaching/learning format (Cummins, 1989). A second language learner must be considered to be as proficient as a native speaker in order to function successfully in Quadrant D. A ‘D’ quadrant task, labeled as both cognitively demanding and context-reduced, will typically be the most challenging for most

students, and especially more challenging for ELL students. Nevertheless, ELL students cannot bypass this quadrant because the content is required for academic success and successful performance on standardized assessments (Cummins, 2000). Research indicates requiring four to seven years in order to reach native language proficiency to successfully perform tasks in this quadrant (Collier, 1992; Cummins, 1981; De Avila, 1997; Hakuta et al, 2000).

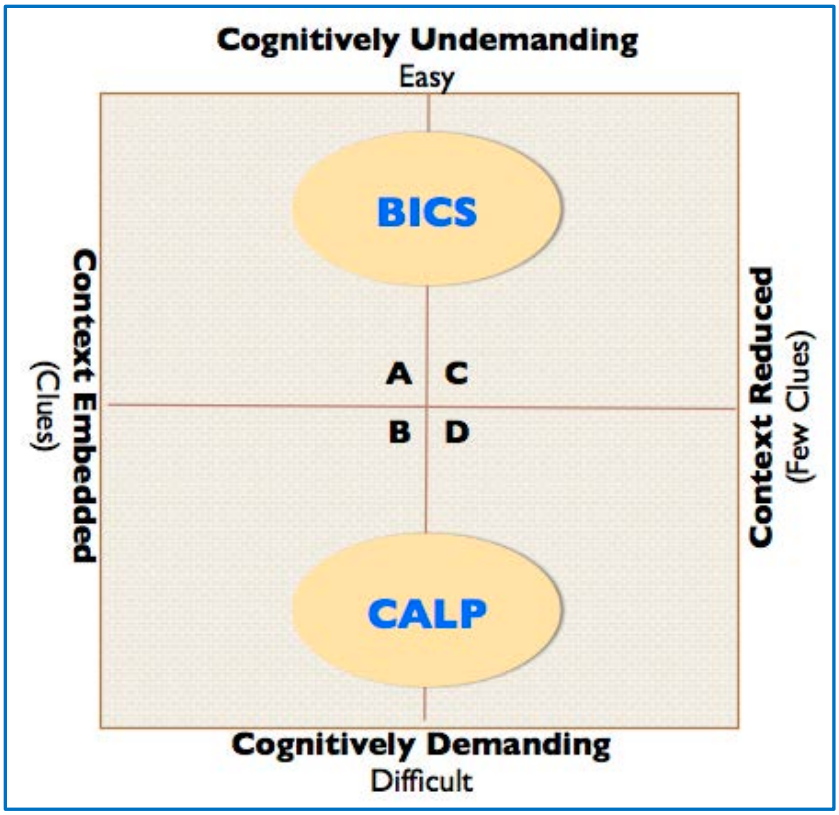
When addressing second language development and acquisition it is critical that the literature review include information on the difference between academic and social language, as it relates to student academic success within the classroom and in relation to performance on assessments (Abedi, 2004; Abedi & Dietel, 2004; Olmstead, 2004; Schmidt, 2000).

Basic Interpersonal Communication Skills (BICS) is the vocabulary and language of social conversation. The ELL student has many cues and the language is context-embedded (Cummins, 1981). The cues available to the second language learner include but are not limited to non-verbal cues (gestures, expressions, etc.), voice cues (intonation, volume, stress), and contextual cues (visuals applicable to the conversation). Within approximately two years of exposure to a second language, an ELL student can reach a successful level of BICS or conversational language (Collier, 1987; Klesmer, 1981). The learner also had the option to seek clarification and interject as part of their individual understanding. The demand on the language increases with higher level thinking and abstract concepts while providing less language support. Cummins (1981) warns about assuming that non-native speakers with a high level of fluency and mastery of oral English are also at a high level of academic language proficiency; a high level of accuracy in the spoken language does not equate to proficiency in the academic language (Cummins, 2000).

In contrast, *Cognitive Academic Language Proficiency* (CALP) is the language of the classroom (Cummins, 1981). The language tends to include more abstract and non-verbal communication (reading, writing) and oral language fluency is expected to be at a proficiency level at par with native speakers. Cultural background and linguistic knowledge are components of the academic target language. A revisit of Cummins' (1981) Iceberg Model of Language Interdependence and Four Quadrants helps to put the value of BICS and CALP into perspective when applying it to the school environment in Figure 6 and Figure 7.

Figure 6

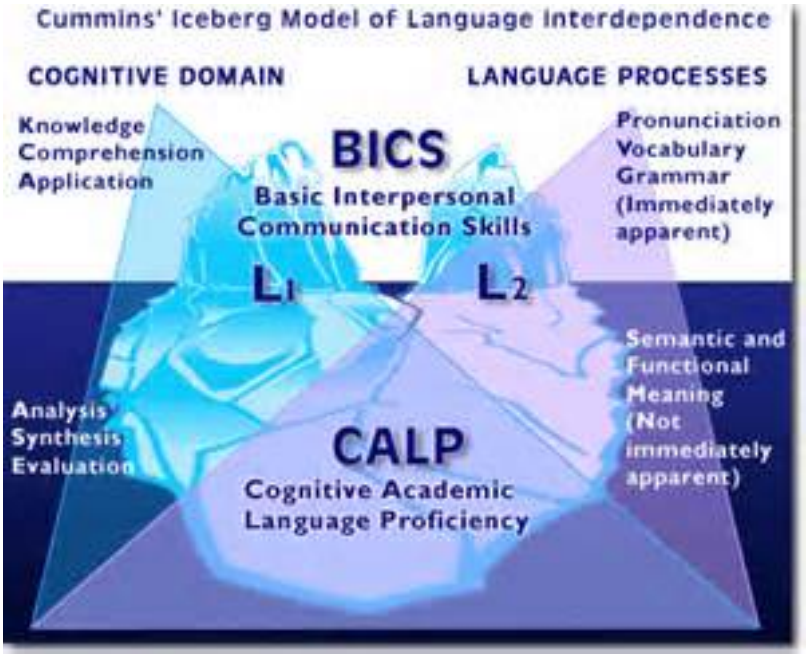
Cummins' Quadrant Matrix of BICS and CALP



Note. Adapted from "*Schooling and Language Minority Students*." by James Cummins, 1991. Sacramento, CA: California Department of Education, p. 12.

Figure 7

Cummins' Dual Iceberg Model



Serpa, Maria de Lourdes. (2005*), ELL Assessment for linguistic Differences vs. Learning Disabilities*. Leslie University Center for Special Education: Language Minority Assessment Project. Retrieved July 23, 2014, from http://ldldproject.net/languages/index.html

Academic language acquisition is not just the understanding of content area vocabulary. CALP extends well beyond the acquisition of even essential vocabulary associated with specific academic content such as naming, rephrasing, and showing/finding. Other higher level skills include, but are not limited to, classifying, evaluating, and inferring (Cummins, 1981). School subject content also results in context-reduced language. Information is gleaned through reading or oral delivery of the information. As the language learner progresses through the grades the academic tasks become more context-reduced which results in fewer cues. A lack of distinguishing between BICS and CALP has resulted in inequitable assessments of bilingual students and premature exit from language support programs (Cummins, 1984, 2000).

Research supports that it takes five to seven years for a student to reach academic language proficiency levels reflective of a native speaker (Collier, 1992; Cummins, 1981; De Avila, 1997; Hakuta et al, 2000). Collier and Thomas (2004) reviewed over two million student records over an 18-year period. The findings supported the need for six to eight years for students to reach their native speaking age level peers. ELL students who enter the educational system with no prior education in their first language and/or who lack support in the development of their first language, are likely to take an additional three to five years to reach the same academic level of language proficiency and ability as same-age ELL peers (Thomas & Collier, 1995). Additional factors or variables which can impact the amount of time needed for a student to become proficient in a second language can include, but not be limited to: age, enrollment in school, academic proficiency in the learner's native language, and support of the learner with the second language (Cummins, 1981, 1996; Thomas & Collier, 1997). This amounts to as long as 10 years before a second language learner may reach native like fluency in the second language.

Appropriateness of Standardized Testing Requirements for English Language Learners

When addressing appropriateness of standardized testing for ELL students, a natural starting point includes the identification of this subgroup. Abedi (2008) identifies that the continued use of different English Language Proficiency (ELP) standards assessments by states has been reduced due to the work of the English Language Proficiency Assessment for the 21st Century State Consortium, however, the variation in standards continues to be an issue. Abedi (2008) states that whatever model is used will be insufficient and lacking if teachers and administration do not accurately understand the classification/rationale used to determine the model or if the implementation is not correctly executed. Mahon (2006) recognizes the

correlation between English language proficiency and academic performance; however, there continues to be an absence of agreement on what stage ELL students are ready to be assessed using the target language (Mahon, 2006). This research consideration is invaluable because it continues to identify that there is disagreement in when students should be tested, but also leaves the question open of whether we should even be assessing identified ELL students. The study does note that even after three years, English proficiency levels of ELL students continued to impact performance on the Colorado state standardized test.

Beckman, Messersmith, Shepard, and Cates (2012) considered the categories of ethnicity, poverty and second language status as potential factors in the performance on the reading portion of the Nebraska standardized test in the area of reading (NeSA-R). The study indicated ethnicity was not a significant factor. There was a significant difference between ELL and non-ELL students who received free/reduced lunch (poverty). The subgroup of ELL students who also qualified for free/reduced lunch were at the highest risk level of not passing the NeSA-R. The authors state the validity and reliability of the test for students of diverse backgrounds needs to be established before cut scores are implemented (Beckman et al., 2012). Although the information is consistent with other data regarding ELL student performance, this study offers another layer of consideration when looking at ELL performance scores, a finer delineation in poverty level within the subgroup.

Aside from the expectation of making adequately yearly progress in academic achievement, ELL students have a language proficiency mandate under the NCLB Act: to demonstrate adequately yearly progress in the domains of listening, speaking, reading, and writing; this is in addition to a composite comprehension measure (Kenyon, 2011). One measurement tool used to meet this requirement is a vertical scale called WIDA ACCESS for

ELLs, a large-scale assessment designed to measure academic English language proficiency for K-12. Issues for vertical scaling of a common language assessment include identification of a model that fits the data, selection of the scale calibration method, length of the common item set, decision on base year, and computer software. Kenyon (2011) reinforces the research reflecting that lower target language proficiency levels and/or lower grades will reflect a higher performance rate than students performing at a higher proficiency level or placed at higher grades. Bailey and Huang (2011) concluded that more recent WIDA ELP standards are more aligned to content areas for academic success as well as designed so that they include the continuum from preK-12. However, the depth of academic English language has not been studied at all the grade levels but rather mostly intermediate elementary grades. Regardless, grade level goals have been determined. Bailey & Huang (2011) identified the lack of empirical evidence or relationship to proficiency levels. The authors also note that although Common Core State Standards have been developed for English Language Arts and Mathematics, standards have not been created for English Language Development/Proficiency.

Key issues have been identified in obstacles related to standards-based assessments of English language development at the regular classroom level (Llosa, 2011). The most significant findings were that 1), teachers do not interpret the standards consistently; and 2), the level of mastery for a student was determined by each teacher's interpretation of the standard. As much as 55% of the standards had different interpretations by classroom teachers. Llosa (2011) identifies that the necessity to develop consistent and common understanding of what mastery looks like for a standard is needed in the evaluation of ELL student's English Language Development (ELD). Currently teachers have a good and reliable ability to make overall

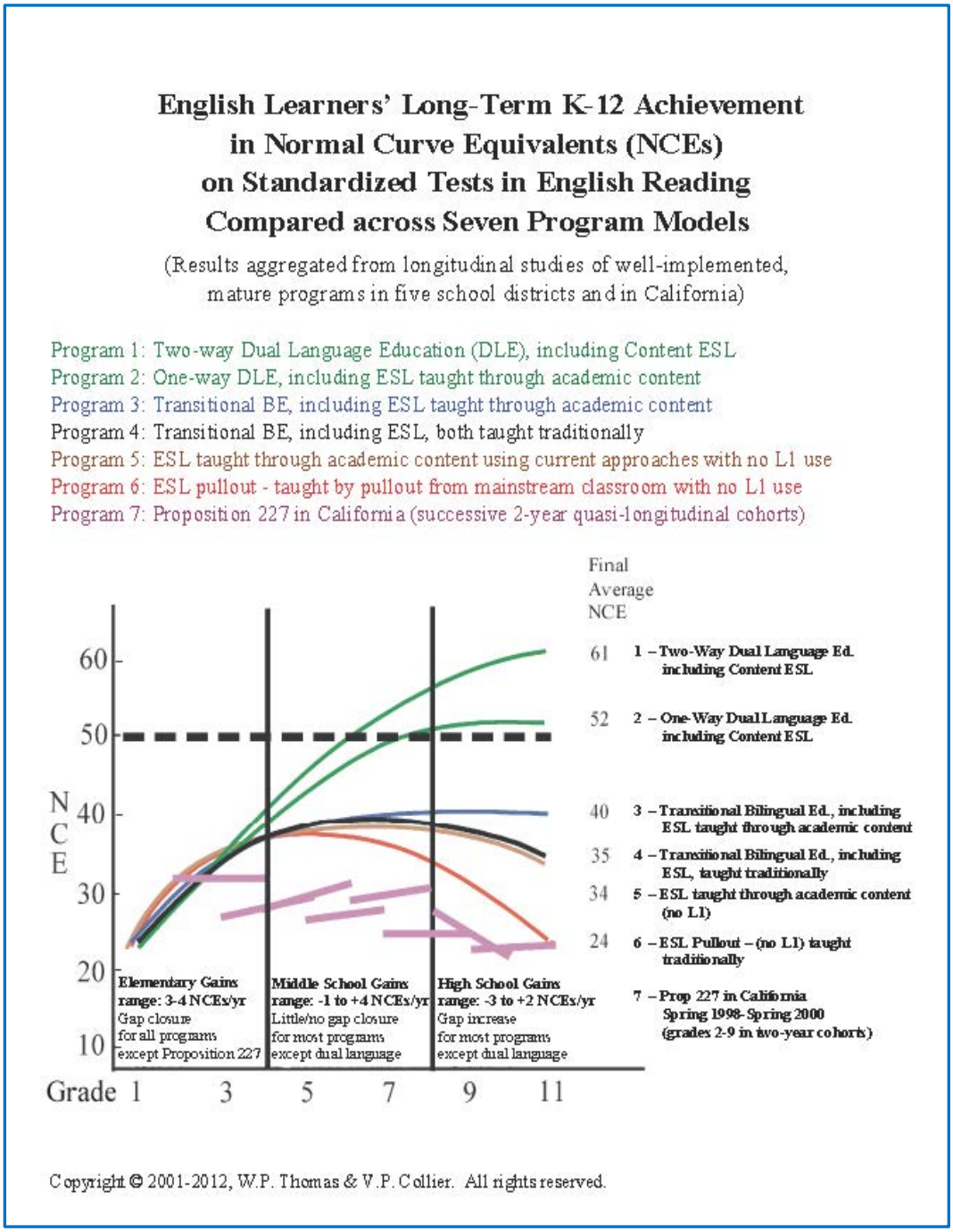
judgments but lack the ability to accurately and consistently identify mastery levels for individual students.

Academically successful readers in the target language shared more things in common with regard to word reading and reading comprehension regardless of the language group they belonged to; vocabulary, decoding and reading comprehension did not reflect a relationship with language group membership (the students' native language). It is important to recognize that the language group was not a predictor of performance regardless of the measure; the predictor was language proficiency (Grant, Gottardo & Geva, 2012). The study also found that there was a similarity in reading skills/performance between non-ELL students and academically successful ELL students. This research simply emphasizes that the skill-set is reflective of language proficiency in reading. When applied to a reading assessment where the students' language proficiency varies between ELL and non-ELL students, so too will there exist a significant variance in testing performance with ELL students underperforming.

Thomas and Collier (1997) identify the six typical English language program models used by school districts across the country (see Figure 8). It is noted that some districts will combine certain characteristics from two or more programs to create a hybrid model. The data was collected from a series of three to seven year longitudinal studies from well-established programs in five school districts. Regardless of the pure or hybrid model used, research supports that the most effective model is Program I: Two-way developmental bilingual education, based on the assessment of ELL students on standardized tests administered in English (Rolstad et al, 2005; Quintanar-Sarellana, 2004; Thomas & Collier, 2002).

Figure 8

General Pattern of K-12 ELL Student Achievement on Standardized Test in English Reading



Note. The line graph displays the impact that instructional programs have on the academic performance of ELL students (Dual Language Education for a Transformed World, 2012, p. 93)

Based on this research, it is critical to note that this most effective model requires approximately five years before students are able to mirror, on average, their native-English speaking classmates and then exceeding the said group's performance (Thomas & Collier, 1997). This means that regardless of long-term program gains the ELL students will not be able to academically compete with their grade level peers for a minimum of approximately five to six years. This supports the argument that testing of ELL students before they reach a proficiency level in CALP, comparable to the Transitional stage of language acquisition, will not accurately reflect the ELL students' learning and knowledge (Ramirez, 1991; Cummins, 2000).

The No Child Left Behind (NCLB) Act requires states' accountability for ELL students reaching proficiency levels in reading and math (NCLB, 2002), which in turn has a direct impact on the states' assessment practices. This brings to question the practice and validity of testing ELL students. ELL students reach 'basic' level of Annual Yearly Progress less than half as often as non-English proficient students (Abedi, Carolyn & Lord, 2004; Abedi & Levine, 2013; Abella, Urrutia & Shneyderman, 2005). Collier and Thomas (2009) note that elementary ELL students typically begin at the 20^{th} normal curve equivalent (NCE), or 8^{th} percentile, as compared to their native English speaking peers who are initially performing at the 50^{th} NCE, or 50^{th} percentile which is considered grade level. As a result, Collier and Thomas outline how ELL students must then make approximately 15 months growth over 6 years to close the NCE achievement gap. According to Abedi (2002), one study showed that language factors are likely to affect the validity and reliability drawn about students' content-based knowledge. The National Center for Research on Evaluation, Standards, and Student Testing (CRESST) found that student language background does affect student performance in content-based areas. The

inclusion of ELL students in the test design and piloting process is necessary (Council of Chief State School Officers, 2000).

NCLB Act Requirements and Mandates for English Language Learners as a Sub-Group

The Elementary and Secondary Education (ESEA) Act was passed in 1965 as the fundamental federal law governing K-12 education (State of Washington Office of Superintendent of Public Instruction, 2014). One charge of the ESEA was concentrating on students whose primary language was other than English. In 1968, the Bilingual Education Act was passed as Title VII of the ESEA (Crawford, 2005; Stewner-Manzanares, 1988). The ESEA has evolved dramatically during its six reauthorizations (1974, 1978, 1984, 1988, 1994, 2002). During its last reauthorization, Title III, addressing the English language learner subgroup, emerged under NCLB Act as Language Instruction for Limited English Proficient and Immigrant Students (ESEA, 2002). Due to the national legislature not coming to agreement on a new reauthorization, the NCLB Act is still in effect, by default, through the 2015-2016 school year. This resulted in states applying for waivers, and receiving them, from the current law due to states not being able to meet the expectations that 100% of students will be at grade level by spring, 2014-a target date that is now outdated and unfulfilled by every state (The U.S. Department of Education, 2014). The U.S. Department of Education (2014) is promoting states the ‘opportunity’ to receive relief from the Elementary and Secondary Education Act (NCLB) provided that the states are able to create rigorous plans designed to raise educational outcomes for all students, eliminate the achievement gap, increase equity in academic settings, and advance the quality of instruction (U.S. Department of Education, 2014). The NCLB is designed to close the achievement gaps that exist among different student populations and to provide equal access to current and future academic opportunities. The U.S. Department of Education has outlined

four main components or pillars within NCLB: 1) Accountability aimed at academic proficiency for disadvantaged students; 2) Flexibility to school district federal education funding implementation for the improvement of student achievement; 3) Research-based education, which assures that curriculum, programs and practices are grounded in educational research; and 4) Parent Options to increase school choice to parents who have students enrolled in a Title I school (The U.S. Department of Education, 2014). Regardless of the rhetoric regarding English language learners, the current statutes in effect do not address the developmental needs and research of assessment needs for ELL students (Koyama, 2004; Mahon, 2006).

The NCLB Act requires annual statewide testing of students from third grade through eighth grade and eleventh grade in English (NCLB Act, 2002). Although numerous states do provide ELL students accommodations to listen to the test questions in different languages, the student is still required to answer in English; a practice that conflicts with research-based best practices (Pennock-Roman & Rivera, 2011). Pennock-Roman and Rivera (2011) examined the influence of testing accommodation on content-based subjects. The first language (Spanish) and second language (English) groups were categorized based on the specific accommodation as well as the interval. Study results indicate an accommodation that includes a native language test version is more effective for ELL's with a low proficiency level in the target language.

SBAC accommodations available to ELL students include an interesting finding in that of states having the option of providing read-aloud accommodations even though it is not permitted according to the set-guidelines; although this may be done at the state's discretion, the test will then be considered invalidated (Samuels & Maxwell, 2013). States also have the discretion to determine on an individual basis which accommodations ELL students will have access to based upon each state's specific laws and regulations. The Partnership for College and Careers

(PARCC) assessment on the other hand, has incorporated the accommodation of reading text-passages to those students who have difficulty decoding, which will result in a notation specifying that the student's print schools, or reading ability, cannot be verified (Samuels & Maxwell, 2013).

A testing accommodation for ELL students is identified as effective when it improves the actual test performance without providing an unfair advantage over other students; the key factor being that the accommodation will compensate for the student's limited/lacking proficiency in the target language (Li & Suen, 2012). The issue of the test accommodation being fair is determined by providing the test accommodation to non-ELL students and noting that there is not a measurable improvement on assessment performance. The study conducted included providing standardized testing accommodations to non-ELL students as well as ELL students. There was a measurable increase in performance of ELL students, but no measurable advantage of the accommodation for the non-ELL students.

Translanguaging is the use of code switching between different languages as well as using different versions of the same language interchangeably. A continua is noted as "…bringing into focus all the dimensions-of context, content, media, and development-that research says should be taken into account in creating a learning environment that recognizes and builds on the language and literacy repertoires students bring to school" (Hornberger & Link, 2012, p. 243). In order to receive the benefits of developing multiple languages two key factors must be in place: 1), demands in the second language must be context based with permission to use all languages in their tasks and communication; and 2), students must have access and support to use both languages rather than simply the target language (Hornberger & Link, 2012). This information is applicable to this body of research in that it naturally directs this work to

answering the question of why not the use of a translanguage approach to assessment accommodations for ELL students in order to help increase the reliability and validity of performance scores.

Current practices do not allow for the implementation of recommendations by respected authorities such as The National Center for Research on Evaluation, Standards, and Student Testing (CRESST); examples include teacher review of test questions for the purpose of eliminating undue linguistic complexity, retention of students in ELL classes beyond the current guidelines, and test accommodations designed with the ELL student in mind (Lewis, 2004). More importantly, since ESEA's last authorization, data analysis has found that ELL students did not improve their performance significantly through the use of what are considered commonly accepted accommodations such as providing additional assessment time and reading test items aloud (Castellon-Wellington, 2000).

Understandably, these tests are identified as high stakes assessments. Educators and policy makers at the local and national level continue to question the most appropriate ways to include English language learners in state wide standardized testing (Bunch, 2011; Butler & Stevens, 2001; Council of Chief State School Officers, 2000; Deysson, 2013; Horn, 2003; National Research Council, 2000; Ornelas, 2002). It is recognized that the ELL sub-group consistently scores lower, as much as 30%, than their native English-speaking peers (Abedi & Dietel, 2004; Garcia, 2003). English language learners have been able to demonstrate higher performance scores when tested in their primary language as well as when the language is simplified on test items while maintaining the items' difficulty level (Abedi & Lord, 2001; Brown, 2005; Escamilla, Mahon, Riley-Bernal & Rutledge, 2003; Li & Suen, 2012; Lord & Plummer, 1997). It has been recommended that tests be subject to expanded bias reviews specific

to language difficulty (Abedi & Dietel, 2004; CCSSO, 2000; Espin, Wallace, Campbell, Lembke, Long & Ticha, 2008; Huempfner, 2004, Roseberry-McKibbin & O'Hanlon, 2005). Current state and federal testing guidelines include neither primary language nor simplified language assessments. The standardized testing of ELL students results in two flawed assumptions: 1), focusing on student performance, outcomes, will result in academic improvement; and 2), the evaluation of ELL students using English standardized assessments will produce valid results (Menken, 2010). On average, ELL students score 20-50% lower on standardized testing than non-ELL students (Menken, 2010). The study identified that the vocabulary used in the New York State Regents exam was linguistically complex in both language arts and mathematics; the latter usually referred to as using a universal language. Referencing 2007 data, the author notes that New York has the ELL students as the population with the highest non-graduation rates; although the graduation rates have actually increased in general, they have decreased for ELL students.

Slama (2012) looked at the progress in language proficiency of students who qualified for ELL services in 9th grade. Although students made progress, most did not exit out of the program and into full time mainstream classrooms until the end of their senior year. Native born students who qualified for ELL services progressed faster than the foreign-born ELL students; nevertheless, both groups were at par by the end of their high school careers due to the foreign-born ELL students having made more accelerated progress. The overall language proficiency levels of both groups are identified as low for most, if not all, of the ELL students' high school career. This minimum proficiency level does not support academic success in the regular classroom setting or success on state standardized testing. Slama (2012) notes that although ELL's enter high school with a certain level of skills in oral and written language, they also have

frequent errors, comprehension is below grade level, and only a basic understanding of the academic English language.

NCLB also impacts ELL students in other ways. As a subgroup, ELL students are tracked and monitored for making English language proficiency progress in order to exit from English language services (NCLB Act, 2002). Concerns for ELL students under NCLB include the goal of exiting ELL students from English Language support programs with what can be considered minimal proficiency of academic language. In addition, there is a lack of discrepancy between bilingual programs and alternative instructional programs (Wright, 2005). As a result, English proficiency exit levels from target language programs are viewed as lacking due to the fact that ELL students continue to qualify for English language support services two years after exiting the Washington State approved Bilingual Transitional program (State of Washington Office of the Superintendent of Public Instruction, 2015). Focused upon the performance of students who were limited to only one year of sheltered English instruction as a result of California's Proposition 227, which eliminated the implementation of transitional bilingual programs (dual language and bilingual programs); Laman (2012) identifies three main points in the stated concern of over-testing of ELL students: teaching is focused on the test rather than incorporating culture/linguistics, test performance is synonymous with and limited to academic success, and the excessive data does not result in equal amounts of information that teachers can use to inform instruction. Not all ELL instructional programs are created equal: a review of these programs identified that transitional bilingual and dual-language programs were significantly more effective than English immersion programs in terms of standardized test scores (Nakamoto, Lindsey & Manis, 2012; Thomas & Collier, 1997). The results indicated that Spanish reading and oral language performance exceeded testing for reading comprehension and oral language in

the target language. The variation in the achievement levels indicated that the language of instruction was a measureable factor in academic performance (Thomas & Collier, 1997). This reference has value in that it identifies the additional advantage, or disadvantage, that ELL students have based on the type of second language programs the district they are enrolled in offer. This raises an additional concern of accessibility to quality programs with regard to student performance on standardized tests.

The ESEA clearly identifies standardized testing guidelines for ELL students. However, it is noted that ELL status is determined at the discretion of individual states. Since 2002, multiple consortia of states have developed common English proficiency assessments: Comprehensive English Language Learning Assessment or CELLA (Accountability Works, 2007), Assessing Comprehension and Communication in English State-to-State for English Language Learners (ACCESS), English Language Development Assessment (ELDA), and Mountain West Assessment or MWA (Bauman, Boals & Bunch, 2007). These assessments are now in use along with other commercially or locally developed tests. The result is a discrepancy in the criteria for identifying and exiting ELL students, which by default then impacts potential testing performance scores amongst states (Bunch, 2011). The reauthorization of ESEA in 2015 held the status quo by states of continuing the same practices of assessing ELL students' English language proficiency.

The number of ELL students enrolled in public education continues to climb. For example, in Washington State, state transitional bilingual programs continue to report annual increases. According to the state's Superintendent of Public Instruction, the percentage of ELL qualified students for the last twenty years breaks down into the following by five-year increments (See Table 1):

Table 1

Students Identified for Bilingual Transitional Programs in Washington State

Year	Number of ELL Students	Percentage of ELL Students
2014	94,176	9.7
2009	81,516	8.0
2004	66,038	6.9
1999	50,980	5.1

Note. The table displays a consistent upward trend in students qualifying for bilingual education services from 1999-2014 (State of Washington Office of the Superintendent of Public Instruction, 2016)

Based on Table 1, this researcher believes the continuing increase of identified ELL students translates to the assessing of limited English speakers being neither a topic that can be addressed through attrition nor ignored because of enrollment numbers being significant enough to create a critical mass.

Conclusion

The literature review supports that the assessing of ELL students using current federal and state standardized testing practices and mandates are not aligned with the research (Abedi & Dietel, 2004; Collier, 1992; Cummins, 1981, 1996; De Avila, 1997; Hakuta et al, 2000). The literature drew from the following four themes as a significant and consistent influence: 1) second language acquisition and learning can be supported in the classroom setting, but the amount of time necessary to acquire a second language to proficiency cannot be controlled (Cummins, 1981, 1988, 1996; Krashen, 1982), 2) the developmental stages of language development do not permit the second language learner to perform at their true knowledge level since input precedes production (Cummins 1981; Krashen & Terrell, 1983), 3) the development

of specific academic language is required for ELL students to be successful in school (Cummins 1981, 1988; Krashen 1982), and 4) the current design and practice of standardized testing of ELL students is not reflective of best research practices (Abedi & Dietel, 2004; Collier, 1992; Cummins, 1996; De Avila, 1997; Hakuta et al, 2000).

Studies have shown that personalized high stakes assessments, such as classroom or program placement, and graduation can be a motivational factor for students to perform well. Research has also addressed the role of emotions on the learning of a new language (Krashen, 1982; Krashen & Terrell, 1983; McLaughlin, 1990). The language acquisition process can be slowed down, due to internal and external influences that result in emotional demands or anxiety for the language learner to produce or perform in the second language. This process can impact the ability to learn and/or produce spoken language (Wu, Le & Lu, 2014). These are examples of factors that are within the student or other individuals' ability to control. Although second language acquisition can be supported and nurtured in a school setting to assure strong and effective transition between language proficiency levels, the determining variables to reach proficiency in the second language cannot be manipulated to hurry along the attainment of proficiency in a second language.

It is acknowledged that a measureable method of reporting student performance is needed and that the closing of the achievement gap for second language learners is a valid priority (Thakkar, 2013; Ugwu, 2013; Visone, 2009). However, current assessment practices of second language students are inaccurately labeling the performance of the ELL sub-group and unfairly penalizing schools and districts under NCLB. Concerns regarding the complexities of adequately measuring opportunity to learn continues to be a topic of discussion. Districts serving significant proportions of ELL students are less likely to meet Adequately Yearly Progress (AYP) goals and

thus are more likely to corrective action as part of the outlined testing accountability mandates (Herman, 2004).

Chapter III

Design and Methodology

Introduction

Extensive research studies have been conducted with regard to students being required to quickly become proficient in the oral/social language while typically four to ten years is needed to become academically proficient for school success (Collier, 1987; De Avila, 1997; Hakuta, Butler & Witt, 2000; Klesmer, 1981; Olmstead, 2009). Language and subject-content proficiency acquired in the first language also transfers to the second language with only the need to learn the new vocabulary (Cummins, 1989). ELL students are required to be tested annually as part of the process for continuing to qualify for ELL services (Office of the Superintendent of Public Instruction, 2015). The current practice across the country is that students are exempt from standardized testing only if they have been in-country less than one year; this is a practice that goes against proven research (Collier, 1987; Olmstead, 2009). The research questions here help to serve as a reminder that more study is required to better understand the characteristics of standardized academic testing unique to second language learners:

1. Is there a relationship between English Language Learners' second language proficiency level and performance on state standardized tests in reading and English language arts? Utilizing a null hypothesize will provide more specific direction to the question:
   H_0: There will be no difference between the proficiency rate of English language learners with a level 2 or below on the WELPA and the proficiency rate of English language learners with a level 3 or above on the WELPA on the Washington State standardized test for reading and English language arts.

The non-directional research hypothesis associated with the null hypothesis is identified as follows:

H_1: The proficiency rate of English language learners with a level 2 or below on the WELPA is different from the proficiency rate of English language learners with a level 3 or above on the WELPA on the Washington State standardized test for reading and English language arts.

2. Is there a relationship between English Language Learners' second language proficiency level and performance on state standardized tests in mathematics?

   The null hypothesis for the question is as follows:

   H_0: There will be no difference between the proficiency rate of English language learners with a level 2 or below on the WELPA and the proficiency rate of English language learners with a level 3 or above on the WELPA on the Washington State standardized test for mathematics.

   The non-directional research hypothesis associated with the null hypothesis is identified as follows:

   H_1: The proficiency rate of English language learners with a level 2 or below on the WELPA is different from the proficiency rate of English language learners with a level 3 or above on the Washington State standardized test for mathematics.

The purpose of this study was to find a correlation between ELL students' English language proficiency and successful performance on state standardized testing. A quantitative methodology was used to determine an appropriate developmental level of second language proficiency in order to validate that standardized testing was measuring student content knowledge rather than second language ability, or lack thereof.

Research Design

A correlational research design provided the ability to compare quantitative data, independently and in-conjunction with the other (Creswell, 2013). The data was then brought together to help provide a more robust and unequivocal conclusion as well as direction for further study and next steps. A non-directional hypothesis was utilized because each group contained multiple English language proficiency levels; these language levels presented the potential of a variance in difference of direction within each group.

Participants

ELL students met the federal definition of limited English proficient (ESEA title IX, Sec.9101(25)) by: A) aged three through 21; B) enrolled or preparing to enroll in an elementary or secondary school; C) not born in the United States or whose native language is other than English; who come from an environment where a language other than English has had a significant impact on English language proficiency; D) difficulty in reading, writing or comprehending the English language may be deemed significant enough to deny the student the ability to reach a proficiency level on State assessments described in section 1111(b)(3); and may impact the student's ability to successfully achieve in classrooms where English is the language of instruction. ELL students also met the Washington State definition of an English language learner (WAC 392-160-005) by A), the primary language of the student is other than English; and B) the student's English language proficiency skills are sufficiently lacking or absent as to cause a delay in academic learning.

The participants for this study were limited to ELL students in grades (3, 4, 5, 6, 7, 8, and 11) during academic years 2012, 2013, and 2015, who participated in state standardized testing. 2014 testing data was not available due to all districts within Washington State participating in

the Smarter Balance Assessment Consortium (SBAC) pilot for all impacted grades in lieu of completing the annual state standardized assessment. As a result, the data included the comparison of each group per year in order to account for the change in assessment tools from the Measurement of Student Progress (MSP) to the Smarter Balanced Assessment (SBA). A stratified (by grade level and English proficiency level) random sampling of 520 students were selected based on acquiring a sufficient number of students at level 1, level 2, level 3, and level 4 as measured by Washington English Language Proficiency Assessment scores. ELL student participants included individuals scoring at the Beginning/Advanced Beginning, Intermediate, Advanced, Transitional, as well as those who had exited from ELL program services within two years due to also being included by the state as part of the performance accountability for the ELL subgroup. Native Americans and Alaska Native are also eligible for ELL services under ESEA Title IX, sec. 9101(25). For purposes of this study, students in the Native American/Alaska Native subgroup were also included in the data if, upon entry into the Transitional Bilingual Program, they met the identification criteria of the primary language of the student being other than English. Table 2 provides another presentation of the number of participants and how they fit within the larger educational and demographic community.

Table 2

Participant Demographics

Demographics	Students
Research Participant (n)	988
Grades in Study	3, 4, 5, 6, 7, 8, 11
Size of Community	91,274
School District Size	22,250
Program Size	1,320
Elementary ELL Students	984
Secondary ELL Students	336
Exclusions	Students qualifying for ELL Services under ESEA Title IX, whose primary language was English

Setting

The setting includes elementary, junior high, and high schools from a rural school district in the Pacific Northwest**.** The district, referred to as Northwestern School District, was selected due to being identified as one of the ten largest school districts in Washington State in terms of student population with approximately 22,250 students. The district was classified as rural and is within a 20 mile vicinity of larger districts. The district was recognized as having a rich diversity in terms of languages spoken by ELL students; a minimum of 50 languages are spoken within the district with Spanish speakers being the most rapidly growing second language population in the district and state.

Data Collection

The collection of data consisted of electronic web-based access to requested information from Northwestern School District's student assessment database, PerformancePLUS. The data from PerformancePLUS included a combination of raw scores and a general identification as to whether participants met proficiency on the identified assessments based upon each assessment's scoring rubric. The specificity of the quantitative data mining was driven by the data content

requirements for PerformancePLUS as determined by Northwestern School District's Office of Assessment Accountability & Student Success. PerformancePLUS access made available included the following ex post facto data from Washington State standardized test scores for 2012, 2013, and 2015:

a. Measurement of Student Progress (MSP): The quantitative data, for grades 3-8, included reading and mathematics scores for years 2012 and 2013.
b. Smarter Balance Assessment (SBA): The quantitative data, for grades 3-8, included English language arts and mathematics scores for year 2015.
c. High School Proficiency Exam (HSPE): The quantitative data, for grade 11, included reading for years 2012 and 2013.
d. End-of-Course (EOC) Exams for math: The quantitative data, for grade 11, included Algebra 1 for years 2012, 2013, and 2015.
e. State English language proficiency assessment: The quantitative data included student proficiency scores using the Washington English Language Proficiency Assessment (WELPA) for 2012, 2013, and 2015.

The state standardized test is used to determine if a student is reaching academic proficiency in reading and mathematics and meets the requirements for the No Child Left Behind (NCLB) Act (Public Law 107-110, 2002). The Washington English language proficiency assessment is used to measure the level of students' English language fluency. Both the Washington State standardized test scores and Washington English Language Proficiency Assessment were used to determine a relationship between language and performance; the research questions lend themselves to corresponding to statistical tests as noted in Analytical Methods.

Analytical Methods

The analytical methods for quantitative analysis that were utilized included the need to determine relationships between different kinds of variables as well as being able to identify nominal data for multiple variables. ELL students' language proficiency level is the common thread that is woven throughout the analytical methods and so a correspondence of the data easily connects back to the test questions. The following analytical methods were used to expand upon this theme:

a. Correlational analysis using a scatterplot: The scatterplot helped to determine if there was a significant relationship between ELL students' second language proficiency level (X) and performance on state standardized tests (Y). The scatterplot helped to tell the general strength and direction based on grouping of the points on the scatterplot regardless of whether the distribution was a strong direct correlation or indirect relationship (Salkind, 2014). The strength of the scatterplot was in determining correlations between variables as well as ease of visual presentation (Creswell, 2008). The option of interpreting the size of the correlation with a coefficient general interpretation, essentially using-your-thumb-rule, was bypassed for the more precise method of computing the coefficient of determination (Salkind, 2014). This resulted in being able to identify the percentage of variance.

b. Spearman's rho: The Spearman's rho (r_s), also referred to as Spearman's rank, was selected because it provided the tools to measure one variable on a continuous scale and another on a categorical scale to determine whether there was a relationship (Creswell, 2008)- academic proficiency on Washington State standardized testing and English language proficiency level for ELL students. The test was also used to measure

multiple successes, or lack thereof, in standardized testing for ELL students. This provided the necessary data to determine if ELL students were displaying similar academic performance outcomes on standardized testing overall or only on a specific standardized assessment.

The correlational analysis using a scatter plot and the Spearman's rho met the needed analytical methods to then properly interpret the data (Salkind, 2014; Tanner, 2011).

Limitations

The correlation research conducted, by design, does not identify a causal relationship between English language proficiency levels and performance on state standardized testing and district standardized testing; the analysis was limited to a level of association. Friedman's Chi-square test did not allow a distribution assumption to be made from the data. Factors not accounted for but identified as predictors of success and/or rate of acquisition in a second language include: socio-economic status, educational level of family, parent involvement, literature/books in home, classroom teachers' experience and professional development associated with ELL students, Response to Intervention Programs (RTI) available to students as determined by school sites, ELL program access to services available, previous amount of schooling in the students' home language, performance on intelligence quotient assessments, and ELL students meeting criteria in additional academic categories such as special education and gifted (Alcala, 2000; Berman, 1997; Collier & Thomas, 2004, Cummins, 1986).

Roles of the Researcher

Life experience and formal educational philosophies and training were considerations when addressing the roles of the researcher. My own life experience undoubtedly, and clearly played a very significant role in the selection of the topic for study. I experienced the topic as a

student (I learned English as an immigrant in elementary school), educator (I taught English as a Second Language and Spanish as a Second Language as a bilingual classroom teacher in a two-way bilingual program), and administrator (my role as principal required collaboration and decision making of on-site ELL programs, and interaction with ELL teachers, parents, and students). Creswell (2013) distinguishes between the need for awareness of potential bias in research due to background, perspectives, and opinions and the establishment of a purpose to address the bias. My role as a researcher in this particular study delineates the use and analysis of ex post facto data; this will contribute to a process that eliminates, or diminishes to an insignificant factor, the potential introduction of bias in the study. If there is a life experience factor it will come in the approach I may take in how the data is presented to the reader while maintaining its integrity.

Protection of Human Rights and Approval

The protection of human rights in this study was validated through the submittal process for approval as outlined in the Northwest Nazarene University Human Research Review Committee Handbook. All research involving human subjects was required to be approved through the Human Research Review Committee (HRRC) prior to the commencement of data collection. The process outlined a three tiered format for approval of any and all research involving human participants: 1) the research met the criteria of being exempt; 2) the research was identified as minimal risk to participants and required a review of the protocol by the chair of the HRRC or a designee, or 3) the research did not meet exempt or minimal risk status or presented more than minimal risk and required submission for full review to the HRRC. This study met the criteria of being exempt due to limiting the quantitative research to the exclusive use of ex post facto data. As an additional measure of assurance, the proposed study was

submitted, reviewed, and cleared to conduct the research by the NNU Human Research Review Committee (See Appendix E).

Approval to access and use ex post facto data from Northwestern School District required completion of the application guidelines to conducting research which included the following documents: 1) request to conduct research; 2) summary of proposed research, 3) copy of all questionnaires, forms, tests, instruments, and curricular materials to be used as applicable; 4) copy of consent forms and other communication to be distributed to participated as applicable; 5) signed ethical principles for research form; 6) signed research contract guidelines form; and 7) signed conducting a district-approved research project form.

Chapter IV

Results

Introduction

There is agreement that research is insufficient with regard to practices implemented to gauge the academic progress of limited English language learners solely on the premise of using standardized testing (Collier & Thomas, 2009). Since time is an integral component to the process of reaching second language fluency reflective of a native speaker (Krashen, 1996; Krashen & Terrell, 1983), the academic language required to reflect academic proficiency on standardized testing is in large part determined by developmental stages (Collier & Thomas, 2009; Cummins 1984, 2000; Krashen, 1996). The continued legislative policy as part of the Elementary and Secondary Education Act (ESEA) at the federal level and the states' responses with accountability measures in reading, English language arts, and mathematics, are becoming more pronounced as districts struggle with ELL students to perform at required proficiency levels. An absence of agreement, a gap, as to what to reasonably expect from the various fluency levels of ELL students must be addressed.

The purpose of this study was to examine the relationship between English language proficiency levels of ELL students and performance on state standardized testing in the areas of reading and mathematics. The results of the study will address the appropriateness of high stakes testing of students who are identified by Title III of the Elementary and Secondary Education Act as qualifying for English language services in their educational program (Bunch, 2011; Butler & Stevens, 2001; Deysson, 2013; Horn, 2003). The questions guiding this dissertation study included the following:

1. Is there a relationship between English Language Learners' second language proficiency level and performance on state standardized tests in reading and English language arts?
2. Is there a relationship between English Language Learners' second language proficiency level and performance on state standardized tests in mathematics?

As discussed in Chapter III, the methods utilized for data collection consisted of ex post facto student data that included electronic web-based access to a combination of raw scores, and a general identification as to whether participants met proficiency on the specified assessments based upon each assessment's scoring rubric as determined by the state. Ex post facto data from 2012, 2013, and 2015 included:

- Washington State standardized test scores from the Measurement of Student Progress (MSP) for reading, High School Proficiency Exam (HSPE) for reading, and the Smarter Balanced Assessment (SBA) for English language arts.
- Washington State student language proficiency scores using the Washington English Language Proficiency Assessment (WELPA).
- End-of-Course (EOC) Algebra 1 exam; results are used to determine if students have met graduation requirements in compliance with the State Board of Education.

This chapter outlines the results of the study. Organization of the data begins with an outline of the participants, the state recognized English language proficiency levels and the distinction between the three different state standardized tests' rank scores and academic proficiency levels, identification of data requiring exemption, followed by the results based upon the two research questions. The research questions were addressed using a scatterplot by subject for each grade level, followed by a Spearman's rho correlation table with results by subject for each grade level.

Participation

The comprehensive analysis of this data includes a breakdown of the number of participants who were eligible to be included in the study. Table 3 summarizes the total number of participants by grade level and the assessments they contributed towards.

Table 3

ELL Qualified Students Participating in State Standardized Testing in 2012, 2013, 2015

Grade	Assessment					
	MSP		SBA		HSPE	EOC
	Reading	Math	ELA	Math	Reading	Algebra 1
3	129	132	85	87		
4	107	114	68	68		
5	112	117	64	67		
6	78	82	59	60		
7	71	74	53	56		
8	49	50	38	40		
11	19		11		39	19

A combined total of 943 ELL students participated in reading and ELA as part of the MSP, SBA, and HSPE state standardized testing. A combined total of 986 students participated in math and algebra 1 as part of MSP, SBA, and EOC state standardized testing. As a result, 1,929 assessments were collected for analysis.

Student achievement of English Language proficiency was defined using Washington State's WELPA proficiency levels and rank scores (See Table 4).

Table 4

WELPA Proficiency Levels and Overall Ranking Scores

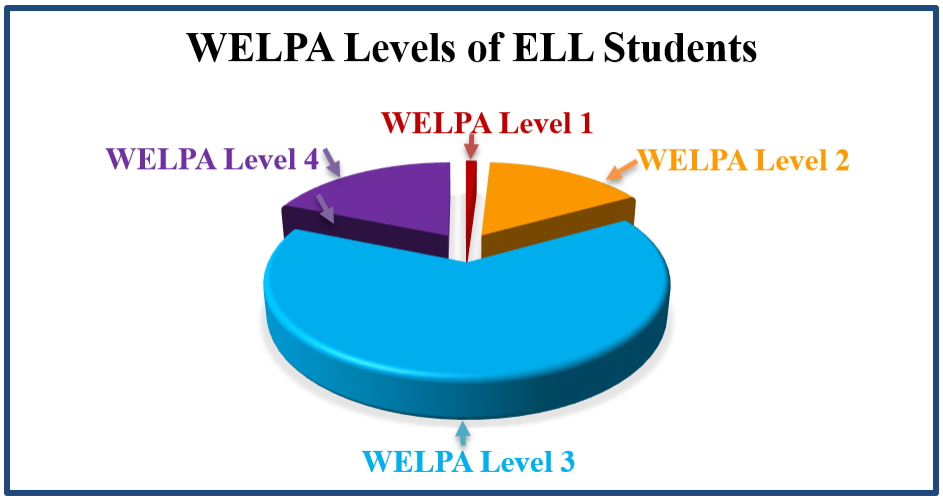
Grade	1 Beginning/Advanced Beginning	2 Intermediate	3 Advanced	4 Transitional
Grade 3	297-395	396-477	478-528	529-602
Grade 4	330-422	423-484	485-547	548-656
Grade 5	330-423	424-493	494-552	553-656
Grade 6	341-430	431-499	500-562	563-666
Grade 7	341-431	432-505	506-574	575-666
Grade 8	341-436	437-510	511-574	575-666
Grade 11	350-442	443-520	521-576	577-675

Office of the Superintendent of Public Instruction. (2016). Retrieved from http://www.k12.wa.us/assessment/EL/pubdocs/WELPA2014ProficiencyLevelScaleScoreRanges.pdf

Due to the fact that numerous assessment tools are used by different states, it is imperative that the reader have an understanding of how this state qualifies a student for English language services. Table 4 identifies the four categories of language proficiency. The overall ranking score that determines the placement on the student proficiency table is determined by an overall scale score. The scale score is an average derived from scores in the categories of speaking, listening, reading, writing, and comprehension. It is noted that there is a varying scale score among all grade levels. As a result, the data for ELL students' proficiency levels can only be analyzed by individual grade level rather than as a combined grade level data set, thus the scatterplot and spearman's rho correlations were analyzed exclusively by grade level. Nevertheless, it is reasonable to combine the WELPA levels to garner a perspective of the overall English proficiency levels of the ELL subgroup as a whole (See Figure 9).

Figure 9

Pictorial display of WELPA levels of ELL students' group sample



Student eligibility designation within the study was based upon the students' level of English language proficiency. A total of 947 ELL students in grades 3, 4, 5, 6, 7, and 8 were identified from the 2012, 2013, and 2015 school years to be included in the study. Level 1 includes 10 ELL students or 1.10% of the total sample, Level 2 encompasses 150 or 15.80% of the total sample, level 3 comprises 609 or 64.30% of the total sample, and level 4 accounts for 178 or 18.80% of the total sample.

Scale Range Scores

It is vital that the reader understand that there are differences between the grade level scale range scores of reading and mathematics on the MSP and English language arts and mathematics on the SBA. Student achievement on state standardized tests was defined using Washington State's scale range scores for achievement levels on the MSP for reading and mathematics, and the SBA for English language arts and mathematics (See Tables 5-8). In

addition, adjustments were made to the descriptors for each performance level between the two tests.

Table 5

Scale Range Scores for Achievement Levels on the Measurement of Student Progress (MSP) Assessment for Reading

MSP Reading	Level 1	Level 2	Level 3	Level 4
Grade 3	275-374	375-399	400-425	426-500
Grade 4	275-374	375-399	400-423	424-475
Grade 5	275-374	375-399	400-421	422-475
Grade 6	275-374	375-399	400-424	425-475
Grade 7	275-374	375-399	400-417	418-475
Grade 8	250-374	375-399	400-418	419-500
High School	225-374	375-399	400-426	427-525

Office of the Superintendent of Public Instruction. (2016). State Testing. Retrieved from http://www.k12.wa.us/assessment/StateTesting/ScaleScores.aspx

Table 6

Scale Range Scores for Achievement Levels on the Measurement of Student Progress (MSP) Assessment for Mathematics

MSP Math	Level 1	Level 2	Level 3	Level 4
Grade 3	200-374	375-399	400-435	436-575
Grade 4	200-374	375-399	400-446	447-575
Grade 5	200-374	375-399	400-439	440-575
Grade 6	200-374	375-399	400-441	442-575
Grade 7	200-374	375-399	400-443	444-575
Grade 8	200-374	375-399	400-436	437-575
Algebra1	200-374	375-399	400-442	443-675

Office of the Superintendent of Public Instruction. (2016). State Testing. Retrieved from http://www.k12.wa.us/assessment/StateTesting/ScaleScores.aspx

Table 5 and Table 6 identify each performance level as the following: level 1 as ‘below basic level’, level 2 as ‘basic level’, level 3 as ‘proficient level’, and level 4 as ‘advanced level.’

Table 7

Scale Range Scores for Achievement Levels on the Smarter Balanced Assessment (SBA) for English Language Arts

Smarter Balanced Math	Level 1	Level 2	Level 3	Level 4
Grade 3	2114-2366	2367-2431	2432-2489	2490-2623
Grade 4	2131-2415	2416-2472	2473-2532	2533-2663
Grade 5	2201-2441	2442-2501	2502-2581	2582-2701
Grade 6	2210-2456	2457-2530	2531-2617	2618-2724
Grade 7	2258-2478	2479-2551	2552-2648	2649-2745
Grade 8	2288-2486	2487-2566	2567-2667	2668-2769
High School	2299-2492	2493-2582	2583-2681	2682-2795

Office of the Superintendent of Public Instruction. (2016). State Testing. Retrieved from http://www.k12.wa.us/assessment/StateTesting/ScaleScores.aspx

Table 8

Scale Range Scores for Achievement Levels on the Smarter Balanced Assessment (SBA) for Mathematics

Smarter Balanced Math	Level 1	Level 2	Level 3	Level 4
Grade 3	2189-2380	2381-2435	2436-2500	2501-2621
Grade 4	2204-2410	2411-2484	2485-2548	2549-2659
Grade 5	2219-2454	2455-2527	2528-2578	2579-2700
Grade 6	2235-2472	2473-2551	2552-2609	2610-2748
Grade 7	2250-2483	2484-2566	2567-2634	2635-2778
Grade 8	2265-2503	2504-2585	2586-2652	2653-2802
High School	2280-2542	2543-2627	2628-2717	2718-2862

Office of the Superintendent of Public Instruction. (2016). State Testing. Retrieved from http://www.k12.wa.us/assessment/StateTesting/ScaleScores.aspx

Table 7 and Table 8 identify each performance level as the following: level 1 as ‘not met standard’, level 2 as ‘nearly met standard’, level 3 as ‘met standard, and level 4 as ‘exceeded standard.’ Although the descriptors vary for each level between the MSP and SBA, the performance levels themselves are consistently aligned between the two state assessments: below basic level/not met standard (level 1); basic level/nearly met standard (level 2); proficient level/met standard (level 3); and advanced level/exceeded standard (level 4). For the purpose of

this study, the author will refer interchangeably to the level of performance on standardized testing as level 1, level 2, level 3 and level 4.

Determination to exempt data from partial analysis

There is insufficient data to run a valid analysis using the pre-determined analytical methods for grade 11 as a sample group (See Table 9).

Table 9

Grade 11 ELL Students Participating in State Standardized Testing

Year	HSPE Reading	SBA ELA	EOC Algebra 1
2012	11		9
2013	8		12
2015		11	18

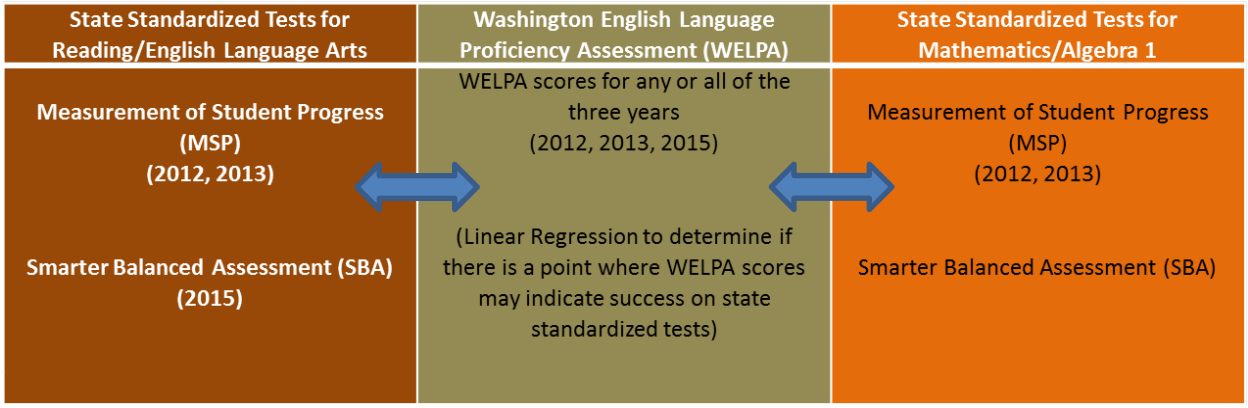
The total sample for grade 11 is 69 students. Table 9 verifies that all of the assessments are assigned an n value less than 30. Consideration was given to incorporating data from grade 10 since the grade level also met the criteria of having the desired state standardized assessments: MSP and SBA data, and EOC Algebra 1 scores. Unfortunately, grade 10 also lacked the *n* values necessary to run the desired correlational statistic for each of the three years noted. Recognizing that an n value greater than 30 is recommended for correlational studies relating variables and that such a small sample size will increase the possibility of a sampling error (Creswell, 2013) resulted in the decision to exclude the grade 11 data in the statistical procedures. Although grade 11 data was not analyzed using scatterplots and Spearman's rho, extrapolations were able to be mined from the data itself which are included in Chapter 4 and incorporated into the discussion in Chapter 5.

Figure 10 provides a pictorial presentation of how the research methods of using a Spearman's rho and scatterplot will identify a linear regression to determine if there is a point

where the WELPA scores can indicate a certain level of success on a state standardized test for reading and math. The arrows are bi-directional due to the fact that the correlations themselves are not considered causal. The graphic is useful in providing coherence amongst the different assessment data included in the scope of this study.

Figure 10

Pictorial Representation of a Relationship Between Language Proficiency and Test Scores.



Participation Rate. The analysis of the data begins with the identification of the number of participants eligible for the study, trailed by graphic displays of the eligible participants'

Scatterplot Table

The scatterplot, or scattergram, permits the researcher to visually represent a correlation (Salkind, 2013). Most beneficial is the identification of the form, direction, and degree of the association (Creswell, 2013). An acceptable cursory assessment of the relationship between variables is the incorporation of a table that allows the reader to visually estimate data, such as produced by a scatterplot, to determine a rough but initial estimation of the strength or weakness of a relationship (Salkind, 2014). Table 10 is intended as an overall visual estimation of the distribution of the correlation coefficient of the scatterplot results.

Table 10

Table Interpreting Strength of a Correlation Coefficient

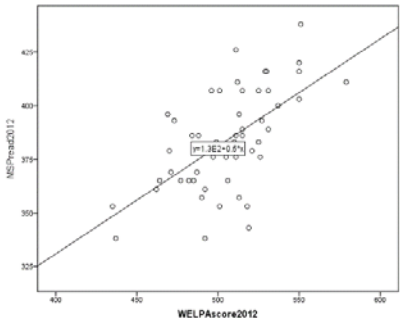
Interpretation of Coefficient Strength	Values of the Correlation
Very Strong Relationship	0.8 to 1.0
Strong Relationship	0.6 to 0.79
Moderate Relationship	0.4 to 0.59
Weak Relationship	0.2 to 0.39
Weak or No Relationship	.0 to 0.19

Scatterplot and Spearman's rho Tables

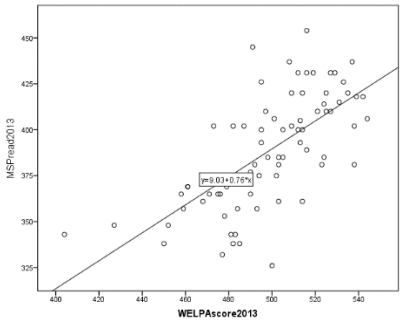
A table follows each scatterplot figure in order to provide a summation of each cluster of scatterplots for each individual grade level. The content of each table identifies the type of state standardized test as Reading, ELA, or Math and its corresponding year. The information derived from each scatterplot that is included in the table includes the r^2 linear value, and the interpretation of the coefficient strength reference for each scatterplot provided. The format offers the desired overview of visually capturing multiple scatterplots simultaneously without compromising data points. The results of each individual Spearman's rho table that corresponds to each scatterplot have also been consolidated into the same table that follows each cluster of scatterplots by grade level. The information derived from each Spearman's rho table that is included in the table includes the *n* value of participants, significance value of a 2-tailed test; and the value of the correlation coefficient (See Appendix G for Corresponding Spearman's rho Tables). The consolidated format of the scatterplot analysis and Spearman's rho table provides the reader the benefit of capturing themes and patterns with greater ease.

Figure 11

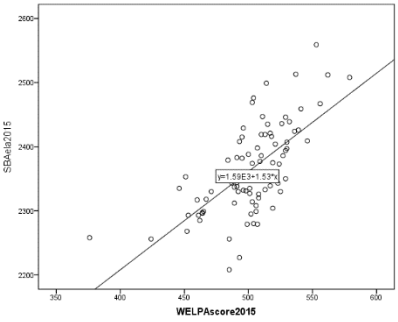
Grade 3 Scatterplots identifying relationship strength between WELPA score (X) and Performance in Reading, ELA, Math (Y)



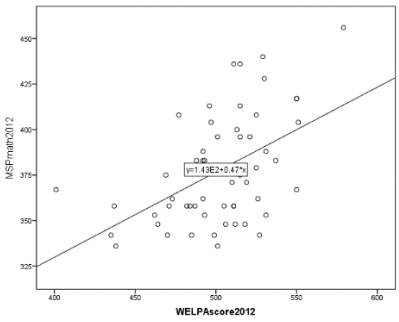
MSP Reading 2012



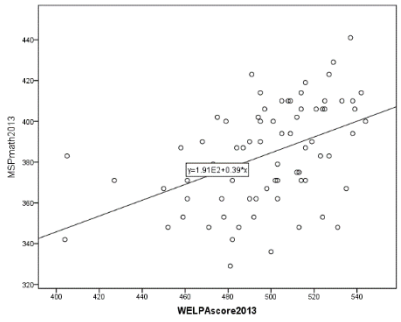
MSP Reading 2013



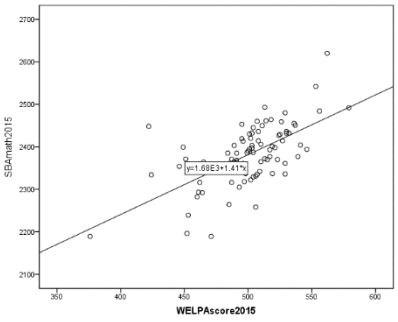
SBA ELA 2015



MSP Math 2012



MSP Math 2013



SBA Math 2015

Table 11

Grade 3 Scatterplot Results and Spearman's rho Correlations Measurement of Student Progress (MSP) /Smarter Balance Assessment (SBA) and Washington English Language Proficiency Assessment (WELPA)

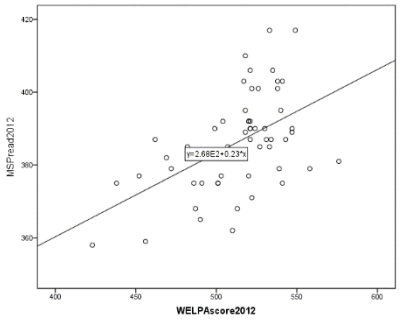
Subject	n value	R^2 Linear	Sig. (2-tailed)	Correlation Coefficient	Relationship Strength
Reading 2012	55	.374	.000	.559**	Weak
Reading 2013	74	.447	.000	.539**	Moderate
ELA 2015	85	.447	.000	.635**	Moderate
Math 2012	57	.252	.000	.457**	Weak
Math 2013	75	.208	.001	.379**	Weak
Math 2015	87	.394	.000	.530**	Weak

*. Correlation is significant at the 0.05 level (2-tailed).

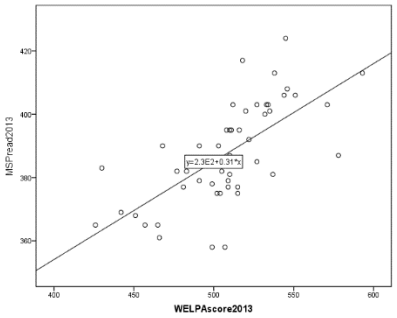
**. Correlation is significant at the 0.01 level (2-tailed).

Figure 12

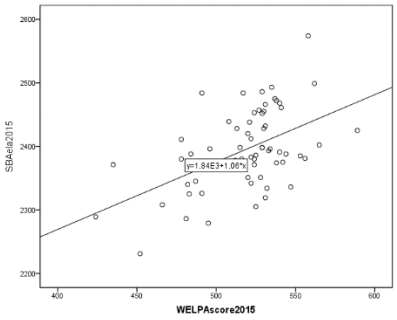
Grade 4 Scatterplots identifying relationship strength between WELPA score (X) and Performance in Reading, ELA, Math (Y)



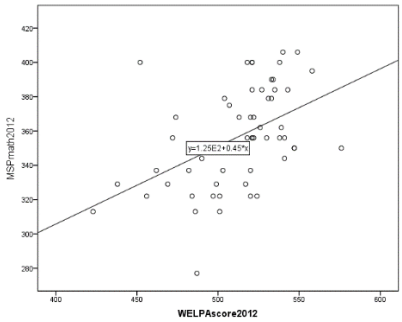
MSP Reading 2012



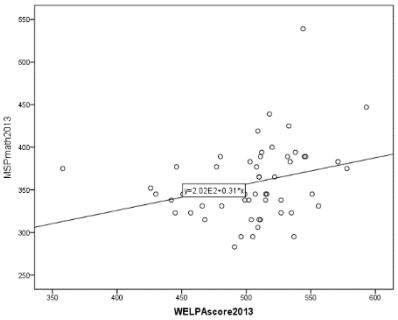
MSP Reading 2013



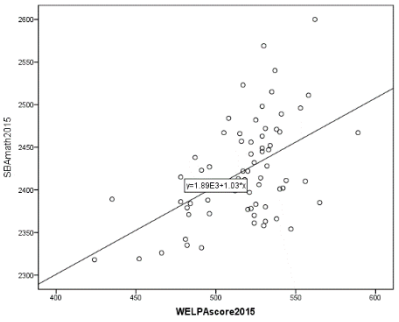
SBA ELA 2015



MSP Math 2012



MSP Math 2013



SBA Math 2015

Table 12

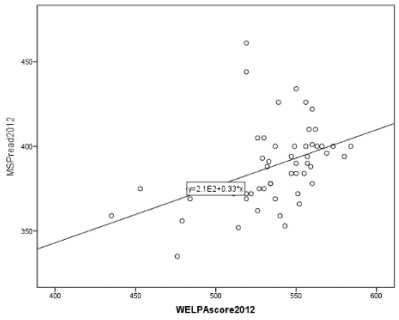
Grade 4 Scatterplot Results and Spearman's rho Correlations Measurement of Student Progress (MSP) /Smarter Balance Assessment (SBA) and Washington English Language Proficiency Assessment (WELPA)

Subject	n value	R^2 Linear	Sig. (2-tailed)	Correlation Coefficient	Relationship Strength
Reading 2012	57	.270	.023	.301*	Weak
Reading 2013	50	.454	.000	.521**	Moderate
ELA 2015	68	.260	.000	.426**	Weak
Math 2012	58	.222	.017	.313*	Weak
Math 2013	56	.082	.295	.142	Weak/NR
Math 2015	68	.261	.000	.490**	Weak

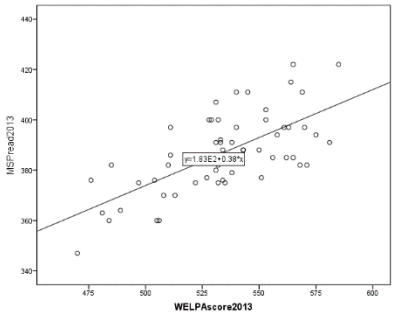
*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).
NR. No relationship.

Figure 13

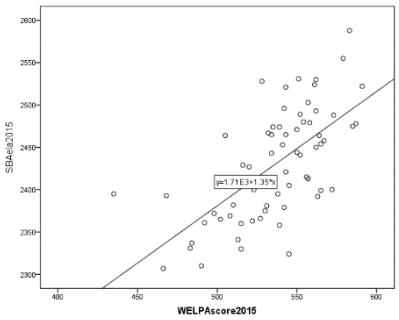
Grade 5 Scatterplots identifying relationship strength between WELPA score (X) and Performance in Reading, ELA, Math (Y)



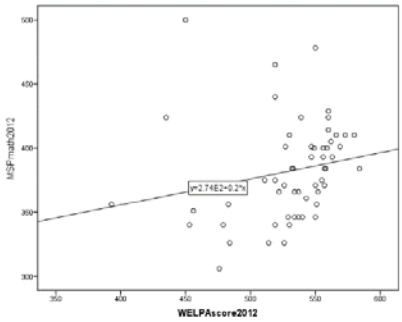
MSP Reading 2012



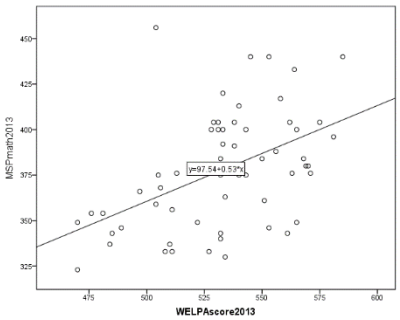
MSP Reading 2013



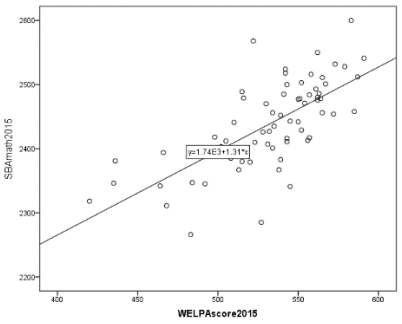
SBA ELA 2015



MSP Math 2012



MSP Math 2013



SBA Math 2015

Table 13

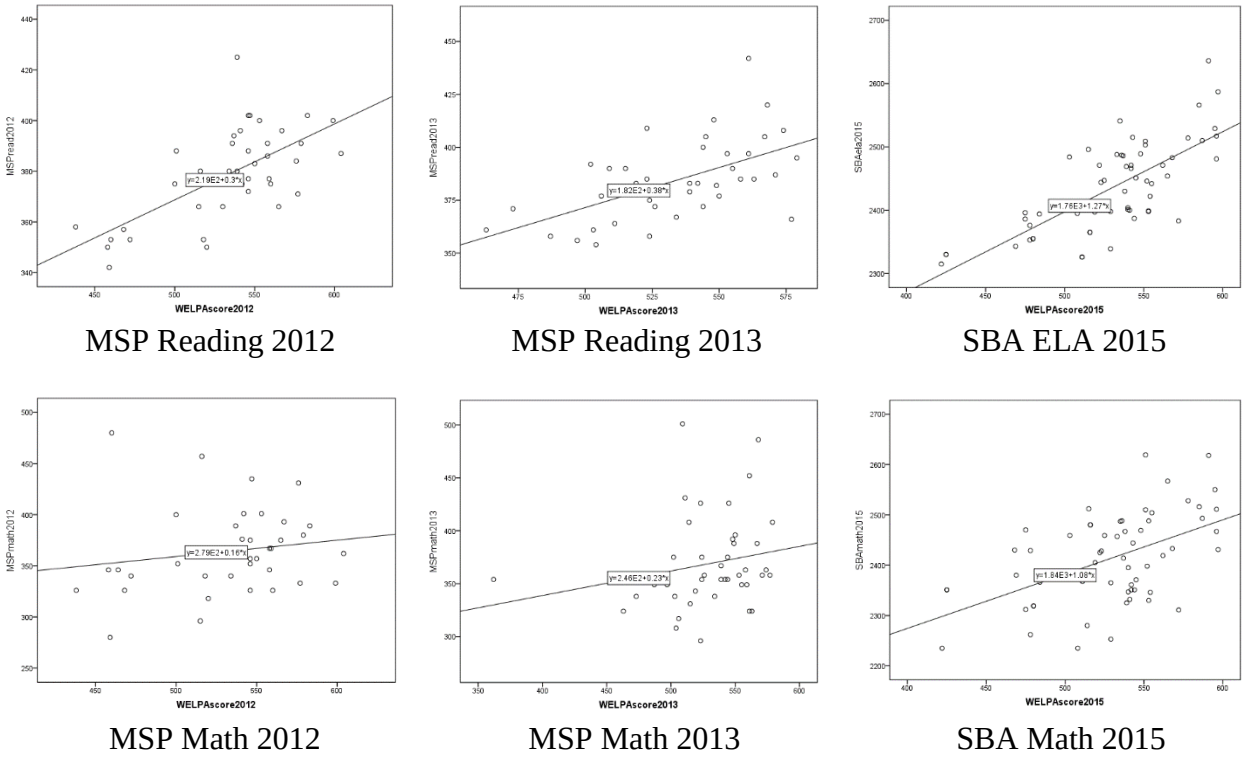
Grade 5 Scatterplot Results and Spearman's rho Correlations Measurement of Student Progress (MSP) /Smarter Balance Assessment (SBA) and Washington English Language Proficiency Assessment (WELPA)

Subject	n value	R^2 Linear	Sig. (2-tailed)	Correlation Coefficient	Relationship Strength
Reading 2012	53	.178	.000	.540**	Weak/NR
Reading 2013	59	.457	.000	.544**	Moderate
ELA 2015	64	.417	.000	.564**	Moderate
Math 2012	56	.041	.001	.444**	Weak/NR
Math 2013	61	.227	.001	.412**	Weak
Math 2015	67	.487	.000	.682**	Moderate

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).
NR. No relationship.

Figure 14

Grade 6 Scatterplots identifying relationship strength between WELPA score (X) and Performance in Reading, ELA, Math (Y)



MSP Reading 2012 | MSP Reading 2013 | SBA ELA 2015

MSP Math 2012 | MSP Math 2013 | SBA Math 2015

Table 14

Grade 6 Scatterplot Results and Spearman's rho Correlations Measurement of Student Progress (MSP) /Smarter Balance Assessment (SBA) and Washington English Language Proficiency Assessment (WELPA)

Subject	n value	R^2 Linear	Sig. (2-tailed)	Correlation Coefficient	Relationship Strength
Reading 2012	39	.428	.001	.507**	Moderate
Reading 2013	39	.323	.003	.465**	Weak
ELA 2015	59	.537	.000	.674**	Strong
Math 2012	40	.027	.057	.304	Weak/NR
Math 2013	42	.042	.058	.295	Weak/NR
Math 2015	60	.257	.000	.500**	Weak

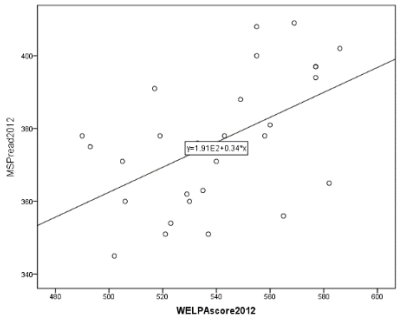
*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

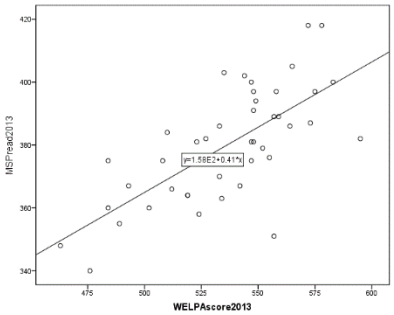
NR. No relationship.

Figure 15

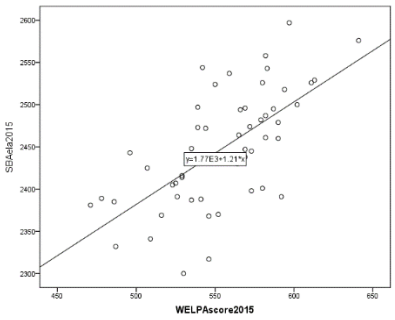
Grade 7 Scatterplots identifying relationship strength between WELPA score (X) and Performance in Reading, ELA, Math (Y)



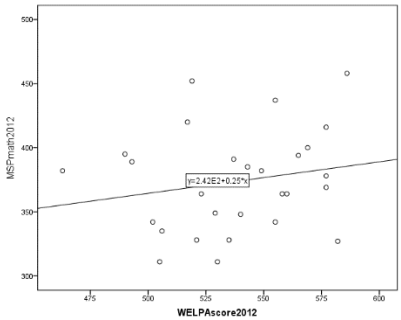
MSP Reading 2012



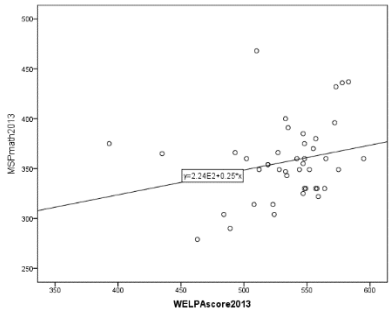
MSP Reading 2013



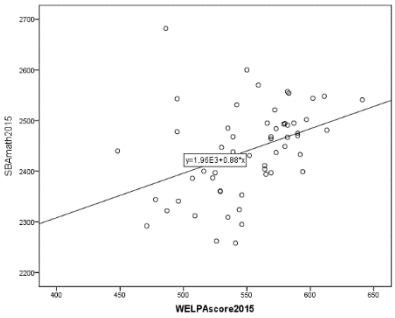
SBA ELA 2015



MSP Math 2012



MSP Math 2013



SBA Math 2015

Table 15

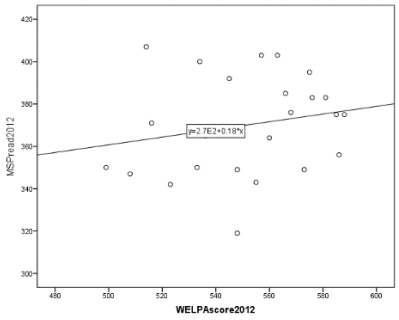
Grade 7 Scatterplot Results and Spearman's rho Correlations Measurement of Student Progress (MSP) /Smarter Balance Assessment (SBA) and Washington English Language Proficiency Assessment (WELPA)

Subject	n value	R^2 Linear	Sig. (2-tailed)	Correlation Coefficient	Relationship Strength
Reading 2012	28	.273	.045	.382*	Weak
Reading 2013	43	.494	.000	.589**	Moderate
ELA 2015	53	.420	.000	.581**	Moderate
Math 2012	29	.038	.525	.123	Weak/NR
Math 2013	45	.067	.085	.260	Weak/NR
Math 2015	56	.152	.003	.395**	Weak/NR

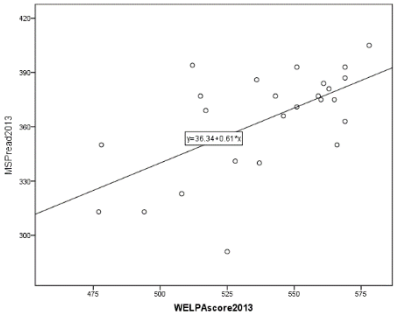
*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).
NR. No relationship.

Figure 16

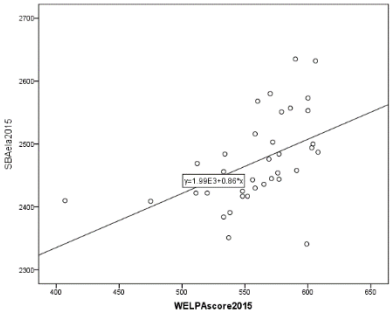
Grade 8 Scatterplots identifying relationship strength between WELPA score (X) and Performance in Reading, ELA, Math (Y)



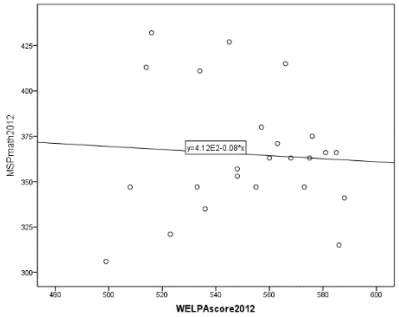
MSP Reading 2012



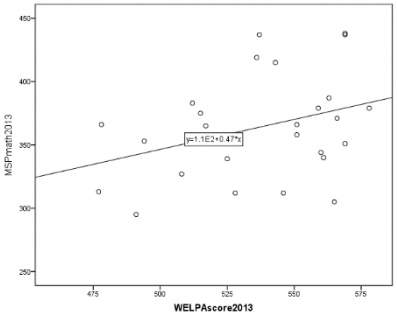
MSP Reading 2013



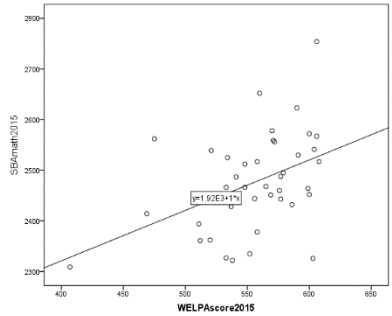
SBA ELA 2015



MSP Math 2012



MSP Math 2013



SBA Math 2015

Table 16

Grade 8 Scatterplot Results and Spearman's rho Correlations Measurement of Student Progress (MSP) /Smarter Balance Assessment (SBA) and Washington English Language Proficiency Assessment (WELPA)

Subject	n value	R^2 Linear	Sig. (2-tailed)	Correlation Coefficient	Relationship Strength
Reading 2012	24	.041	.171	.289	Weak/NR
Reading 2013	25	.370	.001	.611**	Weak
ELA 2015	38	.240	.001	.522	Weak
Math 2012	24	.004	.687	.087	Weak/NR
Math 2013	26	.119	.044	.399*	Weak/NR
Math 2015	40	.187	.105	.260	Weak/NR

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).
NR. No relationship.

Tanner (2012) references Spearman's rho as a nonparametric procedure that allows the researcher to analyze data that are not normally distributed; in other words they do not meet the criteria for an interval/ratio scale. The correlational research design allows the researcher to compare quantitative data, in this instance ordinal data converted to rank order data with interval scale data (Creswell, 2013). Table 22 depicts a matrix which correlates ELL students' English language proficiency level as measured by the WELPA and performance on state standardized testing in reading/English language arts and mathematics. The compilation of correlations were identified as statistically significant at both $p<.50$ and $p<.01$ levels, and as the correlation not being statistically significant at the $p>.05$ level.

Table 17

Matrix Correlating Relationship Between p Value and Alpha Value on State Standardized Testing Performance and ELL Students' WELPA Level

Grade	Reading		ELA		Math	
	2012	2013	2015	2012	2013	2015
3	.559**	.539**	.635**	.457**	.379**	.530**
4	.301*	.521**	.426**	.313*	.142	.490**
5	.540**	.544**	.564**	.444**	. 412**	.682**
6	.507**	.465**	.674**	.304	.295	.500**
7	.382*	.589**	.581**	.123	.260	.395**
8	.289	.611**	.522	.087	.399*	.260

**. Correlation is statistically significant at the 0.01 level.
*. Correlation is statistically significant at the 0.05 level.

Table 17 identified approximately 64% of the analysis using Spearman's rho resulted in a positive correlation of the sig. (2 tailed) p value being greater than the alpha value of .01. The analysis identified approximately 11% of the positive correlation the sig. (2 tailed) p value being greater than the alpha value of .05. Table 17 verifies that for this study approximately 75% of the analysis validated a statistically significant relationship between state standardized test scores and ELL students' English language proficiency as measured by WELPA. The remaining 25%

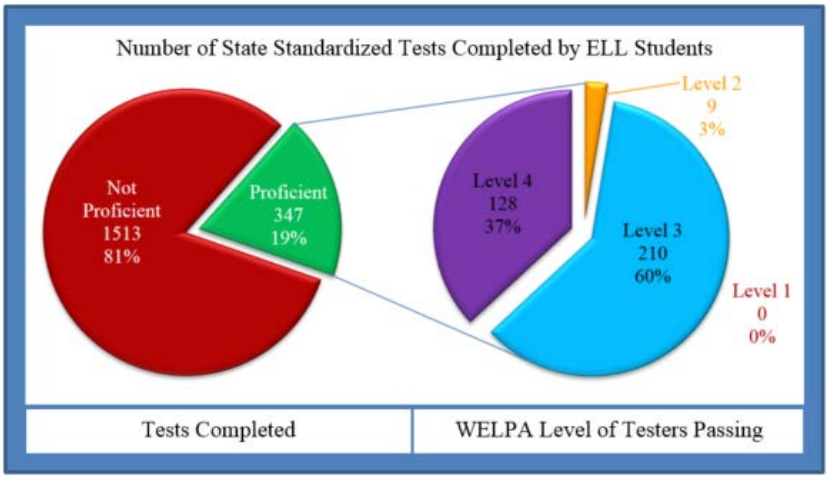
analysis, which indicated no significant correlation, were identified 89%, or 8 out of 9, within grades 6 through 8.

Standardized Testing Proficiency Rates. While the intention of this research study was to analyze ex post facto data utilizing correlational methodology, this researcher understood that an overview of the number of tests administered and passed would provide relevant information to the study.

Figure 17 provides an overview of state standardized testing outcomes for ELL students, grades 3-8, in terms of whether or not students met standard/proficiency level. The standardized tests listed are for school years 2012, 2013, and 2015.

Figure 17

Proficiency Levels of Grade 3-8 ELL Student Testing in Reading, ELA and Math



The first pie chart in Figure 17 identifies the total number of state standardized tests completed by ELL students in the areas of Reading, English Language Arts, and Math. 177 tests were identified as proficient for reading/English language arts and 170 tests were identified as proficient for mathematics, for a total of 347 tests categorized as meeting proficiency level. It is noted that the supermajority of the students reaching proficiency on state standardized testing,

regardless of the subject, were categorized as either a WELPA level 3 or WELPA level 4. Of the 347 total tests administered and identified as proficient, only 9 (3%) ELL students passed with a WELPA level 2; no students (0%) passed with a WELPA level 1.

Table 18 provides a detailed profile of the total number of tests completed by ELL students. Table 18 identifies, by grade and WELPA level, the ELL students who reached a proficiency level on state standardized testing for school years 2012, 2013, and 2015.

Table 18

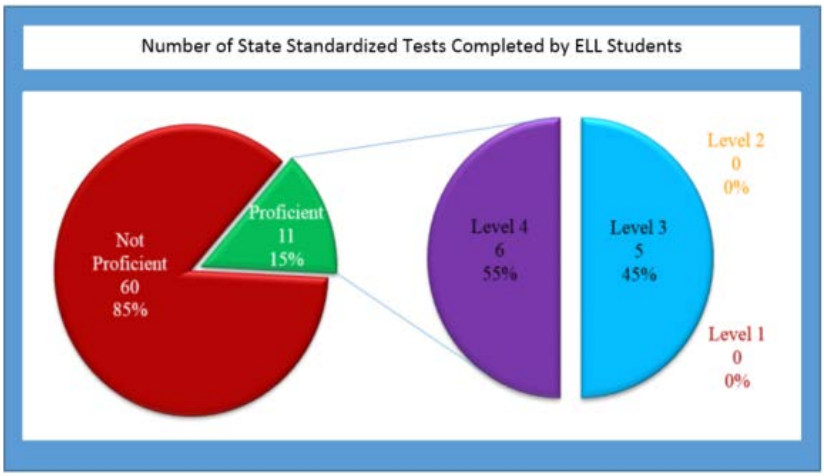
Number of Grade 3-8 ELL Students Passing State Tests and Their WELPA Levels

Grade	Tests Passed Per WELPA Level				MSP / SBA		
	Level 1	Level 2	Level 3	Level 4	Administered	Passed	Percentage
3	0	4	71	47	433	122	28.17
4	0	1	43	11	357	55	15.40
5	0	2	40	44	360	86	23.88
6	0	1	22	13	279	36	12.90
7	0	1	17	7	254	25	9.84
8	0	0	17	6	177	23	12.99

As a result of the determination to exempt Grade 11 data from analysis utilizing a Scatterplot and Spearman's rho, the grade 11 data was not included in neither Figure 17 nor Table 23. However, the data will be reviewed in relation to the number of state standardized tests administered and passed by ELL students since there is no recommended minimum n value for participants as is the case for a correlational analysis (Creswell, 2013). Figure 18 provides an overview of state standardized testing outcomes for grade 11 ELL students in terms of whether or not students met standard/proficiency level. The standardized tests listed are for school years 2012, 2013, and 2015.

Figure 18

Proficiency Levels Grade 11 ELL Student Testing in Reading, ELA and Algebra 1



The pie chart in Figure 18 identifies the total number of state standardized tests completed by ELL students in the areas of Reading, English Language Arts, and Algebra 1. Five tests were identified as proficient for reading/English language arts and six tests were identified as proficient for mathematics, for a total of 1q1 tests categorized as meeting proficiency level. It is noted that the students reaching proficiency on state standardized testing, regardless of the subject, were exclusively categorized as either a WELPA level 3 or WELPA level 4. Of the 71 total tests administered in 2012, 2013, and 2015: six (8%) ELL students passed with a WELPA level 4, five (7%) ELL students passed with a WELPA level 3, no (0%) ELL students passed with a WELPA level 2, and no (0%) ELL students passed with a WELPA level 1.

Table 19 provides a detailed profile of the total number of tests completed by ELL students in grade 11. Table 19 identifies, by WELPA level, the ELL students who reached a proficiency level on state standardized testing for school years 2012, 2013, and 2015.

Table 19

Number of Grade 11 ELL Students Passing State Tests and Their WELPA Levels

Grade	Tests Passed Per WELPA Level				MSP / SBA / EOC		
	Level 1	Level 2	Level 3	Level 4	Administered	Passed	Percentage
11	0	0	5	6	71	11	15.49

Conclusion

The correlations provided in the scatterplots and in the Spearman's rho data compilation in Table 17 provide the required evidence to reject the null hypothesis as there is a difference, albeit a weak one, between English language learners second language proficiency level and performance on state standardized tests in reading, English language arts, and mathematics.

Chapter IV provided the results of the applied analytical methodologies to accurately respond to the two guiding research questions in this study. The data sources were exclusively ex post facto data of ELL students who qualify for services based on measured English language performances using the WELPA. The data sources for research question one included MSP data for reading, HSPE data for reading and SBA data for English language arts. The data sources for research question two included MSP data for mathematics, SBA data for mathematics, and EOC data for Algebra 1.

Chapter V will expand upon the results of the data analysis. Particular emphasis will be given to distinguishing themes of assessment success between elementary and secondary students in relation to English language proficiency. The challenge schools face of holding students accountable to state standardized testing and academic success and graduation rates will also be a topic for discussion.

Chapter V

Conclusion

Introduction

Washington State has experienced continued increases in ELL students in the K-12 education system. Washington State Office of the Superintendent of Public Instruction references serving 110,000 English language learners in 2016. This equates to approximately doubling the 54,796 ELL students served in 2000. The continued growth trend gives priority to this current and relevant topic for educators as well as it being applicable to individuals setting policy.

Chapter V provides the venue for a discussion of the results of this study. The presentation of the summary of results is comprised of factors impacting testing performance, precis of the problem, purpose of the study and research questions, methodology review, major findings, implications for professional practice, recommendations for further study, conclusion, and final reflection.

Factors impacting testing performance. Linguistic researchers have identified and agreed upon certain factors that play a pivotal role in the current practice of assessing ELL students' academic proficiency in their second language. There is structure and there are stages to acquiring proficiency in a second language that cannot be hurried (Abedi, J., & Levine, H. G., 2013; Cummins, 2000; Dockery, 2013; Krashen 1982). The research identifies a measurable variance in levels of instructional impact on learning and academic performance as measured by standardized test scores based upon the type of ELL instructional program available to second language learners (Collier & Thomas, 2012; Nakamoto, Lindsey & Manis, 2012; Thomas & Collier 1997). Current practices do not reflect research based decision making in the

standardized testing of ELL students (Pennock-Roman & Rivera, 2011; Stansfield, 2011). The inconsistent and invalidated use of accommodations impact performance as well as accountability reporting on standardized testing (Huggins & Elbaum, 2013; Dixon, 2011). The continued increases in ELL students in the K-12 education system gives priority to this current and relevant topic for educators as well as it being applicable to individuals setting policy.

Precis of the problem. The Elementary and Secondary Education Act (ESEA) addresses standardized testing guidelines for ELL students. Unfortunately, the collection of research does not align with current accountability methods applied to ELL students in the area of state standardized testing in an effort to meet ESEA testing requirements. There is a recognized gap in the research in terms of the relationship between the distinct proficiency levels of English language learners and performance on state standardized testing (Abedi, 2008; Mahon, 2006). As a result, blanket assumptions and decision making is occurring in response to erroneously reporting ELL students' performance as one sub-group and omitting English language proficiency level as a consideration in standardized testing performance.

Purpose of the study and research questions. The purpose of this study was to find a correlation between ELL students' English language proficiency and successful performance on state standardized testing. A quantitative methodology using ex post facto data was used to determine an appropriate developmental level of second language proficiency in order to validate that standardized testing was measuring student content knowledge rather than second language ability, or lack thereof. Direction of the literature review, establishment of a framework, data collection, data analysis, and the reporting of the results were driven by two research questions. The questions for this study included:

3. Is there a relationship between English Language Learners' second language proficiency level and performance on state standardized tests in reading and English language arts?
4. Is there a relationship between English Language Learners' second language proficiency level and performance on state standardized tests in mathematics?

Methodology review. Quantitative research, with exclusive use of ex post facto data, was utilized in the methodology because it provided the necessary avenue for analysis using statistical procedures. The data set used lent itself to inquiry with protections against bias, control of alternative explanations as to the results, and most importantly, the ease to have the findings of this study replicated (Creswell, 2014). The study was conducted in a manner that combined the presentation of the methodology results, scatterplot data and Spearman's rho tables using IBM SPSS Statistics 23, into tables by grade level. This lead to the two research questions being answered using the same data tables. The results used to answer the research questions focused upon the r^2 linear data from each scatterplot, and the correlation coefficient using a two tailed test for each Spearman's *rho* analysis that was conducted.

Major Findings

Multiple, extremely pertinent, findings emerged from the analysis in chapter IV when viewed from the perspective of WELPA scores. The major findings section is presented in a manner that the results of the two research questions are addressed simultaneously; the major findings format is also reflective of the fact that the results of the analysis in Chapter IV were presented in combined data tables to provide the reader greater ease in the reviewing and processing of the data. The section encompasses Finding #1: correlations between WELPA level and testing performance, Finding #2: WELPA level and testing proficiency, and Finding #3: Testing Performance between reading/ELA and mathematics. Each finding is followed by

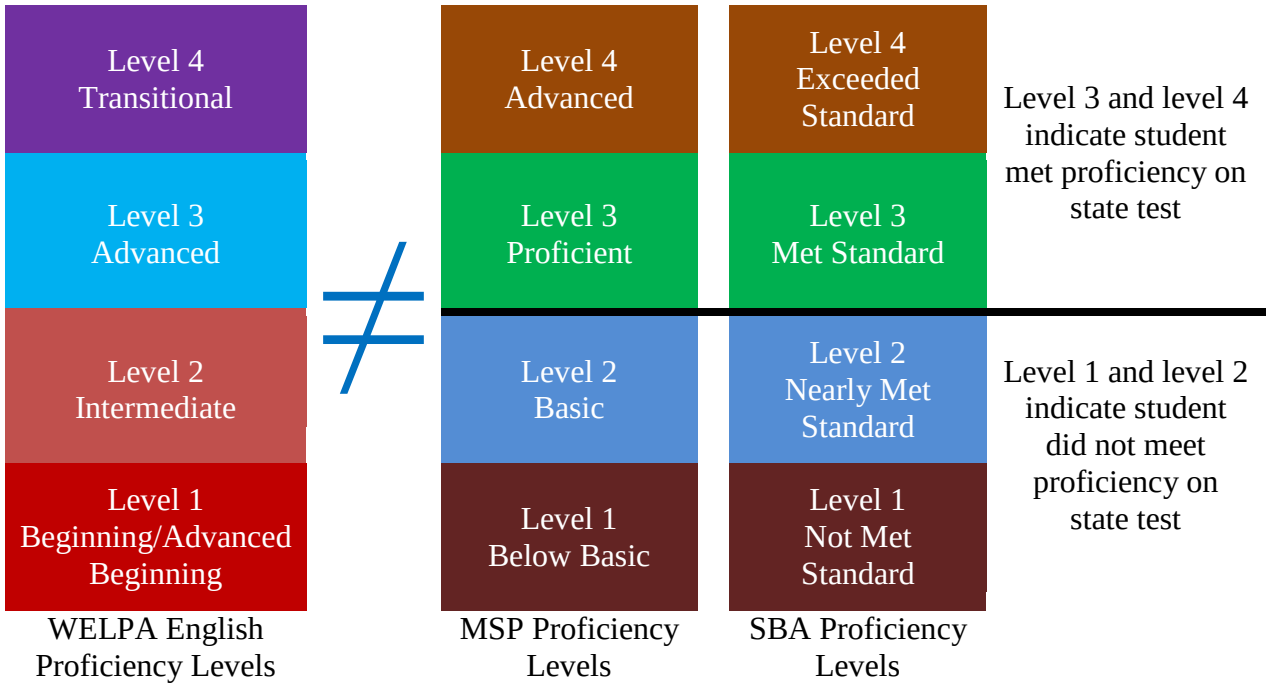
impact of limitations, recommendations for further study, and implications for professional practices.

Finding #1: Correlation between WELPA level and testing performance

Finding #1 informs us that there is a correlation between WELPA level and ELL students' performance on standardized tests. The data collection included analysis of ex-post-facto data of ELL students and their performance on state standardized tests for reading, language arts, and mathematics. The ELL students received a rating for both English language proficiency and proficiency on state standardized testing. For the purpose of assuring a clear understanding of the relationship between English proficiency levels and proficiency on state testing, it is imperative that the reader understand that there is no commonality between WELPA level ratings and state testing proficiency levels. Figure 19 illustrates the levels of proficiency for both English language and academic performance. Note that the WELPA language proficiency levels are not synonymous with the recognized proficiency levels associated with standardized testing. Additionally, there is no explicitly identified benchmark goal associated with language within the WELPA levels; rather, the distribution of levels is designed as a continuum.

Figure 19

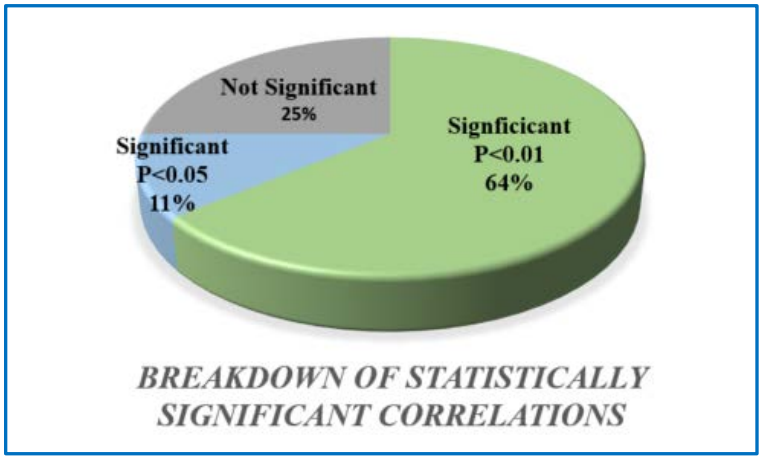
Pictorial display of language levels and State testing performance levels



Language Test vs. Academic Performance Test

The data collection and analysis of ELL students in grades 3, 4, 5, 6, 7, and 8 revealed that there was a correlation between ELL students' English language proficiency and successful performance on state standardized testing. This correlation was substantiated through the data collected from the SPSS output of the scatterplots and Spearman's *rho* tables. Each scatterplot consistently identified a positive regression line as measured by the R^2 linear values. The Spearman's rho tables corroborated the results of each scatterplot through a positive correlation coefficient with a range from 0.087 to .682. The Spearman's *rho* analysis identified that 27 of 36, or 75%, of the correlation scores were categorized as statistically significant. Of the recognized 27 statistically significant correlations, 23 or 85%, of the correlations were identified as significant at the 0.01 level; the remaining 4, or 15%, of the correlations were identified as statistically significant at the 0.05 level. Figure 20 provides a visual perspective.

Figure 20



Correlations between WELPA language level and Academic Proficiency

This analysis informs us that although the relationship strength for the correlations between WELPA scores and performance on state standardized test scores maintained a relationship strength classified overall as weak to a moderate low, the relationship itself cannot be denied.

Implications for Professional Practices. An important consideration for the reader when addressing the implications for professional practice, is to first acknowledge an understanding that the WELPA indicators/definitions adopted by Washington State are designed around the developmental stages and acquisition of a second language rather than a direct connection to state standardized testing (See Figure 21). In other words, The WELPA is evaluative of language proficiency but is not specifically designed to determine performance on assessments.

Figure 21

Washington State English Language Development Performance Definitions*

English Language Learners will process, understand, produce, and use:		
Level 1	Beginning	• pictures, graphs, or nonverbal representations of language • words, including high-frequency words, phrases or formulaic chunks of language • language to communicate with others around basic concrete needs
	Advanced Beginning	• language to draw on simple and routine experiences to communicate with others • general language related to content areas • phrases or short sentences in oral or written communication, making errors that often impede the meaning of the communication
Level 2	Intermediate	• language to communicate with different audiences on familiar matters • general and some specific language of the content areas • expanded sentences in oral or written communication, making errors that may impede the communication while retaining much of its meaning
Level 3	Advanced	• language in both concrete and abstract situations, applying language to new experiences • specialized and some technical language of the content areas • a variety of sentence lengths of varying linguistic complexity in oral and written communication, making minimal errors that do not impede the overall meaning of the communication
Level 4	Transitional	• a wide range of longer oral and written texts and recognize implicit meaning • specialized or technical language of content areas at grade level • a variety of sentence lengths of varying linguistic complexity in extended oral or written discourse approaching comparability to that of English-proficient peers

*(2011) Adapted from Figure 8. Performance Definitions of the Five Levels of English Language Proficiency, *Pre-K–12 English Language Proficiency Standards*, TESOL.

Washington State Language Development Indicators associated with WELPA levels

The language performance definitions in Figure 21 limit themselves to ELL students' language proficiency; these language skills may be applied to a formal learning environment. Note that the language performance definitions for all four levels do not take into consideration the students' academic performance or level of school success. Students identified in the Level

4/Transitional category are the only ones who reflect a profile most indicative of a native English language speaker.

Nevertheless, the results of Finding #1 helps to inform the educator of the performance expectations that are considered 'reasonable' for overall academic performance of ELL students. More importantly, knowing that educators assess to drive instructional delivery, the WELPA language levels themselves can also be used to determine what kind of results to expect from ELL students on standardized testing based on the students' language development. Most importantly, the educator is provided a profile of the specific skills that the ELL student needs to develop to be more successful in standardized testing scenarios. Cummins' Dual Iceberg Model (See Figure 7) from the theoretical framework, also reinforces the fact that students must have a mutually well-developed Cognitive Academic Language Proficiency (CALP) level in order to reflect academic proficiency in standardized testing performance and proficiency in the language they are being assessed (Cummins, 1984, 2000).

Recommendations for Further Study. Finding #1 has two recommendations identified for further study: 1) methodology, and 2) replication of the research study using the English Language Proficiency Assessment for the 21st Century (ELPA21).

The methodology used for the study was applicable to the research questions, design of the analysis, and the data available for the study. The use of Spearman's rho was selected over a Pearson's r due to the fact that the measurement scale of the variables to be correlated required an ordinal scale variable with an interval scale variable (Tanner, 2012). The researcher also wanted to allow for consideration of a monotonic relationship between the variables (Lund Research Ltd, 2013). The trade-off is that Spearman's rho is not as powerful an analysis tool as a Pearson's r (Tanner, 2012). In reflection, the question is generated that asks if the use of another

analytical tool, with the appropriate adjustments in data sets, would not provide a stronger correlation between the WELPA levels and proficiency on state standardized testing. Additionally, six of the 36 n values hovered around the endorsed minimum of 30 participants for the analysis methods utilized in the study. Ensuring a larger sample of participants will also contribute to the robustness of future research.

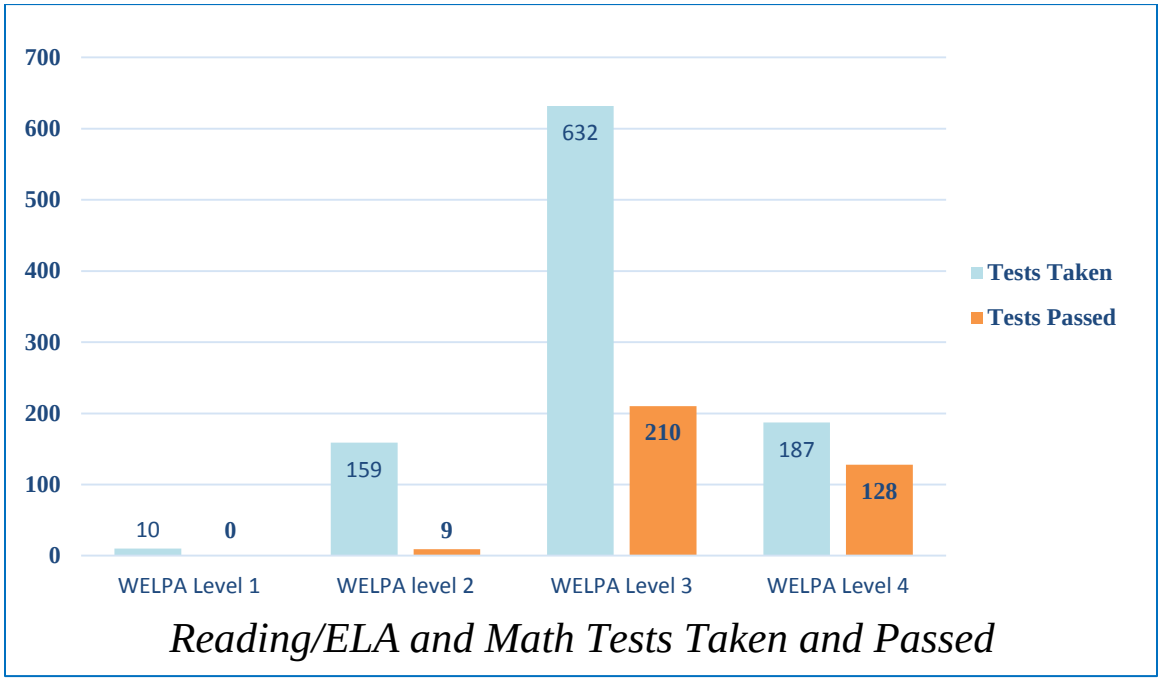
Washington State officially committed in 2013 to transition from the WELPA to the ELPA21 during the 2015-16 school year. Washington joined a consortium of 11 other states to develop the ELPA21 as the new assessment tool to determine students' English language proficiency levels. This does not eliminate the WELPA from continuing to be implemented by other states as both a placement test and qualifying assessment to determine ELL services. The content of this body of research continues to be both relevant and applicable to the current educational system. In terms of application for Washington State, however, the ELPA21 does provide an opportunity for recommendation for further study-particularly due to the new system being centered on the adoption of new English Language Proficiency Standards.

Finding #2: Correlation between WELPA level and testing proficiency

Finding #2 verified that there is a connection between WELPA level and testing proficiency. An examination of the data viewed through a lens focused upon performance by each individual WELPA level produced startling results. The results of the data in Figure 17 noted that of the 347 tests identified as meeting proficiency: only 9 were from students at a WELPA level 2, and 0 were from students at a WELPA level 1. Figure 21 visually emphasizes the differences in performance by WELPA level.

Figure 22

Graphic Representation of ELL Student Testing Results for 2012, 2013, and 2015



Keeping in mind that grade 11 ELL students were not included in Figure 22, the results are found to be replicated with the grade 11 data set as well. Figure 18 identified a total of 11 grade 11 ELL students reaching proficiency in reading/ELA and math (Algebra 1). Of the 11 total students who passed, their WELPA levels were as follows: 6 were at a level 4, 5 were at a level 3, 0 were at a level 2, and 0 were at a level 1. As a result, we can conclude that both data sets followed a pattern of virtually eliminating the anticipated probability that a WELPA level 1 student will pass a state standardized test in reading/ELA and math. In addition, we can also conclude that according to the data presented, the probability of a WELPA level 2 student has a

2.59% chance, at best, of passing a state standardized test in reading/ELA and math if they are in grades 3-8. According to the data available for grade 11, the WELPA level 2 students have a probability of not passing a state standardized test in reading/ELA and math.

A revisit of the theoretical framework acknowledges that Cummins Quadrant Matrix for the evaluation of language demands is directly applicable to Finding #2 (Cummins, 1989). The matrix ascertains that in order to be academically proficient in standardized assessments, the ELL student's academic language must be reflective of a native speaker as outlined in Quadrant D. This native language proficiency allows the ELL student to be successful with context-reduced material found in standardized testing. An alignment is found when an initial comparison is made between the Washington State English Language Performance Definitions (See Figure 21) for WELPA Level 1 and level 2 and Cummins Quadrant Matrix (See Figure 5) quadrant A and quadrant B. Since WELPA level 1 and level 2 reach only to quadrant B at most, it is understood the Finding #2 reflects the component of the theoretical framework.

If the researcher applies the results represented in Figure 22, then the following case scenario is theoretically applicable to Finding #2. Two large middle schools with the same number of ELL qualified students participate in state standardized testing for grades 6, 7 and 8. Middle School A has 100 ELL students in the following WELPA levels: 25 students at level 4, 55 students at level 3, 16 students at level 2, and 4 students at level 1. By comparison, Middle School B also has 100 ELL students, but the numbers by WELPA levels vary as follows: 18 students at level 4, 21 students at level 3, 35 students at level 2, and 26 students at level 1. Before a single test is administered, we can conclude from what we have learned in Finding #2 that Figure 23 below is highly probable.

Figure 23

Varying Academic Proficiency Results of ELL students from Middle School A and Middle School B Based on Varying WELPA Levels

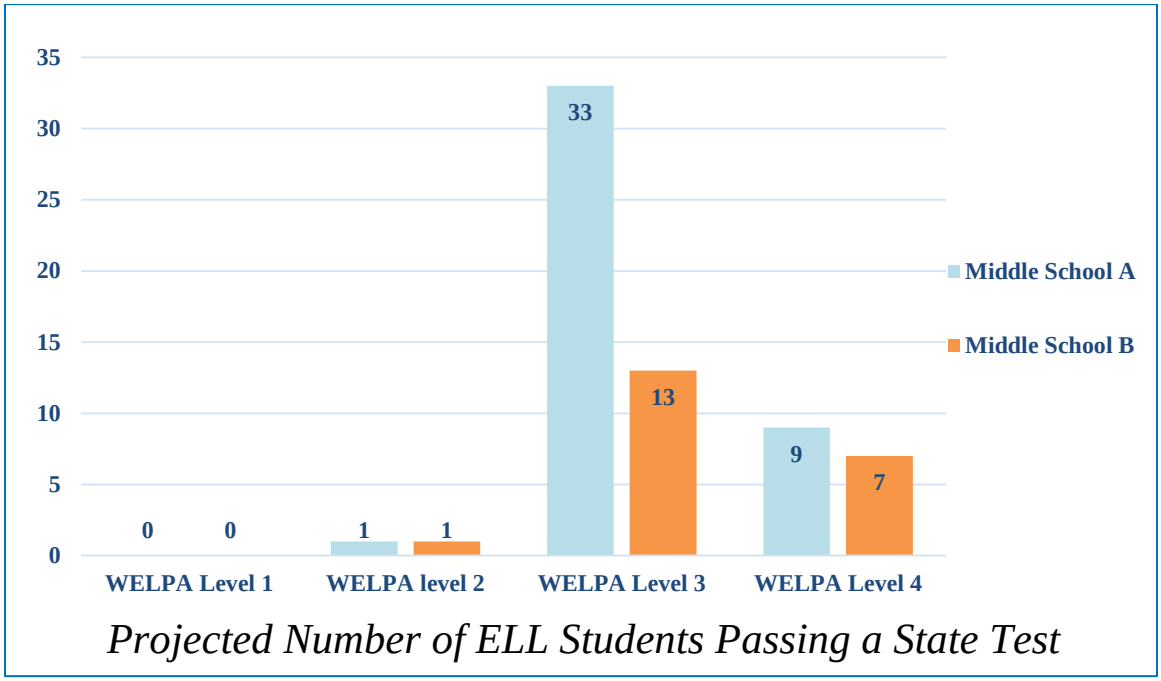


Figure 23 projects that twice as many ELL students will pass state standardized tests from Middle School A than from Middle School B solely based on the fact that Middle School A has more students designated at a level 3 and level 4 in comparison to Middle School B. The manipulated variable in this case scenario is simply the varying number of ELL students assigned to each WELPA level. Another statistically accurate, although not necessarily acceptable, application of Finding #2 would be to simply anticipate that no students from WELPA level 1 will be meeting proficiency and up to two per 100 ELL students at WELPA level 2 will be meeting proficiency. The data in Finding #2 tells us that certain generalizations

can be applied to the potential standardized testing success rate of ELL students exclusively based upon each ELL student's English language proficiency level as measured by the WELPA.

Implications for Professional Practices. The implications of Finding #2 for professional practices include program design, professional development for enhancing student performance, and opportunity for corrective measures in assessment practices.

Recognition of the impact on student testing as a result of the composition of WELPA levels within a school is a paramount consideration when reviewing program design. It is imperative that educational leaders and educators take into account the fluency levels of students when making program/instructional decisions; data mining should extend well beyond looking at the ELL population simply as an overall sub-group. These implications become that much more important if the school is identified as a school in improvement. For example, under current legislation, Washington State schools become focus schools when they have a combined average proficiency rate in Reading/Math that is less than or equal to 13.58% for at least one subgroup over a consecutive three year period. The more stringent status, School Improvement Grant (SIGS) schools, is applied to Title I schools achieving around the bottom 5%. Whether approaching student improvement status or simply delineating a comprehensive school improvement plan, it is imperative that individual student WELPA levels be a component of program and instructional design. Otherwise, decision making based on broader data sets will most likely not produce the desired academic performance results.

A comprehensive understanding of how ELL students perform on individual WELPA levels is essential in order for educators to appropriately support ELL students for instructional purposes as well as in preparation for state standardized testing. All students should receive the support necessary to assure that they are demonstrating their knowledge on state standardized

testing. However, a strong and effective educator differentiates instruction, goals, and support so that it challenges students at their instructional level. The same concept is applied for the practices utilized when assessing students with state standardized testing, district testing, or testing at the classroom level-an understanding of ELL students' needs based upon individual WELPA level. This should result in appropriate expectations and well-designed plans for incremental growth based on the status of the students' language proficiency. For example, a WELPA level 1 student may have a plan focused on assuring that student performance/percentile growth is captured during testing knowing that it is unlikely the student will receive a passing score/proficiency rating, whereas a WELPA level 3 ELL student may have a plan to support reaching proficiency on state standardized tests.

The most notable implication for Finding #2 is the fact that students at WELPA level 1 and level 2 do not really have much, if any, chance of being identified as proficient on state standardized testing. The biggest question is why test these students at all. It's important to note that this does not need to be an all-encompassing decision; there are multiple possible options. The finding supports an argument for testing to begin with ELL students at WELPA level 3 or even later. WELPA level 1 and level 2 students could be held accountable for making progress on English language proficiency levels. Another available option is to wait until students have exited ELL services before they begin state testing. A viable reason not to test would be the standardized test itself. The rigor of the test would understandably be in question if WELPA level 1 and level 2 students were experiencing proficiency levels on state testing.

Recommendations for Further Study. This body of research helps to provide a partial answer to the problem of how to measure student growth for ELL students who do not yet proficient enough to be successful with state standardized testing. This body of research

provides, through Finding #2, the direction necessary to further investigate the impact that the least fluent English speakers, in this case WELPA level 1 and level 2 ELL students, are experiencing with standardized testing. The results from Chapter IV indicate that the current accountability guidelines established through ESEA and enforced at the state level are currently not appropriate for ELL students. This study can easily be replicated since every state has an English language proficiency evaluation tool and every state has mandated standardized testing in reading/English language arts and mathematics. The results of future study will help to create a threshold to more accurately measure student growth while avoiding blanket testing requirements for ELL students as a subgroup.

Finding #3: Testing performance between reading/ELA and mathematics.

Finding #3 informs us that there is no distinction in success rates between reading/English language arts and mathematics. This important finding was referenced in Figure 17 and Figure 18 based on the number of reading/ELA tests and mathematics tests that were passed by ELL students and identified as proficient.

Grades 3-8 ELL students passed a total of 347 tests. A breakdown of these tests identified that 177, or 51%, were in the subject area of reading/English language arts; 170, or 49%, were in the area of mathematics. Grade 11 was comprised of a much smaller *n* sample but reflected almost identical findings. Grade 11 ELL students passed a total of 11 tests. A breakdown of these tests identified that five, or 45%, were in the subject area of reading/English language arts; 6, or 55%, were in the area of mathematics (Algebra 1). This finding is significant in that there is not a distinction between the two subjects being assessed: reading/ELA and mathematics. One of the most important questions that arises from this finding is whether the performance of students

is accurately measured or the methods employed in assessing students is hampering testing results.

Implications for Professional Practices. The implications for professional practices of Finding #3 center upon a misalignment with the research with regard to best practices for accommodations and course alternatives, as well as changes is testing format and content.

Unfortunately, the current practices continue to be questioned by the researcher and the expert in the field. As an example, Washington State does offer versatility in the instructional program models used but the state testing itself requires that all ELL students, regardless of WELPA level, complete state standardized testing in English. The use of accommodations of testing for ELL students has a large body of research that is contradictory to currently implemented practices even under the most recent ESEA reauthorization. ELL students have the option of hearing directions in their native language, if available, but the reading of testing content and responses are all in English. The one small exception being that ELL students in country less than a year may waive state testing during that first year. This means that professionals will continue to struggle with practices that do not provide the ELL students with the tools to accurately demonstrate their skill level and knowledge in reading/English language arts and mathematics.

Another implication for professional practices at the secondary level is the negative impact on graduation requirements for ELL students who have not passed state standardized testing requirements. The fact that 85% of secondary ELL students are not meeting this proficiency in testing would identify the problem at the highest priority status. Potential solutions can begin with considering what are referred to as alternatives for ELL students who did not pass.

Let's consider the current alternative options for special education students. These alternatives include, but may not be limited to the following options. Students who have an Individualized Education Plan (IEP) in reading/English language arts or math can pass the exam in that subject area at a level 2 and are marked as Basic/Level 2. If students are not marked accordingly before the test, there is an option to go back after the fact, referred to as retro-basic, and adjust their score to show passing at a level 2; this is provided that the student qualified in the area at the time of the test administration. Another alternative is the WA-AIM, designed for students who have significant cognitive challenges and therefore should not take the off grade level assessment. Washington State offers an Off Grade Level Assessment, which means that students may qualify to complete the standardized test at an elementary level based on the IEP needs.

It is clear that special education students have very unique needs that warrant the consideration of alternatives. In reviewing the body of research associated with the academic needs of ELL students, and reinforced with this study, the argument has already been established that ELL students have just as unique, albeit different, needs than IEP students. In response, it makes sense that the appropriate alternatives are identified and implemented in regards to standardized testing.

Recommendations for Further Study. The recent changes in standardized tests themselves as well new testing practices has meant that the research has not yet caught up with the new evaluation tools. A significant shift has recently occurred in which districts are moving away from paper-pencil standardized assessments. As an example, last year the majority of the districts completed Washington State testing online, and the shift to assess electronically is only getting stronger. This year, Washington State will also be assessing ELL students' proficiency

online. These recent changes in online testing practices provide a priority need and create an ideal opportunity for further research.

Further study is recommended that takes into consideration the language proficiency level along with the various instructional programs available to ELL students in regards to performance on state standardized testing. Delving further into this specific strand of research will help to delineate how much the standardized testing scores are related to program delivery vs. the language proficiency of the ELL student (Cummins, 2000; Thomas & Collier, 2012).

In addition, the WELPA levels themselves merit further study. The shift from Basic Interpersonal Communication Skills (BICS) to Cognitive Academic Language Proficiency (CALP) is acknowledged to avoid premature exit from language support programs (Cummins, 1984, 2000). With this in mind, the Washington State English Language Development Performance Definitions (See Figure 21) are recommended for further study in terms of the rigor of the benchmarks established by each WELPA level. Level 4 is when students are transitioned out of English language services in Washington State, yet the definition of level 4 is described as, “approaching comparability to that of English-proficient peers.” This information leaves the researcher wondering as to how developed an ELL student’s CALP must be in order to be transitioned out of program since Finding #3 reflects no difference between reading/ELA and mathematics; this wondering is further enhanced when coupled with the significantly lower percentages of students reaching academic proficiency as an ELL sub-group.

Conclusion

The purpose of this study was to find a correlation between ELL students’ English language proficiency and successful performance on state standardized testing. This research study provides the foundation for understanding the impact that English language proficiency has

on state standardized test scores of ELL students. The data can easily be replicated since it can be found in every state with some variation: language proficiency qualifications for services and state standardized testing for English language arts and mathematics. The continued study of this topic will be easier to replicate with schools moving toward common state assessments, the two most prominent assessments include the Smarter Balance Assessment (SBA) and Partnership for Assessment of Readiness for College and Careers (PARCC). The assessment of language proficiency is anticipated to also become closer aligned amongst states with the recent incorporation of consortia models that more states are moving towards.

This research study was conducted using an exclusively quantitative approach in the form of ex-post-facto data being analyzed by grade level utilizing IBM SPSS Statistics 23 output for a scatterplot and Spearman's *rho* for grades 3, 4, 5, 6, 7, 8, and 11. The results of the study concluded answered the two research questions as follows:

1. There is a relationship between English Language Learners' second language proficiency level and performance on state standardized tests in reading and English language arts.
2. There is a relationship between English Language Learners' second language proficiency level and performance on state standardized tests in mathematics?

The research study, as a result of the ex-post-facto data analysis, include three findings. Finding #1: correlations between WELPA level and testing performance were significantly at the 0.01 level the majority of the time. Although the strength of the correlations were weak to moderate low, the study verified that there was an obvious correlation between the two variables. Finding #2: WELPA level and testing proficiency recognized that there is a threshold amongst the WELPA levels and those students who are passing state standardized tests. Students categorized as a WELPA level 1 and level 2 students were identified as an overall group

incapable of passing state tests. Finding #3: Testing Performance between reading/ELA and mathematics revealed that there was no distinction in between the number of tests passed for reading/English language arts and mathematics. The research study validated an ineptitude of how current policy decisions associated with accountability requirements for ELL learners continues to be misaligned with research best practices.

Final Reflection

During the initial presentation of this research we were introduced to an ELL fifth grade student named Raul, an immigrant from Bolivia who enrolled in his second year of schooling in Washington State. His previous schooling performance profile from Bolivia identifies him at grade level in language arts and slightly below grade level in mathematics. Raul is currently receiving additional support for English language development due to qualifying for services based on the state guidelines. Raul's current literacy level in English is well below his grade level peers and he qualifies for Title I assistance. The school does not offer Title I math support, otherwise Raul would also be a strong candidate for math services. As a result of this piece of research, we have learned that we can expect the following from Raul's academic performance under current practice: Raul will struggle academically for at least the first five years and will most likely not reach proficiency in standardized testing until high school, Raul's abilities to demonstrate knowledge and skills will be hampered by testing accommodations that do not reflect best practices, and there is a high probability that if Raul still qualifies for ELL services in high school he will not be able to meet testing requirements for graduation. The success rates of our English language learners tells is that changes in practice and policy need to happen if we are to do better by them.

References

Abedi, J., & Levine, H. G. (2013). Fairness in assessment of English learners. *Leadership, 42*(3), 26-38

Abedi, J., Carolyn, H. H., & Lord, C. (2004). Assessment accommodations for English language learners: Implications for policy-based empirical research. *Review of Educational Research, 74*(1), 1-28

Abella, R., Urrutia, J., & Shneyderman, A. (2005). An examination of the validity of English-language achievement test scores in an English language learner population. *Bilingual Research Journal, 29*(1)

Accountability Works. (2007). *Comprehensive English Language Learning Assessment (CELLA)*. Retrieved from http://www.accountabilityworks.org/news.php?viewStory=13

Acosta, S. (2011). *High-Stakes Reading Assessment and English Oral Language Development: A Study of Third Grade English Language Learners in a Texas School District*. (Doctoral Dissertation). Texas A&M University. Retrieved from http://hdl.handle.net/1969.1/ETD-TAMU-2010-05-8043

Atchley, D. (2010). *Interventions, perceptions of accommodations, and motivating factors impacting the achievement and successful mainstreaming transition of English language learners*. (Thesis). Lindenwood University. Retrieved from http://pqdtopen.proquest.com/#viewpdf?dispub=3390645

Bailey, A. L., & Huang, B. H. (2011). Do current English language development/proficiency standards reflect the English needed for success in school? *Language Testing, 28*(3), 343-365

Bauman, J.: Boals, T. & Bunch, M. (2007). English language proficiency assessment in the Nation: Current status and future practice. *University of California, Davis School of Education*. Retrieved from http://education.ucdavis.edu/sites/main/files/ELP_Report.pdf

Beaulieu, C. A. (2009). *A correlation of standardized benchmark testing and teacher-assigned grades in 10th-grade English courses*. (Doctoral Dissertation). Florida Atlantic University. Retrieved from http://education.ucdavis.edu/sites/main/files/ELP_Report.pdf

Brown, C. L. (2005). Equity of literacy-based math performance assessments for English language learners. *Bilingual Research Journal, 29*(2), 337-363

Bunch, M. B. (2011). Testing English language learners under No Child Left Behind. *Language Testing, 28*(3), 323-341

Butler, F. A., & Stevens, R. (2001). Standardized assessment of the content knowledge of English language learners K-12: Current trends and old dilemmas. *Language Testing, 18*(4), 409-427

Castellon-Wellington, M., California Univ., L. E., & Center for Research on Evaluation, S. C. (2000). *The Impact of preference for accommodations: The performance of English language learners on large-scale academic achievement tests*. CSE Technical Report

Collier, V. (1992). *A Synthesis of Studies Examining Long-Term Language Minority Student Data on Academic Achievement*. Bilingual Research Journal, 16, pp.187-212.

Collier, V. (1981). *How Long? A Synthesis of Research on Academic Achievement in a Second Language*. TESOL Quarterly, 23, pp.509-531.

Collier, V. (2009). *Educating English Learners for a Transformed World.* Dual Language Education of New Mexico Fuente Press.

Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.).* Thousand Oaks, CA, US: Sage Publications, Inc.

Cummins, J. (1991). *Language Development and Academic Learning.* Culture and Cognition Clevedon: Multilingual Matters, pp.161-175.

Cummins, J (1981). The Role of Primary Language Development in Promoting Educational Success for Language Minority Students. In *Schooling and Language Minority Students.* Sacramento, CA: California Department of Education, pp.3-49.

De Avila, E. (1997). *Setting expected gains for non and limited English proficient students.* Washington DC: National Clearinghouse for Bilingual Education. NCBE Resource Collection Series 8.

Deysson, S. L. (2013). *Equity for limited English proficient students regarding assessment and effectiveness of testing accommodations: A study of third graders.* (Doctoral dissertation) Retrieved from ProQuest Dissertations and Theses. (Order No. 3550425)

Dixon, J. J. (2011). *Timelines for English language acquisition: a study of the rates of second language acquisition among Hispanic English language learners including exceptionalities*. (Doctoral Dissertation). Oregon State University. Retrieved from http://hdl.handle.net/1957/22034

Dockery, L. L. (2013). *Testing accommodations for ELL students on an achievement test battery*. (Doctoral Dissertation). University of Iowa. Retrieved from http://ir.uiowa.edu/etd/2477

Espin, C., Wallace, T., Campbell, H., Lembke, E. S., Long, J. D., & Ticha, R. (2008). Curriculum-based measurement in writing: Predicting the success of high-school students on state standards tests. *Exceptional Children, 74*(2), 174-193

García, P. (2003). The use of high school exit examinations in four southwestern states. *Bilingual Research Journal, 27*(3), 431-450

Gutiérrez, G., & Vanderwood, M. L. (2013). A Growth Curve Analysis of Literacy Performance Among Second-Grade, Spanish-Speaking, English-Language Learners. *School Psychology Review*, *42*(1), 3-21

Hakuta, L.: Butler, Y.G. & Witt, D. (2000). *How long does it take English language learners to attain proficiency?* Santa Barbara CA; University of California Linguistic Minority Institute Policy Report

Hamilton, M. D. (2013). *Using formative reading assessments and data utilization to improve ELL Spanish speaking students' achievement test scores.* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (Order No. 3554974)

Hardegree, A. (2012). *Standards-Based Assessment and High Stakes Testing: Accuracy of Standards-Based Grading*. (Thesis). Liberty University. Retrieved from http://digitalcommons.liberty.edu/doctoral/594

Hennrich, S. M. (2011). *Exploring the factors that influence adequate yearly progress within elementary school settings*. (Thesis). University of Nevada – Las Vegas. Retrieved from http://digitalscholarship.unlv.edu/thesesdissertations/1011

Herman, J. L., Abedi, J., & California Univ., L. E. (2004). *Issues in assessing English language learners' opportunity to learn mathematics*. CSE Report 633. US Department Of Education.

Horn, C. (2003). High-stakes testing and students: Stopping or perpetuating a cycle of failure? *Theory into Practice, 42*(1), 30-41

Huempfner, L. (2004). Can one size fit all? The imperfect assumptions of parallel achievement tests for bilingual students. *Bilingual Research Journal, 28*(3), 379-399

Izlar, J. L. (2010). Globalizing No Child Left Behind: A viable catalyst in implementing progress for social integration programs for immigrant, English language learner, and limited English proficient students. *Journal of Law & Education, 39*(4), 603-614.

Koo, J., Becker, B. J., & Kim, Y. (2014). Examining differential item functioning trends for English language learners in a reading test: A meta-analytical approach. *Language Testing, 31*(1), 89-109

Koyama, J. P. (2004). Appropriating policy: Constructing positions for English language learners. *Bilingual Research Journal, 28*(3), 401-423,494

Krashen, S.D. (1996). *Under attack: The case against bilingual education.* Culver City CA: Language Education Associates.

Lakin, J. M. (n.d.). *Comparison of test directions for ability tests: impact on young English-language learner and non-ELL students*. (Doctoral Dissertation). University of Iowa. Retrieved from http://ir.uiowa.edu/etd/536

Lee, P. (2012). *Recent high school immigrants' program placement and academic performance in Texas schools: What do we know and what do we need to know*. (Doctoral Dissertation). University of Texas – Austin. Retrieved from http://hdl.handle.net/2152/ETD-UT-2012-05-5475

Lewis, A. C. (2004). *Undoable Goals?* Education Digest: Essential Readings Condensed For Quick Review, 69(7), 68-69

Li, H., & Suen, H. K. (2012). The Effects of Test Accommodations for English Language Learners: A Meta-Analysis. *Applied Measurement in Education*, *25*(4), 327-346

Lile, B. C. (2012). *Perceptions of Kentucky Educators Concerning the Kentucky State Assessment System as an Accurate Reflection of Student Learning*. (Doctoral Dissertation). Western Kentucky University. Retrieved from http://digitalcommons.wku.edu/diss/24

Mahon, E. A. (2006). High-stakes testing and English language learners: Questions of validity. *Bilingual Research Journal*, *30*(2), 479-497

Moinzadeh, A., Dezhara, S., & Rezaei, O. (2012). A contrastive study of L1 and L2 acquisition. *Theory and Practice in Language Studies, 2*(1), 66-70

Miura, Y. (2006). *High-stakes test performance of limited English proficient students in Ohio.* (Doctoral Dissertation). University of Cincinnati. Retrieved from http://rave.ohiolink.edu/etdc/view?acc_num=ucin1163696263

Mojica, T. C. (2013). *An Examination of English Language Proficiency and Achievement Test Outcomes*. (Thesis). Temple University. Retrieved from http://digital.library.temple.edu/u?/p245801coll10,244005

Moon, J. L. (2013). *Comparability of Online and Paper/Pencil Mathematics Performance Measures*. (Thesis). University of Nebraska – Lincoln. Retrieved from http://digitalcommons.unl.edu/cehsdiss/168

Odo, D. M. (2012). The impact of high school exit exams on ESL learners in British Columbia. *English Language Teaching, 5*(9), 1-8

Olmstead, C. (2009). *How long is long enough?: Fourth grade English language learners' scores on a state's test and lengths of stay*. (Doctoral Dissertation). University of Washington. Retrieved from http://hdl.handle.net/1773/7719

Ornelas, L. G. (2002). *Struggling against the current: Experiences of English language learners and high-stakes testing.* (Doctoral dissertation) Retrieved from ProQuest Dissertations and Theses. (Order No. 3067726)

Preciadocorona, S. (2013). *Correlational study between California Standards Test and California English Language Development Test scores among English language learners*. (Masters Thesis). California State University – Northridge. Retrieved from http://hdl.handle.net/10211.2/3189

Ramirez, J.D., Yuen, S.D., & Ramey, D.R. (1991). *Executive summary final report: Longitudinal study of structured English immersion strategy, early-exit and late-exit transitional bilingual education programs for language minority children.* San Mateo CA: Aguirre International.

Ren, H. (2011). *Academic achievement outcomes of former English-language-learners in Texas*. (Masters Thesis). University of Texas – Austin. Retrieved from http://hdl.handle.net/2152/ETD-UT-2011-05-2691

Rojas, R., & Iglesias, A. (2013). The Language Growth of Spanish-Speaking English Language Learners. *Child Development, 84*(2), 630-646

Roseberry-McKibbin, C., & O'Hanlon, L. (2005). Non-biased assessment of English language learners: A tutorial. *Communication Disorders Quarterly*, *26*(3), 178-185

Rubinstein-Ávila, E., & Fink, L. (2013). Scaffolding content and language demands for "reclassified" students. *Voices from the Middle, 20*(4), 28-33

Sánchez, S. J. M. (2011). *ELL students in Texas' high-stakes testing landscape*. (Doctoral Dissertation). University of Texas – Austin. Retrieved from http://hdl.handle.net/2152/13270

Smarter Balanced Assessment Consortium (n.d.). *Smarter Balanced Assessment Consortium*. Retrieved from http://www.smarterbalanced.org/

Salkind, N.J. (2014). *Statistics for people who (they think) hate statistics.* Thousand Oaks CA: SAGE Publications, Inc.

Stone, K. R. (2008). *Making sense of testing: English language learners and statewide assessment*. (Doctoral Dissertation). University of Minnesota. Retrieved from http://purl.umn.edu/91549

Tanner, D. (2012). *Using statistics to make educational decisions.* Thousand Oaks CA: SAGE Publications, Inc.

Thakkar, D. (2013). *The relationship between English language learners' language proficiency and standardized test scores.* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (Order No. 3558238)

Thomas, W.P. & Collier, V. (2002). *A national study of school effectiveness for language minority students' long-term academic achievement.* Washington DC: Center for Research on Education, Diversity & Excellence. Retrieved from http://www.usc.edu/dept/education/CMMR/CollierThomasExReport.pdf

Thomas, W.P. & Collier, V. (1997). *School effectiveness for language minority students*. Washington DC: National Clearinghouse for Bilingual Education.

Ugwu, E. (2013). *Changes in Texas English language learners' academic achievement scores after no child left behind.* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (Order No. 3605009)

Visone, J. D. (2009). The Validity of Standardized Testing in Science. *American Secondary Education*, *38*(1), 46-61

Willner, L., Rivera, C., & Acosta, B. D. (2009). Ensuring Accommodations Used in Content Assessments Are Responsive to English-Language Learners. *Reading Teacher*, *62*(8), 696-698

Wolf, M., Yuan, W., Blood, I., & Huang, B. H. (2014). Investigating the language demands in the Common Core State Standards for English Language Learners: A comparison study of standards. *Middle Grades Research Journal*, *9*(1), 35-52

Won, M. (2008). *The effects of vocabulary instruction on English language learners*. (Doctoral Dissertation). Texas Tech University. Retrieved from http://hdl.handle.net/2346/14144

Wu, R. T., Le, V. T., & Lu, J. J. (2014). A contrastive analysis of first and second language learning. *Theory and Practice in Language Studies*, *4*(3), 458-465

Yun, J. (2010). *The Effects of Hypertext Glosses on L2 Vocabulary Acquisition: A Meta-Analysis*. (Thesis). University of Kansas. Retrieved from http://hdl.handle.net/1808/6459

Appendix A
Permission to Use Content from OSPI Website: Lisa Ireland

From: **Lisa Ireland** <Lisa.Ireland@k12.wa.us>
Date: Fri, Mar 4, 2016 at 1:36 PM
Subject: Fw: Requesting Formal Permission to Use Content from WA OSPI website
To: "arturogonzalez@nnu.edu" <arturogonzalez@nnu.edu>
Cc: Deb Came <Deb.Came@k12.wa.us>, Sheri Dunster <Sheri.Dunster@k12.wa.us>

Mr. Gonzalez -
Thank you for contacting us regarding the use of data posted on the Office of Superintendent of Public Instruction website.

Data found on the k12.wa.us website, including download files, is public data. You may use this data in your research and presentations.

Please contact us if you have any questions or need further information.

Sincerely,

Lisa A Ireland
Data Analyst
Student Information
Office of Superintendent of Public Instruction
[redacted] | tty [redacted]

From: Arturo Gonzalez [mailto:arturogonzalez@nnu.edu]

Sent: Thursday, March 03, 2016 11:36 AM
To: Lisa Ireland
Subject: Requesting Formal Permission to Use Content from WA OSPI website

Dear Ms. Ireland,

This is a written follow up to our conversation regarding a request for permission to use content from the Washington State Office of the Superintendent of Public Instruction public website.

I am currently enrolled at Northwest Nazarene University in Nampa, Idaho and am pursuing a doctorate degree. My research is focused upon state standardized testing and English Language Learners (ELL).

I would like to include content applicable to my research. Examples include references and visuals/tables associated with Migrant Bilingual programs and WELPA testing levels as well as information regarding Measurement of Student Progress (MSP) and Smarter Balance Assessment (SBA) scale scores for ELA and math. There may be additional areas on the public website that I may reference as my research topic continues to develop.

Although you shared that content on the public website is available for use, a written response would be most appreciated for documentation purposes.

Sincerely,

Arturo Gonzalez
NNU Student

Appendix B
Permission to Use Visuals: Dr. James Cummins

From: **James Cummins** <james.cummins@utoronto.ca>
Date: Wed, Dec 23, 2015 at 9:07 AM
Subject: RE: Dissertation Visuals Use Request
To: Arturo Gonzalez <arturogonzalez@nnu.edu>

Dear Arturo:

It's fine to use the visuals. I'm glad you find the ideas useful.

I'll attach a couple of recent articles on related topics.

Best wishes in wrapping up your dissertation.

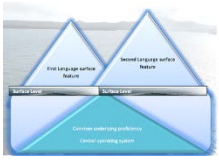
Jim Cummins

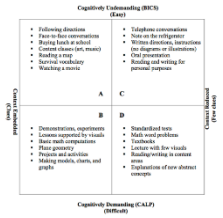
From: Arturo Gonzalez [arturogonzalez@nnu.edu]
Sent: Tuesday, December 22, 2015 12:35 PM
To: James Cummins
Subject: Dissertation Visuals Use Request

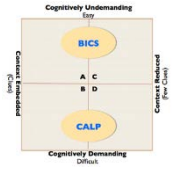
Hello Dr. Cummins,
My name is Arturo Gonzalez and I am a graduate student at Northwest Nazarene University in Idaho. I am currently in the process of writing a dissertation for the Degree of Doctor of Education titled "An Examination of the Validity of State Standardized Testing of English Language Learners."

I am requesting permission to use four visuals from your work as part of my literature review and frameworks: Cummins' Dual Iceberg on the Common Underlying Proficiency , Cummins' Dual Iceberg Model, Cummins' Quadrant Matrix for Evaluating Language Demands on Content Activities, and Cummins' Quadrant Matrix of BICS and CALP.

Below are visual copies for your reference and, I hope approval. I am also more than happy to accept substitutions and/or additional content that you may see as relevant to this topic.







I would be more than happy to send you a completed electronic copy of my study upon it's completion. I am anticipating a final defense this May.

Sincerely,

Arturo Gonzalez
arturogonzalez@nnu.edu
[redacted]

Appendix C
Permission to Use Visuals: Dr. Stephen Krashen

From: **Stephen Krashen** <skrashen@yahoo.com>
Date: Tue, Dec 22, 2015 at 11:14 AM
Subject: citation/referencing
To: "arturogonzalez@nnu.edu" <arturogonzalez@nnu.edu>

All of my published papers and books, anything on my website (www.sdkrashen), and anything I post on facebook or twitter are public domain. You are free to reference or cite any of these publications without asking my permission.

Sent on Dec 22, 2015 at 12:47:53 PM by Arturo Gonzalez <arturogonzalez@nnu.edu>

I am a graduate student at Northwest Nazarene University. I am currently working on a Doctor of Education dissertation and am attempting to contact Dr. Krashen for permission to reference his research and use figures from his work. My focus is on standardized testing of ELL students.

I am requesting contact information for Dr. Krashen. Any assistance would be greatly appreciated.

Thank you,

Arturo Gonzalez
[redacted]

Appendix D
Permission to Use Visuals: Dr. Virginia Collier and Dr. Wayne Thomas

On Thu, Mar 10, 2016 at 1:16 PM, Melanie Vigil <melanie@dlenm.org> wrote:
Hi Arturo,

As Dr. Collier mentioned in her email to you, you do have permission to use the figures in your dissertation.

The figures can be found here: http://www.dlenm.org/book-figures

Let me know if you have any questions or need help with anything else.

Thank you,
Melanie
--
Melanie Vigil
Business Manager
Dual Language Education of New Mexico
Ph: [redacted]
Fax: [redacted]
www.dlenm.org

On Thu, Mar 10, 2016 at 1:53 PM, Arturo Gonzalez <arturogonzalez@nnu.edu> wrote:
Hi Melanie,
Here is the email that I referenced during our conversation.
Thank you for your help.
Arturo
---------- Forwarded message ----------
From: **Virginia Collier** <vcollier@gmu.edu>
Date: Thu, Dec 31, 2015 at 1:41 PM
Subject: Re: Permission to Reference Visuals in Dissertation
To: Arturo Gonzalez <arturogonzalez@nnu.edu>
Cc: "Wayne P. Thomas" <wthomas@gmu.edu>

Hi Arturo,
Congratulations on your doctoral studies. Not quite sure why we didn't receive your request by email a year ago, but we are glad to give you permission to use our research figure in your dissertation. However, please do not use the form of the research figure that you have created below. That does not match what we found in our research findings, and we want to make sure that you use the correct version that we have published in several of our publications. The latest version of our research figure is published in our two books, *Educating English Learners for a Transformed World* and *Dual Language Education for a Transformed World*. In those two books we also have quite a lengthy discussion of the topic of your dissertation as well as a lengthy discussion of the research figure and how to interpret it. You can purchase the books from our publisher -- www.dlenm.org -- and once you have a copy, our publisher will tell you

how you can download all the figures in the book.

Best wishes in completing your doctoral studies,
Virginia P. Collier, Ph.D.
Professor Emerita of Bilingual/Multicultural/ESL Education
George Mason University
Professional email: vcollier@gmu.edu

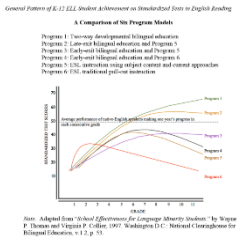
Website: www.thomasandcollier.com

On 12/22/2015 1:49 PM, Arturo Gonzalez wrote:
Dear Dr. Virginia Collier and Dr. Wayne Thomas:

My name is Arturo Gonzalez and I am a graduate student at Northwest Nazarene University in Idaho. I am currently in the process of writing a dissertation for the Degree of Doctor of Education titled "An Examination of the Validity of State Standardized Testing of English Language Learners."

I contacted you via email approximately a year ago but did not receive a response. I am requesting permission to use a visual from your work as part of chapters 1-3; General Pattern of K-12 ELL Student Achievement on Standardized Tests in English Reading/A comparison of Six Program Models.

Below is a visual copy for your reference and, I hope approval. I am also more than happy to accept substitutions and/or additional content that you may see as relevant to this topic.


General Pattern of K-12 ELL Student Achievement on Standardized Tests in English Reading

A Comparison of Six Program Models

Program 1: Two-way developmental bilingual education
Program 2: Late-exit bilingual education and Program 5
Program 3: Early-exit bilingual education and Program 5
Program 4: Early-exit bilingual education and Program 6
Program 5: ESL instruction using subject content and content approaches
Program 6: ESL traditional pull-out instruction

Note. Adapted from "School Effectiveness for Language Minority Students." by Wayne P. Thomas and Virginia P. Collier, 1997. Washington D.C.: National Clearinghouse for Bilingual Education, v. 1.2, p. 53.

I would be more than happy to send you a completed electronic copy of my study upon it's completion. I am anticipating a final defense this May.

Sincerely,

Arturo Gonzalez
arturogonzalez@nnu.edu
[redacted]

Appendix E
Human Research Review Committee Approval

NORTHWEST NAZARENE
UNIVERSITY

April 19, 2015

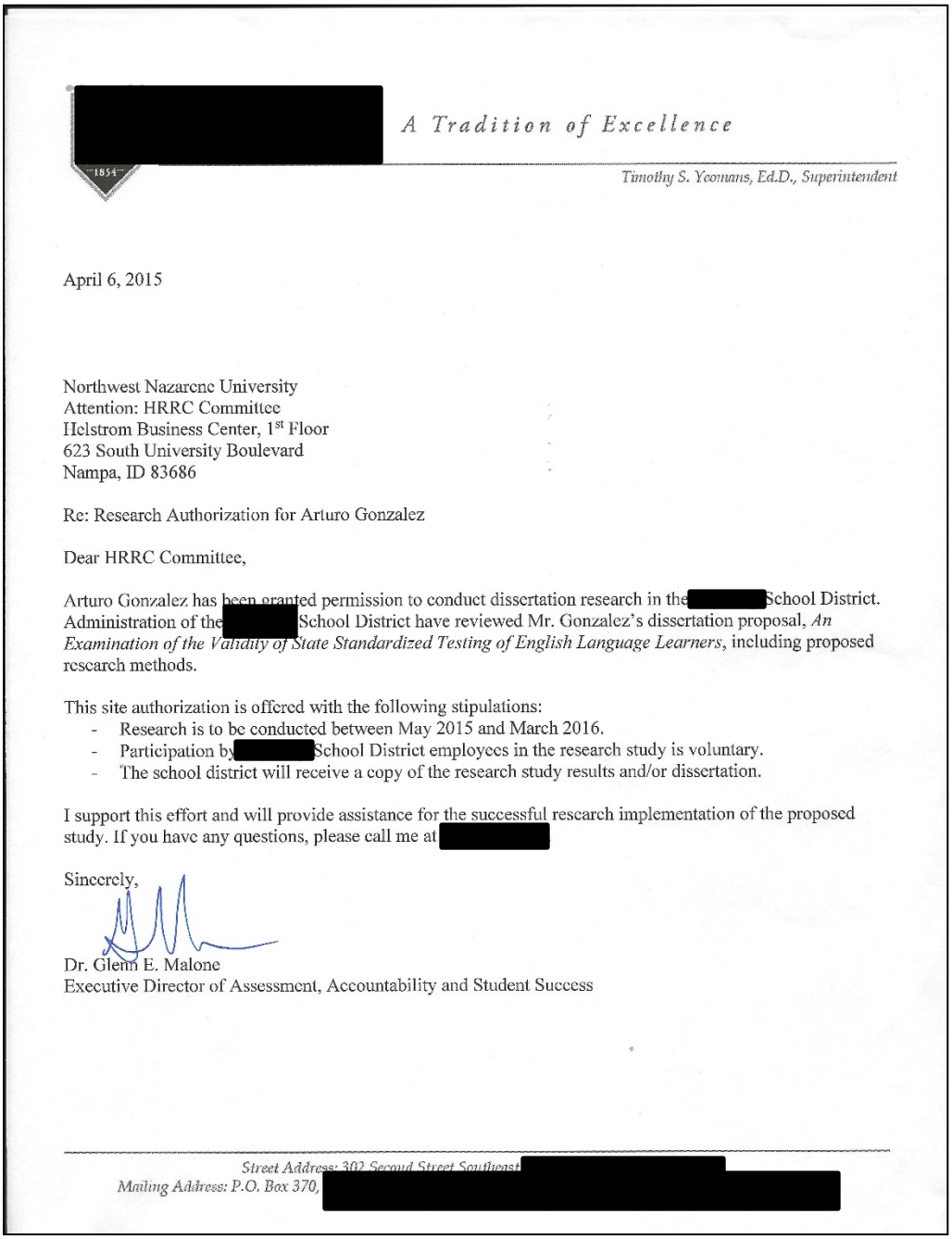
Dear Arturo Gonzales,

The HRRC has reviewed your application to conduct research. Your proposal, "An Examination of the Validity of State Standardized Testing of English Language Learners" is exempt as you are using ex post facto data for this study. Your IRB proposal for the participating school district has also been reviewed, and NNU has cleared you to conduct research.

If you have any questions, please do not hesitate to contact me.

Joe Bankard, PHD,
Chair of NNU's HRRC
jabankard@nnu.edu
208 467-8369

Appendix F
District Approval Letter



[redacted] 1854

A Tradition of Excellence

Timothy S. Yeomans, Ed.D., Superintendent

April 6, 2015

Northwest Nazarene University
Attention: HRRC Committee
Helstrom Business Center, 1st Floor
623 South University Boulevard
Nampa, ID 83686

Re: Research Authorization for Arturo Gonzalez

Dear HRRC Committee,

Arturo Gonzalez has been granted permission to conduct dissertation research in the [redacted] School District. Administration of the [redacted] School District have reviewed Mr. Gonzalez's dissertation proposal, *An Examination of the Validity of State Standardized Testing of English Language Learners*, including proposed research methods.

This site authorization is offered with the following stipulations:

- Research is to be conducted between May 2015 and March 2016.
- Participation by [redacted] School District employees in the research study is voluntary.
- The school district will receive a copy of the research study results and/or dissertation.

I support this effort and will provide assistance for the successful research implementation of the proposed study. If you have any questions, please call me at [redacted]

Sincerely,

Dr. Glenn E. Malone
Executive Director of Assessment, Accountability and Student Success

Street Address: 302 Second Street Southeast [redacted]
Mailing Address: P.O. Box 370, [redacted]

Appendix G
Spearman's rho Tables 1-36

Table A1

Spearman's rho Correlations of Grade 3 Measurement of Student Progress (MSP) Reading and Washington English Language Proficiency Assessment (WELPA) for 2012

			WELPAlevel	MSPread2012
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.559**
		Sig. (2-tailed)	.	.000
		N	55	55
	MSPread2012	Correlation Coefficient	.559**	1.000
		Sig. (2-tailed)	.000	.
		N	55	55

**. Correlation is significant at the 0.01 level (2-tailed).

Table A2

Spearman's rho Correlations of Grade 3 Measurement of Student Progress (MSP) Reading and Washington English Language Proficiency Assessment (WELPA) for 2013

			WELPAlevel	MSPread2013
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.539**
		Sig. (2-tailed)	.	.000
		N	74	74
	MSPread2013	Correlation Coefficient	.539**	1.000
		Sig. (2-tailed)	.000	.
		N	74	74

**. Correlation is significant at the 0.01 level (2-tailed).

Table A3

Spearman's rho Correlations of Grade 3 Smarter Balance Assessment (SBA) English Language Arts and Washington English Language Proficiency Assessment (WELPA) for 2015

			WELPAlevel	SBAela2015
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.635**
		Sig. (2-tailed)	.	.000
		N	85	85
	SBAela2015	Correlation Coefficient	.635**	1.000
		Sig. (2-tailed)	.000	.
		N	85	85

**. Correlation is significant at the 0.01 level (2-tailed).

Table A4

Spearman's rho Correlations of Grade 3 Measurement of Student Progress (MSP) Math and Washington English Language Proficiency Assessment (WELPA) for 2012

			WELPAlevel	MSPmath2012
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.457**
		Sig. (2-tailed)	.	.000
		N	57	57
	MSPmath2012	Correlation Coefficient	.457**	1.000
		Sig. (2-tailed)	.000	.
		N	57	57

**. Correlation is significant at the 0.01 level (2-tailed).

Table A5

Spearman's rho Correlations of Grade 3 Measurement of Student Progress (MSP) Math and Washington English Language Proficiency Assessment (WELPA) for 2013

			WELPAlevel	MSPmath2013
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.379**
		Sig. (2-tailed)	.	.001
		N	75	75
	MSPmath2013	Correlation Coefficient	.379**	1.000
		Sig. (2-tailed)	.001	.
		N	75	75

**. Correlation is significant at the 0.01 level (2-tailed).

Table A6

Spearman's rho Correlations of Grade 3 Smarter Balance Assessment (SBA) Math and Washington English Language Proficiency Assessment (WELPA) for 2015

			WELPAlevel	SBAmath2015
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.530**
		Sig. (2-tailed)	.	.000
		N	87	87
	SBAmath2015	Correlation Coefficient	.530**	1.000
		Sig. (2-tailed)	.000	.
		N	87	87

**. Correlation is significant at the 0.01 level (2-tailed).

Table A7

Spearman's rho Correlations of Grade 4 Measurement of Student Progress (MSP) Reading and Washington English Language Proficiency Assessment (WELPA) for 2012

			WELPAlevel	MSPread2012
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.301*
		Sig. (2-tailed)	.	.023
		N	57	57
	MSPread2012	Correlation Coefficient	.301*	1.000
		Sig. (2-tailed)	.023	.
		N	57	57

*. Correlation is significant at the 0.05 level (2-tailed).

Table A8

Spearman's rho Correlations of Grade 4 Measurement of Student Progress (MSP) Reading and Washington English Language Proficiency Assessment (WELPA) for 2013

			WELPAlevel	MSPread2013
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.521**
		Sig. (2-tailed)	.	.000
		N	50	50
	MSPread2013	Correlation Coefficient	.521**	1.000
		Sig. (2-tailed)	.000	.
		N	50	50

**. Correlation is significant at the 0.01 level (2-tailed).

Table A9

Spearman's rho Correlations of Grade 4 Smarter Balance Assessment (SBA) English Language Arts and Washington English Language Proficiency Assessment (WELPA) for 2015

			WELPAlevel	SBAela2015
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.426**
		Sig. (2-tailed)	.	.000
		N	68	68
	SBAela2015	Correlation Coefficient	.426**	1.000
		Sig. (2-tailed)	.000	.
		N	68	68

**. Correlation is significant at the 0.01 level (2-tailed).

Table A10

Spearman's rho Correlations of Grade 4 Measurement of Student Progress (MSP) Math and Washington English Language Proficiency Assessment (WELPA) for 2012

			WELPAlevel	MSPmath2012
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.313*
		Sig. (2-tailed)	.	.017
		N	58	58
	MSPmath2012	Correlation Coefficient	.313*	1.000
		Sig. (2-tailed)	.017	.
		N	58	58

*. Correlation is significant at the 0.05 level (2-tailed).

Table A11

Spearman's rho Correlations of Grade 4 Measurement of Student Progress (MSP) Math and Washington English Language Proficiency Assessment (WELPA) for 2013

			WELPAlevel	MSPmath2013
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.142
		Sig. (2-tailed)	.	.295
		N	56	56
	MSPmath2013	Correlation Coefficient	.142	1.000
		Sig. (2-tailed)	.295	.
		N	56	56

Table A12

Spearman's rho Correlations of Grade 4 Smarter Balance Assessment (SBA) Math and Washington English Language Proficiency Assessment (WELPA) for 2015

			WELPAlevel	SBAmath2015
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.490**
		Sig. (2-tailed)	.	.000
		N	68	68
	SBAmath2015	Correlation Coefficient	.490**	1.000
		Sig. (2-tailed)	.000	.
		N	68	68

**. Correlation is significant at the 0.01 level (2-tailed).

Table A13

Spearman's rho Correlations of Grade 5 Measurement of Student Progress (MSP) Reading and Washington English Language Proficiency Assessment (WELPA) for 2012

			WELPAlevel	MSPread2012
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.540**
		Sig. (2-tailed)	.	.000
		N	53	53
	MSPread2012	Correlation Coefficient	.540**	1.000
		Sig. (2-tailed)	.000	.
		N	53	53

**. Correlation is significant at the 0.01 level (2-tailed).

Table A14

Spearman's rho Correlations of Grade 5 Measurement of Student Progress (MSP) Reading and Washington English Language Proficiency Assessment (WELPA) for 2013

			WELPAlevel	MSPread2013
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.544**
		Sig. (2-tailed)	.	.000
		N	59	59
	MSPread2013	Correlation Coefficient	.544**	1.000
		Sig. (2-tailed)	.000	.
		N	59	59

**. Correlation is significant at the 0.01 level (2-tailed).

Table A15

Spearman's rho Correlations of Grade 5 Smarter Balance Assessment (SBA) English Language Arts and Washington English Language Proficiency Assessment (WELPA) for 2015

			WELPAlevel	SBAela2015
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.564**
		Sig. (2-tailed)	.	.000
		N	64	64
	SBAela2015	Correlation Coefficient	.564**	1.000
		Sig. (2-tailed)	.000	.
		N	64	64

**. Correlation is significant at the 0.01 level (2-tailed).

Table A16

Spearman's rho Correlations of Grade 5 Measurement of Student Progress (MSP) Math and Washington English Language Proficiency Assessment (WELPA) for 2012

			WELPAlevel	MSPmath2012
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.444**
		Sig. (2-tailed)	.	.001
		N	56	56
	MSPmath2012	Correlation Coefficient	.444**	1.000
		Sig. (2-tailed)	.001	.
		N	56	56

**. Correlation is significant at the 0.01 level (2-tailed).

Table A17

Spearman's rho Correlations of Grade 5 Measurement of Student Progress (MSP) Math and Washington English Language Proficiency Assessment (WELPA) for 2013

			WELPAlevel	MSPmath2013
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.412**
		Sig. (2-tailed)	.	.001
		N	61	61
	MSPmath2013	Correlation Coefficient	.412**	1.000
		Sig. (2-tailed)	.001	.
		N	61	61

**. Correlation is significant at the 0.01 level (2-tailed).

Table A18

Spearman's rho Correlations of Grade 5 Smarter Balance Assessment (SBA) Math and Washington English Language Proficiency Assessment (WELPA) for 2015

			WELPAlevel	SBAmath2015
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.682**
		Sig. (2-tailed)	.	.000
		N	67	67
	SBAmath2015	Correlation Coefficient	.682**	1.000
		Sig. (2-tailed)	.000	.
		N	67	67

**. Correlation is significant at the 0.01 level (2-tailed).

Table A19

Spearman's rho Correlations of Grade 6 Measurement of Student Progress (MSP) Reading and Washington English Language Proficiency Assessment (WELPA) for 2012

			WELPAlevel	MSPread2012
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.507**
		Sig. (2-tailed)	.	.001
		N	39	39
	MSPread2012	Correlation Coefficient	.507**	1.000
		Sig. (2-tailed)	.001	.
		N	39	39

**. Correlation is significant at the 0.01 level (2-tailed).

Table A20

Spearman's rho Correlations of Grade 6 Measurement of Student Progress (MSP) Reading and Washington English Language Proficiency Assessment (WELPA) for 2013

			WELPAlevel	MSPread2013
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.465**
		Sig. (2-tailed)	.	.003
		N	39	39
	MSPread2013	Correlation Coefficient	.465**	1.000
		Sig. (2-tailed)	.003	.
		N	39	39

**. Correlation is significant at the 0.01 level (2-tailed).

Table A21

Spearman's rho Correlations of Grade 6 Smarter Balance Assessment (SBA) English Language Arts and Washington English Language Proficiency Assessment (WELPA) for 2015

			WELPAlevel	SBAela2015
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.674**
		Sig. (2-tailed)	.	.000
		N	59	59
	SBAela2015	Correlation Coefficient	.674**	1.000
		Sig. (2-tailed)	.000	.
		N	59	59

**. Correlation is significant at the 0.01 level (2-tailed).

Table A22

Spearman's rho Correlations of Grade 6 Measurement of Student Progress (MSP) Math and Washington English Language Proficiency Assessment (WELPA) for 2012

			WELPAlevel	MSPmath2012
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.304
		Sig. (2-tailed)	.	.057
		N	40	40
	MSPmath2012	Correlation Coefficient	.304	1.000
		Sig. (2-tailed)	.057	.
		N	40	40

Table A23

Spearman's rho Correlations of Grade 6 Measurement of Student Progress (MSP) Math and Washington English Language Proficiency Assessment (WELPA) for 2013

			WELPAlevel	MSPmath2013
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.295
		Sig. (2-tailed)	.	.058
		N	42	42
	MSPmath2013	Correlation Coefficient	.295	1.000
		Sig. (2-tailed)	.058	.
		N	42	42

Table A24

Spearman's rho Correlations of Grade 6 Smarter Balance Assessment (SBA) Math and Washington English Language Proficiency Assessment (WELPA) for 2015

			WELPAlevel	SBAmath2015
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.500**
		Sig. (2-tailed)	.	.000
		N	60	60
	SBAmath2015	Correlation Coefficient	.500**	1.000
		Sig. (2-tailed)	.000	.
		N	60	60

Table A25

Spearman's rho Correlations of Grade 7 Measurement of Student Progress (MSP) Reading and Washington English Language Proficiency Assessment (WELPA) for 2012

			WELPAlevel	MSPread2012
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.382*
		Sig. (2-tailed)	.	.045
		N	28	28
	MSPread2012	Correlation Coefficient	.382*	1.000
		Sig. (2-tailed)	.045	.
		N	28	28

Table A26

Spearman's rho Correlations of Grade 7 Measurement of Student Progress (MSP) Reading and Washington English Language Proficiency Assessment (WELPA) for 2013

			WELPAlevel	MSPread2013
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.589**
		Sig. (2-tailed)	.	.000
		N	43	43
	MSPread2013	Correlation Coefficient	.589**	1.000
		Sig. (2-tailed)	.000	.
		N	43	43

Table A27

Spearman's rho Correlations of Grade 7 Smarter Balance Assessment (SBA) English Language Arts and Washington English Language Proficiency Assessment (WELPA) for 2015

			WELPAlevel	SBAela2015
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.581**
		Sig. (2-tailed)	.	.000
		N	53	53
	SBAela2015	Correlation Coefficient	.581**	1.000
		Sig. (2-tailed)	.000	.
		N	53	53

**. Correlation is significant at the 0.01 level (2-tailed).

Table A28

Spearman's rho Correlations of Grade 7 Measurement of Student Progress (MSP) Math and Washington English Language Proficiency Assessment (WELPA) for 2012

			WELPAlevel	MSPmath2012
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.123
		Sig. (2-tailed)	.	.525
		N	29	29
	MSPmath2012	Correlation Coefficient	.123	1.000
		Sig. (2-tailed)	.525	.
		N	29	29

Table A29

Spearman's rho Correlations of Grade 7 Measurement of Student Progress (MSP) Math and Washington English Language Proficiency Assessment (WELPA) for 2013

			WELPAlevel	MSPmath2013
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.260
		Sig. (2-tailed)	.	.085
		N	45	45
	MSPmath2013	Correlation Coefficient	.260	1.000
		Sig. (2-tailed)	.085	.
		N	45	45

Table A30

Spearman's rho Correlations of Grade 7 Smarter Balance Assessment (SBA) Math and Washington English Language Proficiency Assessment (WELPA) for 2015

			WELPAlevel	SBAmath2015
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.395**
		Sig. (2-tailed)	.	.003
		N	56	56
	SBAmath2015	Correlation Coefficient	.395**	1.000
		Sig. (2-tailed)	.003	.
		N	56	56

Table A31

Spearman's rho Correlations of Grade 8 Measurement of Student Progress (MSP) Reading and Washington English Language Proficiency Assessment (WELPA) for 2012

			WELPAlevel	MSPread2012
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.289
		Sig. (2-tailed)	.	.171
		N	24	24
	MSPread2012	Correlation Coefficient	.289	1.000
		Sig. (2-tailed)	.171	.
		N	24	24

Table A32

Spearman's rho Correlations of Grade 8 Measurement of Student Progress (MSP) Reading and Washington English Language Proficiency Assessment (WELPA) for 2013

			WELPAlevel	MSPread2013
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.611**
		Sig. (2-tailed)	.	.001
		N	25	25
	MSPread2013	Correlation Coefficient	.611**	1.000
		Sig. (2-tailed)	.001	.
		N	25	25

**. Correlation is significant at the 0.01 level (2-tailed).

Table A33

Spearman's rho Correlations of Grade 8 Smarter Balance Assessment (MSP) Reading and Washington English Language Proficiency Assessment (WELPA) for 2015

			WELPAlevel	SBAela2015
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.522**
		Sig. (2-tailed)	.	.001
		N	38	38
	SBAela2015	Correlation Coefficient	.522**	1.000
		Sig. (2-tailed)	.001	.
		N	38	38

**. Correlation is significant at the 0.01 level (2-tailed).

Table A34

Spearman's rho Correlations of Grade 8 Measurement of Student Progress (MSP) Math and Washington English Language Proficiency Assessment (WELPA) for 2012

			WELPAlevel	MSPmath2012
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.087
		Sig. (2-tailed)	.	.687
		N	24	24
	MSPmath2012	Correlation Coefficient	.087	1.000
		Sig. (2-tailed)	.687	.
		N	24	24

Table A35

Spearman's rho Correlations of Grade 8 Measurement of Student Progress (MSP) Math and Washington English Language Proficiency Assessment (WELPA) for 2013

			WELPAlevel	MSPmath2013
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.399*
		Sig. (2-tailed)	.	.044
		N	26	26
	MSPmath2013	Correlation Coefficient	.399*	1.000
		Sig. (2-tailed)	.044	.
		N	26	26

*. Correlation is significant at the 0.05 level (2-tailed).

Table A36

Spearman's rho Correlations of Grade 8 Smarter Balance Assessment (SBA) Math and Washington English Language Proficiency Assessment (WELPA) for 2015

			WELPAlevel	SBAmath2015
Spearman's rho	WELPAlevel	Correlation Coefficient	1.000	.260
		Sig. (2-tailed)	.	.105
		N	40	40
	SBAmath2015	Correlation Coefficient	.260	1.000
		Sig. (2-tailed)	.105	.
		N	40	40