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CULTURALLY AND LINGUISTICALLY DIVERSE STUDENTS' STANDARDIZED
ENGLISH LITERACY ACHIEVEMENT AND LANGUAGE REDESIGNATION
STATUS: A MULTIPLE REGRESSION ANALYSIS

A Dissertation

Presented to

the Faculty of the Morgridge College of Education

University of Denver

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

by

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November 2015

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Title: CULTURALLY AND LINGUISTICALLY DIVERSE STUDENTS' STANDARDIZED ENGLISH LITERACY ACHIEVEMENT AND LANGUAGE REDESIGNATION STATUS: A MULTIPLE REGRESSION ANALYSIS

Advisor: Dr. Kristina Hesbol

Degree Date: November 2015

Abstract

The initial *No Child Left Behind* (NCLB) legislation stated that by 2014 *all* students would reach proficiency in all subjects. However, this has not been the case as NCLB has had mixed effects for culturally and linguistically diverse students (CLDs) (Hopkins, Thompson, Linquanti, Hakuta, & August, 2013). Language redesignation policies, often termed reclassification, can be considered a significant contributor as the variation in policies and practices alone has led to significantly different achievement for CLDs across the country (Hill, Weston, & Hayes, 2014; Mahoney & MacSwan, 2005) and has created an expansive achievement gap with their non-CLD White counterparts (Reardon, 2011; U.S. Department of Education, 2012). This dissertation utilizes asset-based and systems theories to refute current language redesignation policies employed for CLDs. Additionally, Cummins' (1979, 1981) developmental interdependence hypothesis serves as a theoretical framework. Multiple and hierarchical regression analyses are employed to predict CLDs' longitudinal literacy achievement in English based on language redesignation status (exited or still receiving language services), prior English language proficiency (ELP) data, native language literacy proficiency at kindergarten exit, and prior standardized English literacy achievement. By explaining the variance associated with the most significant predictors, this empirical model could provide

policymakers with an evidence-based approach to the language redesignation policy framework. Specifically, those variables that are the most significant in predicting long-term achievement should be included, while new variables, such as native language literacy proficiency are identified for potential inclusion. The substantive implications of these models will provide policymakers with an objective, evidence-based process for language redesignation of CLDs into mainstream English classrooms based on longitudinal achievement data and statistical analyses.

Acknowledgements

There are numerous people who are responsible for the completion of this dissertation. I will begin with my family: Pete, Lynn, Erin, and Maggie, your encouragement, support, and kindness will never be taken for granted. To Kelsey, you have been instrumental throughout this process, teaching me to persevere and providing the perfect distractions. To my cohort of doctoral students at the University of Denver, it has been a great pleasure meeting each of you and sharing in your journey to right the educational wrongs in our society. To my friends who acknowledge and understand the difficult process of embarking on and fulfilling the requirements of a doctoral program, thank you for the happy hour talks, mindless football watching, and understanding when I cannot make it up to the mountain for the weekend. To the faculty in the ELPS Department, specifically Dr. Hesbol, Dr. Miller-Brown, and Dr. Korach. With this dissertation and its potential for impact, I hope to be a reflection of your commitment to the department's mission and values. To Dr. Seidel, thank you for being my outside committee member; your guidance on all things statistics has proven invaluable. Thank you to Dr. Nicotera, I greatly value your insight and feedback on this process. Special thanks to Dr. Gildersleeve for filling in at the last minute and providing exceptionally challenging and provocative questions. Lastly, I'd like to thank my kindergarten students; the systematic barriers and marginalization you faced on a daily basis and how you still came to learn to read in two languages, count to 100, and write bilingual stories is truly inspirational. You have motivated me to get into the field of education policy and create a strong voice for change; this is for you and your futures.

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Chapter One

Introduction

According to the *No Child Left Behind Act of 2001*, all students in the United States were to reach proficiency in all subjects by the year 2014. While this ambitious goal was not met, a significantly large achievement gap still exists for the vulnerable population of culturally and linguistically diverse students (CLDs) when compared to their native-English speaking peers. For this dissertation, CLDs will be utilized instead of the oft-used English learner or EL. The rationale for this decision is that the term English learner has been considered a social construction and one of which is often generally associated with deficit-based thinking (Ruiz, 1984; Scanlon & López, 2012).

The most recent National Assessment of Educational Progress (NAEP) data demonstrates that in 2013, the reading achievement gap between these groups was 38 points in fourth grade and 45 points in eighth grade. This pattern existed in math as well with gaps of 25 and 41 points for fourth and eighth graders, respectively. The reading achievement gap has not measurably changed since 1998 and the math achievement gap since 1996 (Kena, et al., 2015). This pervasive achievement gap presents in combination with a rapidly-growing CLD population. Native Spanish-speaking Hispanic/Latinos

comprise 80% of all CLDs in the United States (Goldenberg, 2008) and are the focus of this dissertation. This group comprises 16.7% of public school enrollment in large cities (U.S. Department of Education, 2014) and is expected to grow to 25% of the U.S. population by 2028 (Goldenberg, 2008). California has already seen its Hispanic/Latino population exceed its White population by about 70,000 (Panzar, 2015). It is important to note the complexity of the interacting demographic, economic and structural variables that may affect CLD students (Abedi, 2002; Espinosa, 2010). A select sample of these variables is presented in Table 1. While these variables do not present in isolation, nor affect all CLDs, they must be acknowledged when conducting research on this subgroup and especially when crafting education policy. It is assumed that not all CLD students are afflicted by all or any of the issues presented in Table 1, its presentation is to merely cover the variety of problems that could add to the difficulties in acquiring a second language and having success in our country's schools.

Systematic marginalization in the form of structuralized inequities at the school- and district-level negatively impact culturally and linguistically diverse students as well. The education of CLDs has become a stratifying factor with many political and economic undertones (Verdugo & Flores, 2007), and in some cases can even affect teachers' perceptions and treatment of CLDs (Gándara, Maxwell-Jolly, & Driscoll, 2005). The population of ELs has been categorized as marginalized in educational contexts (Gándara & Contreras, 2009), and in need of specific attention from educational researchers, especially in light of their growing numbers. Inconsistencies in policy have produced varied academic outcomes for CLDs and a substantial achievement gap with their non-

ELL White peers (Reardon, 2011; Simon, et al., 2011). Additionally, policies that are driven by deficit-based thinking are to blame.

The paucity of encouraging results for CLDs is not for lack of government intervention (Bunch, 2011), and can be attributed in part to education policy. Subjected to federal, state, and local policies, CLDs have become limited in their fundamental right to develop their native and second language skills because English language development (ELD) policies do not consistently adhere to empirical research on second language acquisition. The most current reauthorization of the Elementary and Secondary Education Act, *No Child Left Behind* (NCLB, 2002), has increased accountability and created a spotlight for national attention, but has produced mixed outcomes for CLDs (Abedi, 2008; Gándara & Rumberger, 2008; Hopkins, Thompson, Linquanti, Hakuta, & August, 2013).

Existing legislation in Arizona (Proposition 203), California (Proposition 227) and Massachusetts (Question 2) has produced incredibly ineffective and inequitable outcomes (Lillie, 2015). However, in the 2015 legislative sessions, pending legislation, in the form of 2016 ballot initiatives exist in these states that could reverse these deficit-based policies. Other positive examples of state legislation, some pending, some enacted, include addressing the requirement of a research-based component to language programming for CLDs (Connecticut Senate Bill 1502a and Massachusetts House Bill 498-see Appendix C), establishing dual-language immersion pilot programming and funding (Indiana Senate Bill 267), and improved accountability systems (Iowa House Bill 658). At the national level, current rewrites to the Elementary and Secondary Education

Act (ESEA) look to improve upon the shortcomings of NCLB by providing more control at the state level regarding accountability, assessment, Title I and Title III funding, standards, and teacher evaluations, all of which could improve school effectiveness and subsequent outcomes for CLDs. Amidst the potential areas for reform, language redesignation policies have been identified a specific lever for policy intervention.

Language redesignation policies for ELs are a specific set of ELD policies with important ramifications (Hill, Weston, & Hayes, 2014). Language redesignation, often termed reclassification, refers to moving an EL student who has reached the proffered standards on measures of English language proficiency and, in a handful of states, standardized achievement assessments, into mainstream English classrooms while still receiving monitoring services. The fundamental goal of redesignating a CLD is for them to thrive without language supports and learn content in an English-only classroom context (Francis & Rivera, 2007). Redesignation marks a significant time in a CLD's educational trajectory as language supports and monitoring are systematically withdrawn over the course of two years, at which point they are referred to as fully-exited. Premature redesignation can lead to long-term underachievement for CLDs as standards and criteria become more rigorous in later grades (Linguanti, 2001). On the other hand, students who repeatedly do not meet language redesignation standards (long-term CLDs) find themselves isolated and subjected to low, self-fulfilling expectations (Valdes, 1998; 2001). Creators of language redesignation policy must acknowledge this intricate balance and move beyond the dichotomy currently employed (Linguanti, 2001). Emphasizing empirical support based on longitudinal analyses could be a good place to start.

Language redesignation policies have been identified for examination as they are significant levers that affect all CLDs, hold tremendous accountability attached, and are receiving increasing attention from educational researchers and policymakers (Hill, Weston, & Hayes, 2014; Hopkins, et al., 2013; Williams, 2014). However, language redesignation policies are only the tip of the iceberg; there are numerous complex persistent problems that can face CLD students and act as barriers to their educational achievement.

Justice in the form of educational research steeped in sound, rigorous, and longitudinal research has been long overdue for culturally and linguistically diverse students, among other marginalized populations (Ladson-Billings, personal communication, April 16, 2015). Combining CLDs' generally below-average achievement record with their increasing population representation within the United States is a concerning issue for the future of American education, its economy, and society at large. The CLD subgroup has even been considered an "urgent concern—a ticking time-bomb" (Leckie, Kaplan, & Rubenstein-Avila, 2013). Primarily, this dissertation aims to add to a limited pool of research on language redesignation policies for English learners in hopes of quelling such "urgent concerns."

Need for Study

While educational researchers tackle numerous problems facing the CLD population, there are few who explicitly address language redesignation policies and even fewer who address the outcomes resulting from these policies in a longitudinal fashion. Rumberger (2000) discovered that redesignated fluent-English proficient (r-FEP) students

significantly underperformed their English-only and initially-fluent English proficient counterparts after fourth grade. Robinson (2011) evaluated whether the threshold for transitioning CLDs between settings was appropriate in a California district by applying statistical analyses to the varying cut-score determinations. Hill, Weston, and Hayes (2014) addressed the various language redesignation procedures in the state of California and concluded that early, rigorous redesignation policies and practices resulted in improved outcomes for CLDs when compared to CLDs who remained classified for periods of time longer than third grade. Laija-Rodriguez, Ochoa, and Parker (2006) conducted multiple regression analyses to determine the contribution of cognitive academic language proficiency (CALP) in L1 and L2 to their respective literacy achievement but only found a weak significant relationship explaining minimal variance. Mojica (2013) examined the relationship between eighth graders' *ACCESS* scores (a measure of English language proficiency) and standardized achievement and found a moderate positive correlation between the two. Slama (2014) utilized discrete-time survival analysis for CLDs to determine their average time to reclassification and the distribution of reclassification over time among CLDs. This analysis did not examine longitudinal achievement. Okhremetchouk (2014) conducted a case study of site-level language redesignation practices for CLDs by examining data integrity, sources of inconsistencies, and implications; this author called for the need for empirical work on the accuracy and consistency of such practices. Thompson (2015) examined nine years of longitudinal data to determine the time necessary for CLDs to become redesignated as English proficient by meeting six distinct criteria. Findings suggest that there might be a

redesignation window, as students not redesignated by the upper elementary grades become less likely to do so over time and become long-term culturally and linguistically diverse students. Thompson's (2015) study also reinforces the findings of the developmental interdependence hypothesis in that the CLDs' native language played a significant role in their redesignation. However, this research did not investigate the unique contributions of redesignation status as assessed through multiple regression analyses.

No known study to date has utilized longitudinal multiple regression analyses to predict CLDs' standardized literacy achievement from a host of predictors. The presented research would provide policymakers with an evidence-based, objective approach to language redesignation policies for CLDs. Connecting the variance explained by predictor variables to CLDs' long-term academic success provides a means to identify key areas for assessment and identification for language redesignation. Additionally, the longitudinal design of this research helps with long-term monitoring and addresses a call for creating formulas and rules for combining English language proficiency (ELP) and standardized achievement measures for large-scale use (Linguanti, 2001).

Purpose of the Study

While the effects of complex persistent problems facing CLDs, presented in Table 1, are pervasive, action must be taken at the policymaking-level that is based on empirical and theoretical evidence. This dissertation will serve to provide policymakers with evidence-based language redesignation recommendations at the local and state levels. Calls for language redesignation research have been intensifying via a new focus on

developing higher standards, and transparent, objective policies (Williams, 2014). This dissertation aims to address these calls by providing an objective analysis of the relationships between English language proficiency, native language proficiency, standardized English literacy achievement, and language redesignation status. This longitudinal design will employ a multiple regression methodology to make recommendations for enhancing language redesignation policies in order for CLDs to experience improved literacy achievement over time. Cummins' (1979; 1981) developmental interdependence hypothesis, basic interpersonal communication skills and cognitive academic language proficiency concepts are used as the theoretical framework, along with asset-based and systems theories to support this research and its practical implications. This research comes at a critical time in which the achievement gap between CLDs and their non-CLD White counterparts is growing. Variation in policy and its lack of theoretical and empirical grounding negatively affects the CLD population. This growing subgroup of students must be viewed as assets to our educational system and treated accordingly. By examining the educational and policy implications stemming from the current analysis, systemic and positive change for CLDs can be realized.

Research Questions

The purpose of this study is to contribute to the field of educational research examining the culturally and linguistically diverse student language redesignation process by providing a longitudinal and empirical link between language redesignation status, prior native and English language proficiency, and prior standardized English literacy

achievement, all towards predicting longitudinal standardized literacy achievement in English.

The following research questions are investigated:

1. a. Can fifth grade CLDs' standardized literacy achievement at the end of the academic year be significantly predicted from prior English language proficiency, prior standardized English literacy achievement, and fifth grade language redesignation status (exited or receiving language support services)?
b. How much unique variance in standardized literacy achievement is explained by each of the predictor variables?
2. a. Can fifth grade CLDs' standardized literacy achievement be significantly predicted from native language proficiency in kindergarten, prior English language proficiency, and prior standardized English literacy achievement?
b. How much unique variance in standardized literacy achievement is explained by each of the predictor variables?

Limitations of the Study

The exclusion of home language surveys, teacher recommendations and other tools utilized for the language redesignation of CLDs affects the predictive ability of this research. The reason these variables are not included is because they are generally very subjective, lack reliability and validity, are often not required to be collected, and thus often not included in large districts' databases. Another limitation is that many of the

Table 1

Possible Complex Persistent Problems Facing the CLD Population

Topic	References
Deficit-based thinking	Cutri & Johnson, 2010; Reeves, 2006; Reyes, 2006
Disproportionately retained in grade	Slama, 2014
Hegemonic policies and practices	Leckie, Kaplan, & Rubenstein-Avila, 2013; Tung, et al., 2009
High dropout rates	García, Jensen, & Scribner, 2009; Valencia & Villareal, 2005
Immigration and mobility	Alba, et al., 2011; Terriquez, 2014; Vallejo, 2012
Inadequate resource appropriation	Gándara & Contreras, 2009
Invalid and unreliable assessments	Abedi, 2004; Abedi & Gándara, 2006; Solano-Flores, 2008
Lack of certified and experienced teachers	Darling-Hammond & Sykes, 2003
Less access to high quality schools	Alemán, 2007; Callahan and Gándara, 2004
Low levels of parental education	Hammer, et al., 2011; U.S. Dept. of Education, 2012
Low levels of social and linguistic capital	Gándara & Contreras, 2009; Kanno & Kangas, 2014
Lower preschool attendance	U.S. Department of Education, 2007
Motivation and self-esteem	Krashen & Brown (2005)
Neighborhood factors	Portes & Hao, 1998; Thomas, 2004
One-parent households	Gándara, 2006
Poor health care and related issues	Tienda & Mitchell, 2006; Tucker, 2007
Poverty	Milner, 2013; Rose, Sonstelie, & Weston, 2012
Second language acquisition issues	Dressler, et al., 2011; Segalowitz, 1997
Varying native language competence	Bhatia & Ritchie, 1999; Solano-Flores, 2008

examined variables are correlated with each other; to examine this effect, moderator analyses were conducted. For example, English language proficiency data in isolation is a strong predictor of standardized literacy achievement as it has been positively correlated with student achievement (Abedi, 2008; Mojica, 2013). While there is an abundance of covariates to account for in researching CLDs (see Table 1), the present analyses are limited by data made available to the researcher from the district, which was limited to free/reduced lunch status as the primary proxy for socioeconomic status (SES). Parental education levels, family mobility, and teacher- and school-level data were unavailable to the researcher. In acknowledging these limitations, it must be recognized that measured longitudinally, academic achievement of CLDs based on language redesignation status and academic achievement predictors is a relatively unexplored area for educational researchers.

Significance of the Study

The term *English learner* can be considered a social construction (Ruiz, 1984) at the tip of the iceberg of several hegemonic policies and deficit-based thinking. These policies have led to a variety of language redesignation methods and results for CLDs; this “systemic chaos” (Williams, 2014) can no longer be tolerated. CLDs must be valued and perceived as the assets they are, only then will there be a level playing field formed through equitable language redesignation policies grounded in quantifiable and longitudinal research. Culturally and linguistically diverse (CLD) students will be the proffered term for labeling these students as it is much more asset-based than the term English learner, which stems from a strong deficit-based perspective. For too long, CLDs

have been systematically marginalized and not afforded the equal and equitable treatment they are due. The goal is simple: CLDs who are redesignated as fluent English proficient (while still receiving exiting services or not) must be able to excel in English-only classrooms with minimal language supports and monitoring. Further, increasing the linguistic capital of CLDs and their families through the development of academic English proficiency will help improve economic and societal outcomes and their position within (Kanno & Kangas, 2014). While this research potentially lends itself to bilingual education, it is beyond the scope of this study. In an ideal educational system that encouraged bilingualism, and provided effective bilingual language programming, CLDs would have ample time to acquire their L2; such a system would ease the rush to have CLDs acquire and be tested in English. However, within the current boundaries of transitional bilingual education, employed in the district studied, and in which CLDs generally have three to five years to transition to mainstream English classrooms, an effective language redesignation model must be realized.

Chapter Two

Literature Review

The purpose of this dissertation serves to provide policymakers with results-driven and objective language redesignation policy recommendations at the local- and state-level. By applying a rigorous statistical method to examine prior English language proficiency, English literacy achievement, native language proficiency and language redesignation status to predict future English literacy achievement, this research investigates an area previously unexplored in educational research. This literature review will begin by defining culturally and linguistically diverse students, their growing population numbers in the United States, the pressing educational issues facing this group, the tremendous variability within this group and the educative models applied to them. Next, educational policies pertaining to CLDs will be discussed beginning at the federal level followed by analysis of the varying language redesignation policies across the states specifically its implementation and impacts. Attention then turns to CLD assessment in native and second languages, examining validity and reliability issues, and accommodations are briefly discussed. Lastly, theories of second language acquisition are presented as the theoretical framework to ground statistical findings. Asset-based thinking and systems theories are used to frame analyses within educational and policymaking contexts.

Culturally and Linguistically Diverse (CLD) Students

A culturally and linguistically diverse student is a student whose native language is different from the dominant language in the society in which they live (Solano-Flores & Li, 2013). Defined operationally, CLDs are “still acquiring basic communicative skills in and academic knowledge of English” (Robinson, 2011, p. 267). This definition positions CLDs unfavorably in mainstream English classrooms because they are learning English while also attempting to learn content knowledge in this second language (Ardasheva, Tretter, & Kinny, 2012). Not only are CLDs facing an uphill battle with regards to their educational attainment, their population is rapidly increasing, creating a need to improve CLD policies. For more than 20 years, CLDs have been the fastest growing subgroup in the United States (Batalova & McHugh, 2010). By the school year 2022-23, 30 percent of public school students are projected to be Latino (Hispanic Outlook, 2014). In California, native Spanish-speaking CLDs constitute 21% of the overall student population (Hill, 2012). In Texas, CLDs represent 17% of the overall student population (Flores, Batalova, & Fix, 2012). Clearly, this is a population that can no longer be ignored with regard to variable, ineffective educational policies. Within this group, countries of origin are predominately Mexican (64%), Puerto Rican (9%), Salvadoran (4%), Cuban (4%) and Dominican origins (3%), among other smaller groups (Hugo Lopez, Gonzalez-Barrera, & Cuddington, 2013). The target population of this dissertation is CLDs of Hispanic/Latino origin because of their increasing numbers and relevance in the American public education sector. While the previous definitions describe CLDs in an operational sense, they do not account for the diversity within this

group; CLDs are remarkably heterogeneous and vary along a number of dimensions including English and native language proficiency, country of origin, culture, and the amount of formal education in their home country prior to entering U.S. schools (Gándara & Contreras, 2009; Lakin & Young, 2013; Solano-Flores & Li, 2013). In an attempt to effectively group CLDs by ability level in English, several subgroups have been created.

Subgroups of culturally and linguistically diverse students. Generally, culturally and linguistically diverse students are identified as fitting into one of three categories: limited English proficient (LEP), this group includes non-English proficient (NEP), initially-fluent English proficient (i-FEP), and redesignated-fluent English proficient (r-FEP) (Hill, Weston, & Hayes, 2014). LEPs are those students receiving a mixture of English and native language (Spanish) instruction and support services; i-FEPs are students whose home language is other than English, but who tested into mainstream English classes upon entering school; r-FEPs are previous CLDs who have been redesignated after meeting various cut-scores and are now in mainstream English classrooms, with support services and exited status (year one or year two) varying. Within these designations are a wide variety of types of CLD students with an array of academic skills (Aguirre-Munoz & Baker, 1997; Solano-Flores & Gustafson, 2013), making the language redesignation process even more difficult. For example, an LEP student may have stronger math skills than an r-FEP student but be substantially behind in literacy and writing skills. Further, two LEP students may be very similar in most second language skills (e.g. reading, writing, and speaking) but could differ significantly

in their L2 listening comprehension; these examples demonstrate differences between and even within groups.

The central goal of language acquisition programming is to support LEP and NEP students on their journey to becoming r-FEP. Ideally, becoming redesignated-fluent English proficient indicates three criteria have been met: first, the student has sufficient linguistic skills to comprehend and communicate effectively at the given age or grade level; second, the student has sufficient academic language skills to engage in cognitively-demanding, grade-level work without modifications or accommodations; and third, the student is ready to meet grade-level performance expectations, as demonstrated by academic achievement in grade-level subject matter in English (Linguanti, 2001, p.5). Satisfying these three elements connotes r-FEP status and that the culturally and linguistically diverse student is ready for language redesignation. Difficulty arises in assessing when a CLD is truly ready for language redesignation, as accurate measurement in these three elements is often quite subjective. Several researchers have found incredible variation in language redesignation policies when comparing states or even within states themselves (Abedi & Dietel, 2004; Linguanti & Cook, 2013; Wolf, et al., 2008). The language redesignation process has been labeled “systemic chaos” and stems from the absence of a common operationalization of who a CLD is and what is required for effective redesignation (Williams, 2014). Additionally, this process “may actually be contributing to educational inequity, lack of accountability, and student failure” (Linguanti, 2001, p.i).

Culturally and linguistically diverse students' educative models. There are four commonly employed school-based models for educating culturally and linguistically diverse students: *transitional bilingual education*, in which a teacher initially uses the students' native language to provide early literacy skills and ensures access to cognitively challenging academic content but transitions to English language acquisition over a period of three to five years; *dual immersion* or *maintenance bilingual*, in which two languages are used for biliteracy development and academic study; *structured English immersion*, which immerses the student in English from the beginning with minimal language support; and *English as a second language*, in which a trained teacher works in small groups with CLDs to supplement and adjust instruction outside of academic classes (Simpson-Baird, 2015). There is tremendous variation within and between these models in terms of research support, teacher fidelity in implementation and CLDs' subsequent academic achievement. For the purpose of this dissertation, data come from a district employing a transitional bilingual education model, with the goal of developing English language acquisition over three to five years. Whether it is variability in educative model implementation and fidelity or language redesignation policy and practice, generally low outcomes result for culturally and linguistically diverse students when compared to their non-CLD counterparts. This achievement gap is attributable to the many complex and persistent problems described in Table 1.

Achievement Gap

There have been substantial gaps in literacy and mathematics achievement between CLD students and non-CLD White students for decades (Gándara, Rumberger,

Maxwell-Jolly, & Callahan, 2003; Reardon, 2011; Simon, et al., 2011; U.S. Department of Education, 2012). For example, the 2013 National Assessment of Educational Progress (NAEP) reported a gap of 25 points in fourth grade mathematics between CLDs and non-CLDs; this gap increased to 41 points by eighth grade (NCES, 2015). However, the achievement gap is most noticeable in reading and literacy skills (Kindler, 2002; Laija & Ochoa, 1999). This achievement gap has been considered a primary obstacle to the academic survival of CLDs (Tong, Lara-Alecio, Irby, Mathes, & Kwok, 2008). Further, 61% of limited English proficient (LEP) students graduate high school compared to 81% nationally (U.S. Department of Education, 2015). The economic and social implications from the presented statistics are cause for alarm and immediate action.

As mentioned earlier and depicted in Table 1, the achievement gap can be attributed to a combination of cultural, socioeconomic, and structural factors. The majority of literature discussing the achievement gap details the negative contributors while ignoring what is being done to combat this pervasive problem (Coleman, Winn & Harradine, 2012). While demographic factors may confound findings regarding the achievement gap, several researchers discovered strong relationships even after controlling for socioeconomic status (Fuligni, 1997; Reardon & Galindo, 2009). This indicates there are more than just demographic factors at play; systematic inputs are negatively afflicting this group. Accountability policies for CLDs also contribute by serving as negative reinforcement models; once a CLD is redesignated as fully English Proficient (r-FEP), they are statistically returned to the group of non-CLDs and are not counted towards the success of the CLD subgroup (Hill, Weston, & Hayes, 2014;

Hopkins, Thompson, Linquanti, Hakuta, & August, 2013; Saunders & Marcelletti, 2013). This leads to an inaccurate and deflated achievement level for this group, contributing to the achievement gap. Additionally, language redesignation policies are incredibly variable (Wixom, 2015) and this variation could be deemed a systematic contributor to the achievement gap. Adjusting the language redesignation process could help reduce the achievement gap by effectively placing CLDs into the appropriate classrooms with native language support, systematic monitoring, or as fully exited into mainstream English classes to ensure their academic achievement.

It is conceivable that many district and school leaders perceive the factors listed in Table 1 and feel helpless in attempting to improve the achievement of this group. While there is research that might support this notion (Yoko, 2007), administrators should focus on the things they can control, primarily the educational services provided to CLDs in their schools. Successful language redesignation policies that treat CLDs as assets to the educational future of this country could directly confront this deficit-based thinking of school leaders and lead to improved achievement (Wagstaff & Fusarelli, 1995).

Grounded in second language acquisition research and statistically rigorous multiple regression analyses, evidence-based language redesignation policies could begin to close the achievement gap by relying on comprehensive data to base decisions and monitor outcomes longitudinally. For example, the benefit of a consistent language redesignation policy would help to offset the generally high mobility rates of immigrant CLDs and their families (Terriquez, 2014), as cut-scores and redesignation policies would be consistent state-to-state. Federal policy is discussed next to frame culturally and linguistically

diverse students policies as a whole, present the systemic marginalization of this group, and to focus in on language redesignation policies at the state level.

No Child Left Behind Act of 2001

While current rewrites to the Elementary and Secondary Education Act (ESEA) are underway, the most current reauthorization of ESEA, better known as No Child Left Behind (NCLB) will be the focus of this federal policy analysis. Specifically, Title III of NCLB is labeled *Language Instruction for Limited English Proficient and Immigrant Students* and serves “to ensure that children, who are limited English proficient, including immigrant children and youth, attain English proficiency” (NCLB, 2002, Title III, Sec. 3102). Title III was created to explicitly address CLDs and guide their English language acquisition in order to support their academic success; often as soon as possible (Okhremtchouk, 2014). The Office of Civil Rights (OCR) is responsible for mandating that language proficiency and academic achievement are measured (OCR, 2001). At the outset of analysis, it appears as though federal policy is setup for effective and equitable treatment of culturally and linguistically diverse students. Definitions of CLDs are also clear but do not provide an understanding of the heterogeneity within this group; NCLB defines culturally and linguistically diverse students as a student who is: (a) aged three through 21, (b) enrolled or preparing to enroll in an elementary or secondary school, and (c) was not born in the United States or whose native language is a language other than English (NCLB, Section 9101). Assessing CLDs and holding schools accountable for their achievement invites more ambiguity as evidenced by implementation of federal policy at the state level.

Generally, NCLB requires states to use English language proficiency (ELP) assessments to make language redesignation decisions and to monitor CLDs for two years after redesignating them into mainstream English classrooms. NCLB also recommends the standardized achievement testing of CLD students in their native language for the first three years that they are in the United States, and up to five years with review to inform language redesignation decisions (20 USCS, 6311, 2005). However, native language tests are not officially used in the language redesignation process in any state (Wixom, 2015). While NCLB is explicit regarding the initial testing and identification of CLDs, language redesignation policies were not explicitly enacted and are generally established at the state level, leading to immense variation (Tanenbaum, et al., 2012). Accountability reporting as required by NCLB negatively contributes to the formula; adequate yearly progress (AYP) indicators require schools to report on the success of CLDs according to the percentages scoring proficiently on standardized achievement tests and the percentages redesignated as r-FEP (Ramsey & O'Day, 2010). The variation in language redesignation policies combined with accountability reporting forces redesignation decisions sometimes to be made hurriedly (Umansky & Reardon, 2014), adding to the increased pressure on schools and CLDs to perform and invalidating the redesignation process. As testing and reporting policies have been ineffective, so too have funding streams.

Sections of Title VII of NCLB were created to appropriate funding for CLDs; specifically allocating resources for native and second language support services, testing, and monitoring. As an example at the state level, Colorado House Bill 14-1298, Article

24, expanded funding from two to five years for all CLDs (Colorado State Legislature, 2014). Despite this strong singular effort, national trends are quite the opposite; in 2002 (at the initialization of NCLB), congress appropriated \$750 million for Title III, in fiscal year 2013, this funding decreased to \$694 million (Annie E. Casey Foundation, 2014), representing a 7.5 % reduction in funding from 2002 to 2013, amidst rising inflation. This reduction in funding for CLD education is direct evidence of a deficit-based discourse taking place at the national level resulting in further marginalization of these students.

NCLB was designed to hold all states to the highest level of accountability for CLDs' progress in acquiring English language proficiency, requiring the use of valid and reliable assessments, strictly monitoring outcomes, and providing appropriate funding towards the goal of all students reaching proficiency by 2014. Achievement scores for CLDs as a group did not reach the proffered benchmark; on the National Assessment of Educational Progress (NAEP) for 2013, fourth grade CLDs scored an average of 187 on literacy while their non-CLD White counterparts scored 233, a significant difference of 46 points and far below the benchmark (NAEP, 2013). Several researchers have pointed to NCLB as responsible for this lack of achievement for CLDs (Abedi, 2008; Gándara & Rumberger, 2009; Hopkins, et al., 2013). Consistent, equitable and evidence-based policies beginning at the federal level would have provided states with more direction with regards to language redesignation policy, potentially resulting in improved outcomes for CLDs.

Language Redesignation Process and Policy

Language redesignation process. The most common thresholds to language redesignation are English language proficiency (ELP) and in some cases, standardized academic achievement (Wolf, et al., 2008). While all states are required to annually assess CLDs using a standardized ELP measure, the use of standardized achievement assessments is less common (Wixom, 2015). In most cases, by reaching a prescribed score (i.e. partially proficient) on a measure of ELP, a CLD student can be redesignated into mainstream English classrooms. While this practice exists in most states, Abedi (2003) found very low correlations between language proficiency test scores and designation status ($r = .223$) which explained less than 5% of the common variance. This demonstrates that states are disregarding the use of ELPs in this process, further adding to implementation concerns. Further, in utilizing *ACCESS for ELLs*, the most common ELP measure, schools often consider only the composite score, ignoring the sub-scores in reading, writing, listening, and speaking; this issue of dimensionality is critical (Abedi, 2007; Sawaki, Stricker, & Oranje, 2007). Nationally, *ACCESS* cut-scores range from 4.0 in Mississippi to 6.0 in Wisconsin (Williams, 2014). Across consortia, variation exists: the *California English Language Development Test (CELDT)*, *ACCESS*, and the *Texas English Language Proficiency Assessment System (TELPAS)* all utilize different cut-scores and weighting methods (Linguanti & Cook, 2013). This variation leads to multiple interpretations of the meaning of proficient when comparing CLDs across states, a problem, especially for CLDs in highly mobile families (Terriquez, 2014). Utilizing a common cut score and weighting methodology for each ELP assessment has the potential

to provide consistent information for educators to make appropriate language redesignation decisions. However, Robinson (2011) cautions: “there is no reason to think that about 80% of students *just barely meeting* the final assessment criteria are motivated or ready for [redesignation], yet almost 0% of the students *just barely failing* to meet the final assessment criteria are ready or motivated” (p. 274, italics in original). Even while providing consistent cut-scores, additional information to inform the language redesignation process is critical.

By examining all sub-scores (speaking, listening, reading, and writing) on measures of ELP and defining a consistent, evidence-based threshold, school leaders can more clearly justify their language redesignation decisions. The critical piece of the redesignation process is identifying even more assessments that are proven to statistically explain subsequent achievement. The California Department of Education, for example, recommends four criteria in its language redesignation procedure: an ELP measurement, standardized test score(s), teacher recommendation, and parent consultation (CA Education Code Section 313(f)). However, even these recommendations result in a vast array of outcomes for language redesignation (Hill, Weston, & Hayes, 2014). Additionally, the use of standardized achievement tests in English has been cautioned; Abedi (2008) stated “...standardized achievement tests may not be a valid criterion for assessing CLD students for [redesignation] purposes as a single criterion or even when combined with other criteria” (p. 25). Linking all assessments and decision factors of the language redesignation process to CLDs’ longitudinal achievement could prove useful in improving their academic outcomes.

State-level language redesignation policies. While federal law is very clear on the criteria needed to *identify* CLD students, state policies for language redesignation are less transparent. Across the country, state boards of education (SBEs) set the guidelines for their districts' redesignation policies; “there is no consensus about the ideal redesignation policy for ensuring the success of CLD and r-FEP students” (Hill, et al., 2014, p.8). Because federal regulations are flexible, variation on standards, rigor, and the resulting language redesignation decisions exist even within districts (Okhremtchouk, 2014). Inconsistencies can be directly attributed to NCLB; in no part of Section III are explicit laws for language redesignation proffered; the wording affords multiple interpretations and states and districts have acted accordingly. Limitations exist within NCLB; criteria may be insufficient to address the complexity of language proficiency, producing a spurious dichotomy of students as either proficient or not proficient in English and may lead to multiple false positive and false negative CLD designations (Abedi, 2008; Solano-Flores & Gustafson, 2013). States also use a variety of assessments (singularly or in combination): home language surveys, registration/enrollment forms, teacher observations, interviews, native language tests, ELP tests, and English standardized achievement tests (Linguanti & Cook, 2013; Mahoney & MacSwan, 2005; National Research Council, 2011). This variation in assessment tools leads to inconsistencies in CLD language redesignation and provides little, if any, structure for justifying decisions, especially over time.

To study these inconsistencies, policies have been enacted (i.e., California Senate Bill 1108) to document the numerous language redesignation policies and better

understand their link to student outcomes. In a policy paper, Hill, Weston, and Hayes (2014) conducted a longitudinal analysis of three cohorts of CLD students in California and found that stricter redesignation criteria resulted in better long-term outcomes for r-FEP students, even surpassing non-CLDs and i-FEP students. These results have been replicated by several researchers (Halle, Hair, Wandner, McNamara, & Chien, 2012; Hill, 2012; Saunders & Marcelletti, 2013). Alternatively, researchers found that redesignation status as r-FEP can actually slow academic growth and English language development (Flores, Painter, Harlow-Nash, and Pachon, 2009). Slama (2012; 2014) found that, on average, CLDs exit language services (are redesignated) after three years, with some CLDs remaining in language-learning programs throughout their entire schooling trajectories. On a slightly more concerning note, Abedi (2004) and Grissom (2004) found that variables such as ethnicity, gender, parental education, and socioeconomic status were strong predictors of reclassification for California students. Clearly, there are troubling and somewhat conflicting results from education research. Lastly, in a recent study, Motamedi (2015) found that average time to language redesignation for CLDs entering in either kindergarten or first grade was 3.8 years (3.6 for females and 4.0 for males), with CLDs who entered later (in grades 2-5) taking longer to achieve redesignation. This study also found that CLDs took less time to reach redesignation status in schools with high percentages of CLD students. While several studies have looked at time to language redesignation and predictors, very few have examined outcomes stemming from redesignation decisions.

A potential limitation in the formation of language redesignation policy could be the misunderstanding that improved language proficiency in English denotes improved academic development. While a correlation may exist, it is by no means a causal notion (Gándara & Merino, 1993). Policymakers must be informed of this potential fallacy before prescribing policy to millions of CLDs, as policymakers hold tremendous influence on the language redesignation process (Robinson, 2011). To be effective, language redesignation practices must be coupled with rigorous and consistent standards employed on a rolling, year-round redesignation schedule capable of identifying CLDs ready for redesignation early in their academic careers (Hill, Weston, & Hayes, 2014). A fluid, objective, and rigorous redesignation policy in place early in elementary school to identify CLDs as soon as they are ready for redesignation is ideal. However, even as states coalesce around improved cut-scores, definitions, and standards, this process remains iterative (Williams, 2014). It is clear that there is incredible variation in state-level language redesignation policies, implementation, and the subsequent academic outcomes for culturally and linguistically diverse students; to compound the negative outcomes for CLDs, negative policy impacts further add to redesignation policy development and implementation issues.

Policy impacts. Language redesignation policies and CLD policies at large operate “within a complex accountability system, which influences educators to expedite or prolong [CLD]’s exit from language-learning programs” (Slama, 2014, p.224). This evidence demonstrates that implementation is a critical issue at the local-level and decisions are often made for accountability purposes rather than doing what is best for the

CLD student. Further, language identification and redesignation practices have been characterized as likely to determine CLD students' entire academic trajectory in school (Abedi, 2008a; Callahan, Wilkinson, & Muller, 2010) and include misidentification and over-identification (Bedolla & Rodriguez, 2011). Systemic causes for implementation issues include adequate yearly progress (AYP) reporting, which requires school systems to set unrealistic academic performance expectations for CLDs who are not yet proficient in English, undermining both the meaningfulness and the credibility of the accountability system and demoralizing teachers and students (Hopkins, et al., 2013). Adequate yearly progress indicators also impact funding and are very public, lending themselves to high levels of scrutiny and lots of political interest, adding a multiplier effect to the level of pressure on CLDs and their teachers and administrators. The level of impact stemming from accountability policies is immense; "if [CLDs] fail to show adequate growth in English, their schools can be penalized and ultimately even disbanded" (Gándara & Rumberger, 2009, p. 766). Accountability policies must be addressed as they are creating visibly negative impacts; improving language redesignation policies could have a positive residual effect on accountability policies. For example, a redesignation policy that accurately places CLDs who are ready for mainstream classes would enable accountability policies to more precisely track CLDs' academic achievement without forcing students who are not ready to enter, avoiding invalidations of the process (Abedi & Gándara, 2006).

An additional systemic issue with accountability policies negatively affecting all CLDs is the "revolving door" effect of language redesignation; [CLDs] who are

redesignated as fully English proficient (r-FEP) are statistically exited from the group of [CLDs] and assimilated back into the general group of non-[CLD] students, thus their success in attaining English proficiency is not associated with the [CLD] group (Linguanti, 2001; Linguanti & Hakuta, 2012; Saunders & Marcelletti, 2012). Further, “[CLDs] who remain in the [CLD] subgroup are low-performing and new [CLD] students with even lower levels of language proficiency may also move into this subgroup” (Abedi, 2004, p.4). These policies hide the successes of r-FEP students and add new CLDs in, skewing the achievement data represented by this group (Linguanti, 2001). Hopkins, et al. (2013) summarize succinctly: “the more successful schools are in reclassifying their [CLDs], the more poorly their [CLD] subgroup performance looks” (p.102). When this effect is mediated by including all r-FEP students in the CLD subgroup, students are shown to match and even exceed state averages in achievement (Hopkins, et al., 2013). The revolving door effect poses a significant barrier to the measurement of CLDs’ educational success and is a systematic contributor to the achievement gap. Various states have enacted policies to limit this effect but none have completely solved this issue (Linguanti & Cook, 2013).

Assessment

Title III of the *No Child Left Behind Act of 2001* was created to directly ensure that limited English proficient (LEP) students attain English proficiency. This area of NCLB has been largely ineffective because of the amount of variation that exists in educational programming and assessment for CLDs across the country and the lack of theoretical frameworks states use to support their approach (Mahoney & MacSwan, 2005;

Williams, 2014). There are a multitude of factors when assessing CLDs: expressive language (speaking and writing), receptive language (listening and reading), and cognitive academic language proficiency are all critical areas. This adds to the challenge that assessments must meet.

CLDs are generally assessed in English on high-stakes standardized achievement tests by the time they are in third grade, well ahead of what the research recommends (Cook & Zhao, 2011). Evidence suggests that CLDs minimally require four to seven years to develop mastery of English oral skills such as sound discrimination, vocabulary, listening comprehension, and oral expression (Hakuta, Butler, & Witt, 2000; Suárez-Orozco, Suárez-Orozco, & Todorova, 2008), as well as mastery of syntactic, morphological, and pragmatic skills (MacSwan & Pray, 2005). Additionally, CLDs require up to seven or more years to reach high levels of literacy skills comparable to native English speakers on standardized tests in reading (Collier and Thomas, 1989; Thomas & Collier, 2002). While research evidence and theoretical support is generally lacking in the assessment of culturally and linguistically diverse students, measures of English language proficiency have improved their research base over time.

English language proficiency. *Pre-NCLB* English Language Proficiency (ELP) assessments for CLDs were not well grounded in theories of language acquisition (Lee, 1999; 2002; Lee & Fradd, 1998; Solano-Flores & Nelson-Barber, 2001). *Post-NCLB* ELP assessments have shown increased validity and reliability in comparison along with improved psychometric and validation studies and theoretical grounding (Abedi, 2008b; Bauman, Boals, Cranley, Gottlieb, & Kenyon, 2007). *Assessing Comprehension and*

Communication in English State-to-State for English Language Learners (ACCESS for ELLs) has been adopted in 35 states, leading the nation in ELP assessments (World Class Instructional Design & Assessment, 2014). This test, henceforth referred to as *ACCESS*, has a strong research base (Bauman, et al., 2007; WiDA, 2013) however, there is still room for improvement (Cook, Boals, Wilmes, & Santos, 2008). Enhancements in the reliability and validity of ELP measures are critical; such measures inform decisions on language redesignation, curriculum planning, and participation in content-based assessments in English; invalid measures can result in misclassified students and inappropriate, misaligned instruction (Abedi, 2008b; Francis & Rivera, 2007).

Standardized achievement tests. While most ELP tests attempt to utilize evidence-based research on second language acquisition, *standardized* achievement tests do not acknowledge the needs of ELs (Abedi, 2008a; Solano-Flores & Li, 2013). Linquanti (2001) has claimed that because some states' language redesignation processes utilize standardized achievement tests in their formula, their validity is negatively impacted. A secondary focus of this dissertation is to determine whether prior standardized English literacy achievement accounts for significant variance in CLDs' longitudinal achievement. Regardless if these assessments are invalid in measuring CLDs' true achievement levels, they are the norm for testing and assessment in this country and are the benchmark for assessing academic success. Thus, their potential inclusion in the language redesignation process must be investigated. Next, native language assessment is investigated for its potential inclusion in the redesignation process as well.

Native language assessment. Many school districts often consider native language testing an accommodation, one which is not often provided after third grade (Abedi, Lord, Hofstetter, & Baker, 2000). This can be linked to deficit-based thinking (Valencia, 1997; Valencia & Solórzano, 1997). To combat deficit-based thinking, an asset-based approach to instructing and assessing CLDs is critical; Wagstaff & Fusarelli (1995) found that the single most important factor in the academic achievement of minority students is the principal's explicit rejection of deficit thinking. By utilizing an asset-based approach, schools can demonstrate that they value ELs' native language, culture, and traditions; native language assessment provides the means to do so.

Assessing CLDs in their native language is shown to have added benefits (Abedi & Gándara, 2006; August & Hakuta, 1997; Cummins, 1979, 2000; Francis & Rivera, 2007; Han, 2012). Primarily, native language testing provides a snapshot of a CLD's content knowledge and cognitive academic language proficiency (CALP) not necessarily accessible in their second language. Native language testing also aligns with Cummins' (1979) developmental interdependence hypothesis; testing CLDs in their native language would lead to a more reliable, valid, and theoretically-supported approach. So why not test all CLDs in their native language consistently throughout the school year? These reasons can be attributed to a lack of L1 assessments, resources, and time (Ardasheva, Tretter, & Kinny, 2012). If CLDs were tested in their native language for a longer duration, a clearer assessment of their true academic abilities could be determined. Examining the variance explained by native language literacy proficiency in English longitudinal literacy achievement could provide a meaningful new approach to the

language redesignation process, and is a means to test Cummins' (1979) developmental interdependence hypothesis.

Second language assessment. Evidence demonstrates how language factors can confound the outcomes of assessment (Abedi, 2002; Abedi & Gándara, 2006; Abedi, Lord, & Hofstetter, 1998). Causes include standardized tests not normed on CLD students nor aligned with their cultural and school experiences; these tests also have lower reliability and validity for CLD populations (Abedi, 2003; Abedi, Leon, & Mirocha, 2003; Navarette & Gustke, 1996). This discriminatory practice manifests in statistical analyses; Abedi (2004) found alpha coefficients were highest for native English speakers in math and English respectively ($\alpha = .898$ and $.813$) compared to CLD students ($\alpha = .802$ and $.683$). This is direct proof that standardized achievement tests are less reliable for CLDs than non-CLDs. There is one critical concern with testing content in a student's second language: "A test of any content area is, to some extent, a test of proficiency in the language in which it is administered" (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1999). Thus, CLDs taking assessments in English not only must demonstrate their content knowledge, but must use significantly more cognitive processing to do so in their L2 (Robinson & Gilabert, 2007). Linguistic complexity of second language assessment undermines the validity of inferences made from these assessments (Haladyna & Downing, 2004; Messick, 1994). This is often an overlooked factor in assessing CLDs that is clearly inequitable and contributing to the achievement

gap. Assessing in both the L1 and L2 could provide a means for more accurately assessing CLDs.

Combining native and second language assessment. The proficiency of CLDs in both their native language (L1) and English (L2) is seldom assessed properly (MacSwan, 2000; Solano-Flores, 2008). Evidence exists that CLDs perform better on some items administered in their L1 and others in their L2; the same was found to be true across listening, speaking, reading, and writing modalities (Solano-Flores & Li, 2013). Genessee, Lindholm-Leary, Saunders, & Christian (2005) explained this as “complex but supportive interdependencies in the language, literacy, and academic development [of CLDs]” (p. 372). These differences can also be attributed to age and/or length of exposure to L1 (Francis & Rivera, 2007). This evidence gives rise to the need to align assessment with the language(s) that demonstrate a CLD’s highest level of content and language proficiencies; Solano-Flores and Li (2009) went as far as to say that CLDs should be given standardized achievement tests in both languages. Returning, legislation of NCLB mandates that students be tested “in a valid and reliable manner. ... including to the extent practicable, assessments in the language and form most likely to yield accurate data” (NCLB, 2002, Title III, Sec. 3102). This indirectly emphasizes the need for achievement testing in both L1 and L2.

Despite the overwhelming evidence in favor of testing L1 and/or some combination of L1 with L2, researchers have found that some students struggle more in their L1 than L2; Zehler, et al., (2003) found that 23% of CLDs had limited oral language proficiency in L1 and 39% had limited L1 proficiency in literacy skills. Further, Mahon

(2006) found that L2 proficiency accounted for a substantially larger proportion of variance in L2 reading performance than L1 reading ability. These findings point to the heterogeneity of the CLD subgroup: some CLDs have little to no academic knowledge (i.e. literacy skills) in their L1 to begin with (Páez, Tabors, & López, 2007). This is further testament to the idea that CLDs should be tested in both languages across all items to determine their highest capacity for achievement (Solano-Flores & Li, 2009; 2013; Solano-Flores & Trumbull, 2008).

Validity and reliability of assessments. Fair and valid assessment of CLDs has been among the top priorities on the national education agenda (Abedi, 2007; Abedi & Gándara, 2006; Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006). The fundamental validity question regarding assessments impacting language redesignation decisions is whether a student who scores in the proficient range can thrive in an English classroom without language supports (Francis & Rivera, 2007). If not, the CLD should remain designated as such. The 2014 NCLB goal of having all CLDs reach proficiency was not met in part because of variability in the difficulty of standardized achievement tests used by states (Verdugo & Flores, 2007). To examine this, educational researchers have studied the links between ELP and standardized achievement assessments with varying results. These include positive correlations of CLDs' scores on measures of English language proficiency with their standardized achievement scores (Parker, Louie, & O'Dwyer, 2009; Parker, O'Dwyer, & Irwing, 2014). However, Francis and Rivera (2007) found increasing variability in CLDs' standardized math and reading scores as their ELP scores increased. This variability demonstrates that ELP measurements assess language

only and that standardized achievement tests measure content *and* language ability; utilizing these assessments in the language redesignation process must be done judiciously (MacSwan & Rolstad, 2003; Thompson, Dicerbo, Mahoney & MacSwan, 2005). While it is impossible to measure content mastery without acknowledging language, CLDs should be tested in their native language to assess their true ability (Han, 2012), once their English language proficiency allows for reliable and valid testing in English, or a combination of testing in both languages, more accurate score can be determined. While district leadership and school administration may not fully recognize the invalidities of testing for CLDs, most, if not all, are required to provide accommodations for CLDs to ease this difficult task.

Accommodation Issues. Seventy-three accommodations were discovered for CLDs when testing in their L2 (Rivera, 2003). When analyzing these accommodations, Abedi (2006) found that only 11 (15%) were effective for students. Researchers have determined that many accommodations for CLDs are neither effective in helping CLDs with their language barriers nor are the results valid (Abedi, Lord, Hofstetter, & Baker, 2000; Abedi, Hofstetter, & Lord, 2004; Sireci, Li, & Scarpati, 2003). There is evidence that providing CLDs with accommodations that do not address their specific needs is no more effective than randomly assigning them to accommodations (Kopriva, Emick, Hipolito-Delgado, & Cameron, 2007). Overall, accommodations appear to be well intended but are often ineffective; a more appropriate approach is to address and resolve the systemic errors (validity and reliability) present within these assessments and utilize assessments in both languages.

Theoretical Framework

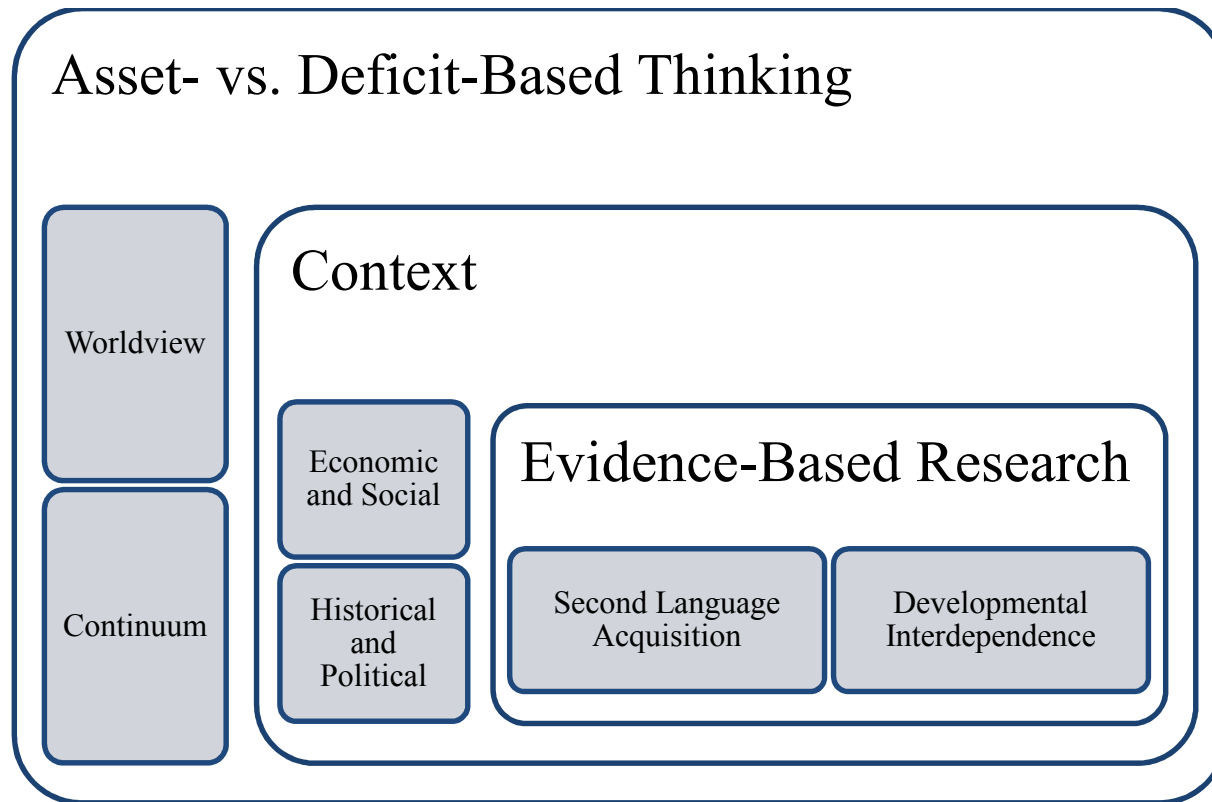
This theoretical framework includes analysis of the historical and political context, asset- and deficit-based thinking, systems theory, and second language acquisition research. The purpose for including this wide array of pieces within this framework is to capture the elements that are at work within educational policies affecting culturally and linguistically diverse students. Systems theory serves to frame these findings on a policymaking level. Figure 1 is presented to provide a clearer understanding of the relationships between each piece of the theoretical framework. To begin with, asset- and deficit-based thinking is situated as the fundamental piece of the theoretical framework. Individual's each have unique worldviews based on prior experiences and future expectations, these worldviews fall on a continuum between asset- and deficit-based thinking. Where an individual falls on the continuum is not static, it can be impacted based on context and other individuals. Next, the context is placed within one's worldview and represents the next layer of factors that impact their worldviews. The historical and political context also includes economic and social factors that act in combination to continually reinforce or challenge one's worldviews with regard to asset- and deficit-based thinking. Lastly, evidence-based research represents the final layer of the theoretical framework and is impacted by both an individual's worldview and the historical, political, social, and economic contexts acting in combination. More specifically, an individual (i.e. policymaker) with a deficit-based worldview who has limited resources available and must represent their constituents' best interest, may act to limit funding for redesignation policies to be evidence-based in favor of saving money by

doing things as they have always been done. Another example includes a policymaker with an asset-based worldview with more resources available and a constituency that resembles a majority of Hispanic/Latino people. This actor (policymaker) would be more inclined to consult educational researchers and evidence-based practices when reforming language redesignation policies. These examples hint at a dynamic interplay between these three layers and Figure 1 serves as a means to map out the theoretical framework for this research.

Historical and political context. In 1981, as a result of the discrimination lawsuit *Castañeda v. Pickard* (1981), in which Mexican-American children in Texas were discriminated against by their school district based on ethnic and language factors, three criteria were established by the Fifth Circuit Court of Appeals. In order to comply with the Equal Education Opportunities Act (EEOA) of 1974, the local language program had to include a sound, research-based methodology of second language acquisition as its foundation, appropriate resources to implement the program, and eventually demonstrate that the program is successful in helping CLDs learn English and subject matter. Hypothetically applying the three requirements to current language redesignation practices nationally, it is clear that these requirements are not being met. They do not use a sound, research-based methodology as part of their foundation, and do not adequately demonstrate that redesignation policies and practices are effective. Too often, simply tracking CLDs is an “adequate” step for states, irrespective of what these educational outcomes actually are. Stricter policies that enforce such rulings as *Castañeda v. Pickard* (1981) nationally would greatly help CLDs overcome these educational barriers to their

Figure 1

Diagram of Theoretical Framework



success by implementing sound research and evidence-based practice with a comprehensive and longitudinal accountability system.

Historically, educational settings have been identified as systematic oppressors of students of color (Kozol, 1991; Ladson-Billings, 2004; Yosso, 2006). Further, Alemán (2009) identifies K-12 settings as “highly contested and political in nature, often bestowing their most deleterious effects on racially minoritized students” (p.291). The political, social, and economic marginalization of CLDs, their families, and communities cannot and will not stand. Too often, high dropout rates affect this group and it is the researcher’s belief that this problem must be addressed in a systematic fashion, beginning with the identification of an empirical and theoretical approach to the language redesignation process. Cummins’ (1979) theory of developmental interdependence is one such example of a theoretical model to support the inclusion of measures of native language proficiency into redesignation policies. Ineffective language redesignation policies that are not grounded in empirical or theoretical frameworks and evidence can be associated with the systematic preservation of the status quo (Abedi & Gándara, 2006; Baltodano, 2004; Cline, Necochea, & Rios, 2004; Nieto, 2005; Revilla & Asato, 2002; Schirling, Contreras, & Ayala, 2000).

Cummins (2014) argues for evidence-based as opposed to evidence-free policies. Proposition 203 in Arizona is tangible proof of an evidence-free policy, resulting in inequitable treatment and outcomes for culturally and linguistically diverse students (Lillie, 2015). This proposition is in stark contrast to the advised approach to educating CLDs in acquiring a second language, in that Proposition 203 fails to adhere to the time

required (typically five to eight years) for full acquisition of a second language (Collier & Thomas, 1989; National Research Council, 1998; Mitchell, Destino, Karam, & Colón-Muñiz, 1999; Bali, 2001; Umansky & Reardon, 2014). A more equitable approach to language redesignation policy formation is to ground these policies in sound theoretical and empirical evidence. CLDs must be viewed as assets to the schooling system; too often minority students' culture and language is devalued (Valenzuela, 1999) and perceived as having a detrimental effect on student outcomes. These deficit-based thinking views manifest in classrooms as a teacher holding negative views and assumptions toward specific students, primarily those from minority groups or of low socioeconomic status (Delpit, 1992), thereby limiting a teacher's ability to see these students' strengths and abilities. Deficit-based thinking can manifest as CLDs feeling like subordinate groups in mainstream English classrooms or as teachers holding low academic expectations for students that have powerful effects on academic performance (Romo & Falbo, 1996; Yoon, 2007). This Pygmalion effect impacts both CLDs and those who have been redesignated; CLDs may be held to lower expectations and outcomes, while those who have been redesignated may be held to higher expectations and outcomes.

In any case, this dichotomizing decision may be having unforeseen effects on long-term achievement. Okhremtchouk (2014) went as far as to say that the specific labels such as English learner and limited English proficient can foster these deficit views. Cummins (2014) summarizes succinctly:

“This devaluation of the linguistic and cultural knowledge that immigrant-background students bring to school also reinforces the broader pattern of societal power relations which has historically excluded certain minority groups from social participation and advancement” (p. 149).

Indirectly, this dissertation provides voice to this marginalized population and attempts to create a critical awareness of the shortcomings of current language redesignation policies and practices that result in educational disadvantage for CLDs.

Instead, valuing the culturally and linguistically diverse student’s native language is aligned with the theoretical and empirical research presented, and contributes to an asset-based view of CLDs. Literature supports the maintenance of the native language and bilingual development which leads to enhanced executive functioning, working memory, cultural identity, self-concept, and metalinguistic abilities (Andesope, Lavin, Thompson, & Ungerleider, 2010; Bialystock, 2001; Espinosa, 2006; Oller & Jarmulowicz, 2007). While deficit-based thinking is a pervasive and destructive force in American education, explicitly rejecting this mindset has been linked to the improved academic achievement of afflicted groups (Wagstaff & Fusarelli, 1995). Truly acknowledging and valuing CLDs’ strengths and abilities has a strong history in educational research. Moll, Diaz, Estrada, and Lopes (1981) have described these strengths and abilities as “funds of knowledge” and highlight their significance in improving the educational outcomes of minority and low socioeconomic status groups. Building asset-based language and discourse into language redesignation policy could lead to more effective policy formation and implementation, leading to improved academic, economic, and social outcomes for CLDs.

Asset-based thinking and CLD language redesignation policies. The aim of this dissertation is to not only create an evidence-based approach to creating language redesignation policy, but to also informally improve the discourse around policy formation for culturally and linguistically diverse students writ large. Focusing on the utilization of research-based policies for culturally and linguistically diverse students, school-, district-, and state-level leadership can create asset-based learning opportunities for these students (Theoharis & O’Toole, 2011). To do so requires an environment that explicitly rejects deficit-based thinking and promotes inclusion, along with it improved academic achievement (Wagstaff & Fusarelli, 1995). Developing an environment of inclusion requires strong leadership and:

“...is built on the belief that all students should be valued for their unique abilities (i.e., language, etc.) and included as an essential part of a school community that is purposefully designed to accept and embrace diversity as a strength, not a weakness” (Theoharis & O’Toole, 2011, p.649).

Disrupting hegemonic worldviews that are projected onto this marginalized population begins with building policies that are deeply rooted in theoretical and longitudinal evidence. Employing asset-based policy discourse at the state-level has the potential to develop reforms that are sustainable, equitable, and effective for all CLDs. It begins with asset-based thinking and leadership then applies these frameworks toward the development of educational policies aimed at establishing strong systems for implementation.

Systems theory and CLD language redesignation policies. In order for a revision to the language redesignation policy framework to be successful, it must include

strong reinforcing and balancing feedback loops (Meadows, 2008). The reinforcing feedback loop, otherwise known as a positive feedback loop, amplifies or enhances a system because it reinforces the direction of change. A balancing feedback loop, often called a negative feedback loop, acts to stabilize and regulate the reinforcing loop. Working in harmony, reinforcing and balancing feedback loops in a language redesignation policy framework would provide stakeholders with valuable information (i.e. educational success of CLDs, implementation issues, long-term outcomes and implications) that would help to revise and improve policy for future implementation. Meta-resilient feedback loops, those that can “learn, create, design, and evolve ever more complex restorative structures” (Meadows, 2008, p. 76), are the aim for creating a strong language redesignation policy framework, one that policymakers, researchers, and other educational decision-makers could use in collaborative efforts to improve the educational outcomes for CLDs.

A central application of systems theory is to identify leverage points; this begins with identifying the feedback loops at work and their relative strengths and interplay, but aims more deeply at information flow, rules, and the goals of actors and stakeholders using the system. Ultimately, having shared goals on behalf of all stakeholders based on clear and timely information operating under fair and universal rules will setup a positive platform for effective change to occur. Applied to language redesignation policy, critical leverage points include the utilization of culturally and linguistically diverse students and their families’ voices in the formation of policy through task forces. Gathering data from these groups uncovers their values, expectations, and goals and permits policymakers and

researchers to build these elements into the central areas of policy. Several states have enacted legislation (Connecticut H.B. 6974, Illinois S.B. 1319, Maryland S.B. 622, Oregon H.B. 3499, and Washington H.B. 1105) creating CLD task forces and committees comprised of CLD students, their parents, researchers, and district- and state-level leadership. The goals of these task forces and committees are to provide stakeholder voice, research evidence, and policy recommendations.

In order to frame the argument for evaluating and reformulating the language redesignation policy framework, it is critical to look at the long-term educational outcomes for CLDs. Combining this rapidly growing population with decades of evidence of underachievement, policies must be critically examined and rebuilt. The “behavior of a system is its performance over time—its growth, stagnation, decline, oscillation, randomness, or evolution” (Meadows, 2008, p. 88). The accumulation of events within this system emerges as a dynamic pattern of behavior, one of general overall stagnation. Some CLD language redesignation policies employ high standards while others do not; tremendous variability exists (Williams, 2014; Wixom, 2015), leading to long-term variable outcomes. It is clear that the language redesignation policies built for culturally and linguistically diverse students have failed for long periods of time, are currently failing, and will continue to fail if no significant action is taken. While there is no single model that will improve the academic success of all CLDs, an objective and statistically-supported model is a step in the right direction. Additionally, this model needs feedback loops for its refinement and ability to serve all culturally and linguistically diverse students. Related to policy design, there must be monitoring and

refinement systems built in that acknowledge the current state and success of the system, and adapt accordingly (Meadows, 2008). A primary outcome of applying systems theory to the language redesignation process is the identification of the lack of theoretical support in the form of educational research.

Second language acquisition. Language programming, testing, and redesignation policies for CLDs are inconsistent with second language acquisition research. Structured English immersion (SEI) and transitional bilingual education (TBE) programs provide language support for one to three years, well short of the five to seven recommended to adequately acquire a second language (Hakuta, Butler, & Witt, 2000; Thomas & Collier, 2002). While CLDs can develop basic conversational skills in a relatively short time after being immersed in an L2 environment, they need considerably more time to develop academic language in their L2 (Cummins, 1981; Hakuta, Butler, & Witt, 2000). Lastly, students' L1 is rarely used a resource in the teaching of L2 despite the fact that second language acquisition is encoded in the students native language (Cummins, 2014). The lack of theoretical and evidential underpinnings could be considered significant contributors to the achievement gap between CLDs and their non-CLD counterparts. Deficit-based thinking, in the form of disregard for research evidence and best practice, permeates CLD policy and has manifested itself in the groups' overall poor achievement trends (Lillie, 2015). To address this issue, a theoretical framework is applied to the present analysis.

Developmental interdependence hypothesis. In order to become literate in their second language, culturally and linguistically diverse students must sufficiently develop

their native language (Cummins, 1979; 1981, 1984). Capabilities from CLDs' L1 such as phonemic awareness, syntax, and morphology allow the student to transfer these skills to learning the L2. Several researchers have documented the strong correlation between L1 and L2 literacy achievement (Gottardo, 2002; Laija-Rodríguez, Ochoa, & Parker, 2006; Yamashita, 2002). Thus, examining the contributions of CLDs' initial L1 literacy skills will hypothetically contribute significant variance to their longitudinal L2 literacy achievement. Cummins' (1979) developmental interdependence hypothesis is cited as the foundational theoretical framework to address second language acquisition and English language proficiency. Cummins highlights linguistic, socio-cultural and school program factors as all contributing to a CLD's ability to acquire a second language. The complex interplay between such factors as a CLD's innate language ability, home environment, and school programming and resources combine to determine their ability to acquire English.

The developmental interdependence hypothesis theorizes that the level of second language (L2) competence is a function of the level of competence the CLD student has developed in L1 at the time when extensive exposure to L2 begins (L1 development places a limit on L2 development). In the present analysis, kindergarten native language literacy proficiency is examined as this is a proxy for when extensive exposure to English began. "The initially high level of L1 development makes possible the development of similar levels of competence in L2" (Cummins, 1979, p.233). In situations where the L1 is underdeveloped, a limiting factor on developing the L2 is established, leading to impoverished achievement. This emphasizes the importance of maintaining and valuing

the CLD's native language. Applied to instruction, teachers must be afforded time and resources to appropriately develop CLDs' vocabulary, language structure, conceptual knowledge, and fluency in their L1 before rushing to instruct in the L2. For language redesignation purposes, this hypothesis suggests that educators and other decision makers should have a strong understanding of the CLD's native language history and proficiency before redesignation. More specifically, if native language literacy skills account for a significant amount of variance in long-term achievement, it should be utilized as a significant factor in redesignation decisions.

Basic interpersonal communication skills. Cummins (1981) discusses the difference between two fundamental aspects of a CLD acquiring and using their L2. Basic interpersonal communication skills (BICS) are the informal communication skills needed in everyday conversation and are generally developed at a much faster rate, often times within two years of initial L2 exposure (Cummins, 2008). Educators must be aware of BICS as it can be misinterpreted for a CLD's level of academic English fluency (Lucas, Villegas, & Freedson-Gonzalez, 2008), and lead to overestimates of a CLD's English language proficiency. These misinterpretations can potentially result in CLDs who are prematurely redesignated into mainstream English classrooms with insufficient academic English skills.

Cognitive academic language proficiency. Cognitive academic language proficiency skills (CALP) refers to the language a CLD must acquire to be successful in academic situations and the aspects of language proficiency which are closely related to the development of literacy skills in L1 and L2 (Cummins, 1980). Additionally, CALP

refers to a student's ability to "understand and express, in both oral and written modes, concepts and ideas that are relevant to success in school" (Cummins, 2008, p. 108).

CALP takes much longer to develop than BICS; five to seven years has been suggested (Collier & Thomas, 1989; Cummins, 1981). Developing CALP is the primary requirement proposed for a CLD to be redesignated; without these skills, CLDs have difficulty accessing content in English and can struggle academically (Lucas, Villegas, Freedson-Gonzalez, 2008).

Chapter Three

Methodology

In the present study, the researcher employs a multiple regression methodology to predict fifth grade standardized literacy achievement based on a series of predictor variables: prior English language proficiency, prior standardized English literacy proficiency, native language proficiency in kindergarten, and language redesignation status. The resulting predictive models will highlight the variance explained by each predictor and lend evidence to whether language proficiency redesignation status significantly predicts longitudinal literacy achievement (the first research question) and whether native language literacy proficiency at kindergarten can as well (the second research question). Answers to these questions will inform language redesignation policies and practices by either demonstrating variability in culturally and linguistically diverse students (CLD) achievement or confirming them as effective, reliable, and valid. The research questions are provided below:

1. Can fifth grade CLDs' standardized literacy achievement be significantly predicted from prior English language proficiency, prior standardized English literacy achievement, and current language proficiency redesignation status (exited or receiving language support services)?

- b. How much unique variance in standardized literacy achievement is explained by each of the predictor variables?
 2. a. Can fifth grade CLDs' standardized literacy achievement be significantly predicted from native language literacy proficiency in kindergarten, prior English language proficiency, and prior standardized English literacy achievement?
 - b. How much unique variance in standardized literacy achievement explained by each of the predictor variables?

Conceptual Framework

For analysis of research question one, the language redesignation process will be investigated for its contribution to long-term achievement in addition to English language proficiency and standardized English literacy achievement. As highlighted in the introduction, there is a strong need to study the language redesignation process and its contribution to CLDs' long-term achievement. Building on the prior research of Laija-Rodriguez, Ochoa, and Parker (2006), this dissertation will examine the unique variance explained by CLDs' language redesignation status (question 1) and native language proficiency (question 2) as it impacts their long-term literacy achievement. Generally speaking, CLDs who have been redesignated in fifth grade should score higher than their counterparts still receiving services. Thus, a positive correlation should exist between language proficiency redesignation status and fifth grade literacy achievement. Also, redesignation status should be a significant predictor of fifth grade literacy achievement,

as the practice of redesignation is applied to all CLDs and holds tremendous accountability and implications. When a CLD is redesignated as fully English proficient (r-FEP), their language support services are systematically removed and they are expected to reach proficiency on English language assessments in all content areas. If r-FEP students are scoring proficiently, then language redesignation process are effective. The primary goal of research question one is to ascertain the unique variance explained by the language proficiency redesignation factor; this will provide direct evidence of how effective and valid these designation decisions are and potentially identify their variable nature as leading to unpredictable outcomes.

The second research question regarding the unique contribution of culturally and linguistically diverse students' native language proficiency tests Cummins' (1979) developmental interdependence hypotheses. To do so, native language literacy skills are presented in the regression model as an initial literacy benchmark. Combined with assessing CLDs' longitudinal English literacy achievement, the researcher is attempting to determine the total variance explained by this variable to support or refute Cummins' hypotheses. If a large amount of variance is explained by the L1, there is direct support for the developmental interdependence hypothesis. If a negligible amount of variance is explained by the L1, then this hypothesis is not supported. These answers will provide evidence as to whether native language proficiency should be included in language redesignation policy and practice. Outcomes from this study could lead to enhanced policy reform concerning language redesignation status decisions as empirical support

will be provided through multiple regression models from a large sample of culturally and linguistically diverse students.

Research Design

These non-experimental, longitudinal dataset analyses examine the relationships between ELP scores, standardized English literacy achievement, language proficiency redesignation status, and native language literacy proficiency for a cohort of CLDs in third through fifth grade. The first multiple regression will utilize prior English language proficiency, prior standardized English literacy achievement and fifth grade language proficiency redesignation status, with fifth grade literacy achievement data as the dependent variable in order to create a predictive model of longitudinal literacy achievement. The second regression will repeat this process substituting native language proficiency at the end of kindergarten for fifth grade language proficiency redesignation status. Multiple regression analyses have been applied broadly to hypotheses in educational research (Cohen, Cohen, West, & Aiken, 2003) and serve as the primary methodology for this dissertation. To make inferences, this method utilizes statistical estimation by means of deducing the index of fit, R^2 . This allows the researcher to infer how much variance is explained by the resulting model, an indicator of its explanatory power (Huberty, 2003). Utilizing multiple regression methodologies to make recommendations for intervention (in this case language redesignation policies and practices), the researcher's primary interest is explanation (Keith, 2015). By explaining language proficiency redesignation outcomes well, the multiple regression model will thus generally predict outcomes accurately. Hierarchical multiple regression is also

employed to ascertain the unique contribution to the variance of each independent variable, with time precedence and presumed causal ordering the method for determining order of entry (Keith, 2015). Models resulting from the analyses will inform district and state leaders, educators, and policymakers of an objective and systematic approach to the CLD language redesignation process, one that is longitudinally linked to standardized literacy achievement data. By determining the most significant contributors of variance to literacy achievement, research-based support can be applied to the language redesignation process in hopes of positively impacting CLD achievement outcomes.

Instrumentation

ACCESS for ELLs. Assessing Comprehension and Communication in English State-to-State for English Language Learners (*ACCESS for ELLs*) is a large-scale, standards-based, and criterion-referenced English language proficiency test administered in the United States annually to more than 840,000 culturally and linguistically diverse students (CLDs) across 35 states plus the District of Columbia in K-12 classrooms (Fox & Fairbairn, 2011; World Class Instructional Design and Assessment, 2013).

Development. WiDA began development of *ACCESS* in 2003 and continued developing standards, piloting and field testing from 2003 through 2005 with annual validation processes conducted (Bauman, et al., 2007). The theoretical framework for this measurement is based on Cummins (1979) developmental interdependence hypothesis, and the second language acquisition research of Lindholm-Leary (2001) and Collier and Thomas (2002).

Validity. Criterion-related validity was established by correlating *ACCESS* with existing ELP measurements from the Pre-NCLB era (*Language Assessment Scales-LAS*, *IDEA Proficiency Test (IPT)*, *Language Proficiency Test Series (LPTS)*, and the *Revised Maculaitis II (MAC II)*). Correlations between *ACCESS* and these existing instruments revealed moderate to high correlations, ranging from .468 to .765, with a sample size of 4,985 K-12 students (Bauman, et al., 2007). To test content-related validity, the researchers examined whether the items embodied the five proficiency levels defined by the standards and administered the field test to 6,500 students in grades one through twelve. Items were vertically scaled after field testing, misfit items were deleted, and average item difficulties were calculated, demonstrating alignment between the standards and test items (Bauman, et al., 2007). These validation phases have been conducted on an annual basis since the inception of the measurement.

Reliability. To demonstrate the reliability of the overall composite score, stratified Cronbach alpha coefficients are as follows: kindergarten = .930, grades 1-2 = .949, grades 3-5 = .941, grades 6-8 = .933, and grades 9-12 = .936. These high reliabilities demonstrate that the overall composite score is reliable. Although high reliabilities alone are insufficient; improvements in validity are critical; through establishing criterion-related validity with post-NCLB ELP assessments and aligning standards with the new Common Core State Standards (CCSS), validity can be improved. Ensuring that proficient scores on *ACCESS* are linked to CLDs having long-term success in English is essential.

Scoring and classification. There are four distinct scores generated from *ACCESS*: overall/composite (all domains), oral language (listening and speaking), literacy (reading and writing), and comprehension (listening and reading). *ACCESS* scores range from one (entering) to six (reaching) with composite scores provided, as a weighted average across the four domains of listening (15%), speaking (15%), reading (35%), and writing (35%). Individual domain scores are also provided to give a comprehensive assessment of CLDs' English language proficiency. Primarily, language redesignation processes use the overall composite score for exiting CLDs (Bauman, et al., 2007; Williams, 2014), although more information can be gleaned by using the sub scores when making redesignation decisions. *ACCESS* has undergone thorough development, review, and support (Gottlieb & Kenyon, 2006; Kenyon, 2006; Kenyon, MacGregor, Jeong, Cho, & Louguit, 2006).

ACCESS for ELLs 2.0. Beginning in the 2015-2016 academic year, the WiDA consortium will be administering the new *ACCESS for ELLs 2.0* measurement. This online, annual summative assessment will replace the current paper-based *ACCESS for ELLs* for grades 1-12, although the paper-based test will remain available for districts that do not have the appropriate technology to administer the new test (World Class Instructional Design, 2014). *ACCESS for ELLs 2.0* will continue to assess CLDs in the areas of speaking, listening, reading, and writing and will aim to improve upon the communicative situations represented in academic contexts. Electronic scoring and data management are two features of the new assessment that will help districts collect and analyze data more efficiently. Using the original *ACCESS for ELLs* is a potential

limitation, however, results from this study will provide evidence of this measure's ability to account for variance in CLD student performance longitudinally, informing use of *ACCESS 2.0* in the future.

Fourth grade standardized English literacy achievement (LITERACY-4). In use from 1996-2012, this standards-based assessment was designed to measure student achievement in grades three through twelve in order to provide a comprehensive standardized measure for students in the areas of reading, math, social studies and science. LITERACY-4 was administered in English and Spanish; for the purpose of this study, only English tests will be utilized in analysis. This allows for examination of the linkages between CLD language redesignation status and success in their second language; while primary language measures can reveal substantial information about a CLD's content knowledge, success in English language acquisition and subsequent academic achievement are the primary focus. At the time of this writing, technical details of LITERACY-4 were unavailable to the researcher because of restrictive access.

Fifth grade standardized English literacy achievement (LITERACY-5). The Transitional State Assessment Program, in place beginning in the 2012-2013 academic year, was designed to measure student achievement in grades three through twelve as schools transition their curricula to reflect the new Common Core State Standards (CCSS). LITERACY-5 measures content areas of reading, writing, and math; science is no longer a LITERACY-5 content area (State Department of Education, 2014). LITERACY-5 is administered in English and Spanish; for the purposes of this study, only LITERACY-5 tests administered in English will be utilized in analyses.

Evaluación del Desarrollo de la Lectura (EDL2). As it is known in English, the Evaluation of Reading Development is a research-based, field-tested reading assessment developed by the educational curriculum manufacturer Pearson. This Spanish-language reading assessment measures accuracy, fluency, and comprehension to provide educators with detailed information on students' independent reading levels. The EDL2 was developed for use in bilingual, dual language, and English immersion classes. Scores for this assessment were collected in the spring of the 2008-2009 kindergarten year.

Data Collection and Participants

Data for these analyses were obtained from the Assessment, Research and Evaluation Department of a large, urban district in a Western state. This district enrolls over 90,000 students with 70% identified as receiving free/reduced lunch and 38% as culturally and linguistically diverse students. The ethnic breakdown for this district: 57% Hispanic, 22% White, 14% Black, 3% Asian, and 4% multiple others. Data were secured through a state-mandated application process; they are confidential and to be used only by the researcher. The dataset includes student-level data collected from 2008 through 2014 and consists of administrative records from the state education agency that oversees public K-12 schools. Longitudinal data files were constructed using student identifiers. Limitations include no information on parental education or income, mobility status, teacher-level or school-level data, students' generational status, or age. Free/reduced lunch is used as a proxy measure for socioeconomic status (SES). Although this method has been labeled as a poor measure of SES (Harwell & LeBeau, 2010), it is still very common in educational research and was the only demographic measure of students

provided to the researcher from the Assessment and Research Evaluation Department supplying the dataset.

The examined district has a very unique history with regards to educating students who are non-native English speakers. The “ordinance” (pseudonym to protect identity) started in the early 1980’s as a result of a discrimination suit on behalf of CLDs against the district, claiming inadequate services were being provided. This ordinance has been revised multiple times since its inception and requires the district to meet several guidelines. Primarily, adequate instructional supports must be provided to CLDs, translation and interpretation services be provided to engage families and the district must demonstrate that CLDs are making progress towards acquiring English while also proficiently learning content. This ordinance was also designed to provide significant voice to parents in order to empower them in the selection of their child’s language instructional programming. However, parents may not always be the most informed decision makers in this process as they have demonstrated mixed feelings when justifying their decisions (Poppen, 2013; Robles, 2014). For example, several parents have opted their students out of native language support in preference of English immersion whereas others would like their child to preserve their native language towards becoming bilingual. The newest iteration of the ordinance requires the district to provide enhanced guidance to parents during this process. The examined district stands apart from many more ‘typical’ districts who are not bound by such an ordinance and thus have lesser standards and accountability. This may be considered a limitation to the presented

analyses, however, examining a district with high standards and still demonstrating evidence of implementation issues and varying outcomes is even more cause for concern.

The overall sample for these analyses was 1,696 students enrolled in prekindergarten through fifth grade. The average age of students in the sample was determined by the year they were enrolled in kindergarten (2008-2009). Emphasizing state statute on mandatory age at kindergarten entrance of five years old, this cohort of students ranged from five to six years old at kindergarten entrance and between 11 and 12 years old at the end of fifth grade. As the original sample represents all CLDs in grades kindergarten through fifth grade in the district, 35 language backgrounds are represented. Table 2 provides a summary of the languages spoken by students in the district. Average years in district is 6.3 years (SD = 1.04), 93.5% students qualified for free/reduced lunch status, 48.4% were female, and 81.1% of students were still designated as CLDs at the end of fifth grade (still receiving language support services).

Table 2

Native Languages Spoken by Students in Total Sample (n = 1,696)

Language	Number of Students	Percent Total
Spanish	1,558	91.9
Vietnamese	25	1.5
Arabic	18	1.1
32 Languages	93	5.5

To be included in the first sample addressing research question one, all students must have spoken Spanish as their native language, had language designation status data for the end of fifth grade, qualified for free- or reduced-lunch, had English language

proficiency and English literacy achievement data for three consecutive years, and had no missing data. After applying these filters, 794 children were omitted from the original sample, resulting in an initial sample size of 902. Descriptives and correlational statistics for the first sample are provided in Table 3.

To be included in the second sample, all students must have spoken Spanish as their native language, had Spanish language proficiency at kindergarten data, qualified for free- or reduced-lunch, had English language proficiency and English literacy achievement data for three consecutive years, and had no missing data. After applying these filters, 382 students met the conditions for inclusion from the initial sample. Descriptive and correlational statistics for the second sample are provided in Table 5.

Chapter 4

Results

Research Question One

This dissertation is divided into two primary research questions, the first of which investigates the language proficiency redesignation process and its predictive ability of longitudinal literacy achievement of culturally and linguistically diverse students (CLDs). More specifically, it looks at a large dataset of CLDs ($n = 902$) to determine if a multiple regression model can be mapped onto the data, and if so, to determine the implications of such a model. This model may also provide predictive ability for determining long-term standardized English literacy achievement based on a few variables, which could prove useful for those developing and implementing language redesignation policies. The goal of this research, however, is to ascertain whether a significant model exists and, if so, how much of the variation in long-term achievement can be explained by each of the independent variables. Specifically, research question one asks: Can the standardized literacy achievement of CLD students at the end of the fifth grade academic year be reliably predicted from prior English language proficiency, prior standardized English literacy achievement, and fifth grade language redesignation status (either exited or receiving language support services)? If so, how much unique variance in standardized literacy achievement can be explained by each of the predictor variables? Figure 1,

depicting the relationship among the variables for research question one, is presented below.

Exploratory Analysis and Assumptions Testing

All statistical analyses were performed using the IBM Statistical Package for the Social Sciences (SPSS) version 23. This statistical software package is commonly utilized for descriptive, correlational and multiple regression analyses. In order to simplify the regression models and to approach singularity, two continuous variables, ACCESS-4 (a measure of prior English language proficiency), and LITERACY-4 (a measure of prior standardized English literacy achievement), were selected as predictors, in addition to fifth grade language proficiency redesignation status, a dichotomous variable (either exited from or still receiving language support services). To better understand the temporal relationship of the LITERACY-4 and ACCESS-4 with language proficiency redesignation status in fifth grade, a logistic regression was conducted to determine whether the presence of remaining a CLD (not being redesignated/exited) in fifth grade could be predicted from fourth grade ACCESS and LITERACY-4, further information is provided in the results section.

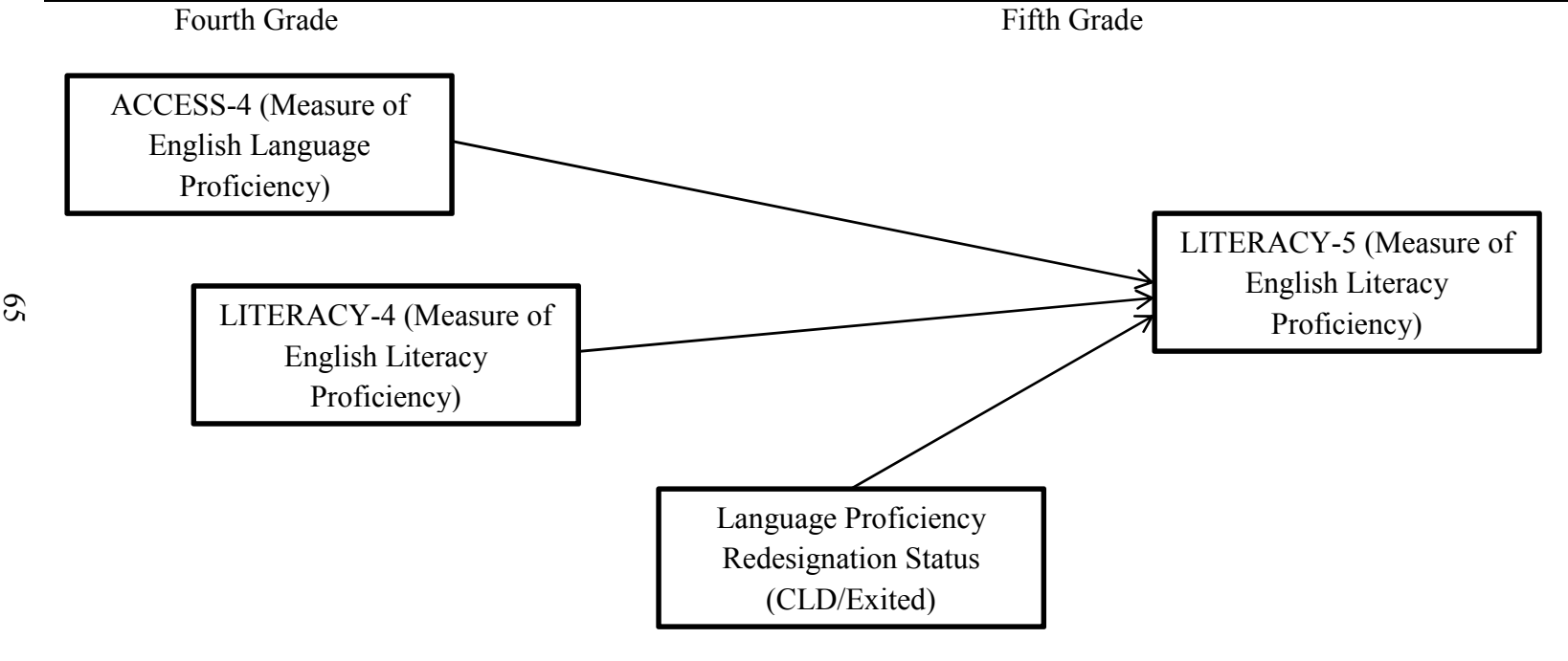
Other combinations of predictors were considered, however the aforementioned predictors were selected because of their accessibility and temporal relationship to each other (Keith, 2015). Additionally, their temporal relationship is clearly defined; as language designation status data is from fifth grade, it is possible that fourth grade English language proficiency (ACCESS-4) and standardized English literacy achievement (LITERACY-4) were factors in the designation decision (as the results take

time to submit, process, and return to the school). While this can be considered a potential limitation to the analyses, it is the most practical and defensible approach to the regression analyses. Culturally and linguistically diverse students' years enrolled in district was explored for inclusion in the regression model, but resulted in an insignificant predictor and demonstrated high multicollinearity, thus it was omitted from analyses. Socioeconomic status was also explored for inclusion in the regression model, but with only 14 students that did not qualify for free/reduced lunch, this group was omitted because of their small sample size (1.6%). Gender effects were not explored as the goal of the presented research is to conduct analyses on the assessment factors utilized in determining language proficiency redesignation status and linking these factors to longitudinal achievement. Motamedi (2015) found that females generally reached exited status faster than males, however this study did not tie these findings to longitudinal outcomes. Future research should examine the gender effect of language proficiency redesignation practices on longitudinal achievement. Prior to applying multiple regression statistics to the sample, the dataset was tested for the assumptions of regression: independence, linearity, homoscedasticity, multicollinearity and normality (Tabachnick & Fidell, 2013). Outliers and influential points were also investigated.

Independence. Independence for the regression model was determined by a Durbin-Watson statistic of 2.103 (Appendix A.1), indicating non-autocorrelation, that errors are not associated based on the sequence of cases, thus demonstrating independence (Wesolowsky, 1976). As this data may represent clusters of students in classes within schools, data observations may not be entirely independent. To address this

Figure 2

Predictive and Temporal Relationships among Predictor and Outcome Variables for Research Question One



*Moderator analyses were conducted for all predictor variables

limitation, future research should attempt to corroborate these findings using hierarchical linear modeling (HLM) or structural equation modeling (SEM).

Linearity. Violating the assumption of linearity leads to all estimates resulting from regression, (coefficients, standard errors, tests of statistical significance) to be biased (Keith, 2015). To test linearity, graphical representations of the data were examined. Specifically, scatterplots depicting all combinations of variables was analyzed to assess if relationships were linear (see Appendix A.2). As can be seen from these plots, all variables appear to be linear in nature. Scatterplots depicting CLD/exited proficiencies also present linear relationships, albeit for dichotomous variables.

Homoscedasticity. Violation of homoscedasticity affects standard errors and statistical significance, however regression is fairly robust to its violation (Darlington, 1990; Keith, 2015). To test the assumption of homoscedasticity, that the variance around the regression line is the same for all values of the predictor variables, the scatterplot figure depicting unstandardized predicted values against studentized residuals from Appendix A.3 was examined. Specifically, this figure was assessed in that residuals do not differ from a rectangular shape (Kelley & Bolin, 2013). Levene's statistic for language proficiency redesignation status predicting fifth grade standardized literacy achievement (LITERACY-5) was 11.976, $p < .001$. This result rejects the null hypothesis that the variance is homogenous. Although residuals are spread out more at lower levels of predicted values, the difference is negligible; visual inspection of this figure indicates there are no serious violations of homoscedasticity.

Multicollinearity. Correlations were examined to test multicollinearity, defined as when two or more independent variables are highly correlated with each other (Appendix A.4). Only one correlation was larger than 0.7 (LITERACY-4 x LITERACY-5, $r = .80$), which can be cause for concern. However, as the measure of prior standardized English literacy proficiency is critical for this analysis, it was retained. Researchers have also pointed to cutoffs of 0.9 or less, which satisfies the observation (Tabachnick & Fidell, 2013). Variance proportions were also examined to test the assumption of multicollinearity. All three dimensions (rows) have only one variance proportion greater than .50, which also demonstrates no evidence of multicollinearity. Tolerance levels for CLD/Exited, ACCESS-4, and LITERACY-4 are .75, .60, and .51 respectively; these are well below the threshold of .90. Variance inflation factors (VIFs) indicate the magnitude of the inflation in the standard errors associated with a particular beta weight due to multicollinearity; generally low VIFs are desired, indicating low variance inflation (Keith, 2015). Variance inflation factors for the three predictor variables are 1.33, 1.67, and 1.95 for CLD/Exited, ACCESS-4, and LITERACY-4 respectively. These values indicate low variance inflation and provide no evidence of multicollinearity.

Normality. To test the assumption of normality, graphical representations of the data were analyzed to determine if they fit under the normal curve; these images are presented in Appendix A.5. Upon inspection, all variables fit well under the normal curve. The language proficiency measure (ACCESS-4) and the standardized English literacy achievement measures (LITERACY-4 and LITERACY-5) appear to fall under

the normal distribution. The normal percentile-percentile plot (P-P Plot) of regression standardized residuals is highly linear as well, as these points do not differ in a trivial way from the equiangular line (Kelley & Bolin, 2013).

Outliers. Students' scores identified as falling outside of three standard deviations from the mean on the continuous variables (ACCESS-4, LITERACY-4, and LITERACY-5) were omitted from analysis, as these were considered to be significant outliers (Tabachnick & Fidell, 2013). This resulted in the deletion of 23 cases. Next, cases identified as having standardized residuals falling outside of three standard deviations were omitted from analysis; this resulted in the deletion of six cases. Further, the Mahalanobis distance was examined for values greater than the critical chi-square value (3, 879) at $p < .001$ of 16.266. This resulted in no cases being dropped from analysis, as the maximum value was 13.43. No Cook's distances exceeded the critical value of one (maximum observed value = .03), and no centered leverage values were identified for removal. Overall, 29 cases were omitted from the final sample for research question one, resulting in a sample of 873 students.

Descriptive Statistics

Means and standard deviations for sample one are presented in Table 3. From this table, standard deviations on the continuous measures of LITERACY-4 and LITERACY-5 increase from fourth to fifth grade, as students are becoming increasingly variable in their standardized English literacy achievement (Gándara & Contreras, 2009; Lakin & Young, 2013; Solano-Flores & Li, 2013). Results from LITERACY-4 for this sample are representative of state data at large; non-English proficient and limited-English proficient

students scored well below their non-CLD peers with about 44% of CLDs scoring proficient on LITERACY-4 compared to 66% of non-CLD students (State Department of Education, 2013). This is further evidence of the achievement gap within this particular district, and demonstrates the sample's representativeness. Less variation in students' scores exists on the measure of English language proficiency (ACCESS-4) when compared to the two state standardized achievement tests. Seventy-seven percent (n = 670) of students were still receiving language support services compared with 23% (n = 203) students having already been exited. This dichotomous variable will later be examined for its moderating effect on the relationships between the measures of English language proficiency (ACCESS-4) and prior standardized English literacy achievement (LITERACY-4) with fifth grade standardized English literacy achievement (LITERACY-5).

An interesting finding exists in the scatterplot depicting CLD/Exited status against LITERACY-5; there is significant overlap in the standardized English literacy achievement of students, regardless of their language designation status. Specifically, the range of scores on LITERACY-5 (the outcome variable of interest) for *exited* students is about 509 to 696 and the range for *CLD* students is about 407 to 677. Additionally, score ranges on ACCESS-4 for students receiving language support services (CLD) are 296-394, while the score range for exited students is 321-399. The highest-scoring CLD and exited student on ACCESS-4 were only five points apart, which is clearly a cause for concern. Score ranges for LITERACY-4 also reveal a similar pattern; ranges for LITERACY-4 for *CLD* students are 431-649 and *exited* students are 518-650, this time

only a one-point difference between the highest CLD and exited student. After running an independent-samples t-test for LITERACY-5 (the main outcome variable of interest), exited and CLD groups were confirmed to be statistically significantly different. Specifically, exited students (former CLDs) had significantly higher LITERACY-5 scores (606.55 ± 31.84) compared to CLD students (557.9 ± 44.56), $t(877) = 14.512, p < .001$. While this t-test indicates that these groups are significantly different, the overlap in scores and proximity of the ranges is a cause for concern in that outcomes for exited and CLD students are somewhat variable, especially at the higher end of scoring. While variation is much higher for CLD students, one would expect those students who have been exited to be scoring much higher on average than those still receiving language support services. A possible interpretation is that the language redesignation practice in this district is producing variable, overlapping outcomes when comparing CLD to exited students; this outcome will be explored further in the discussion section.

Correlational Statistics

Correlational statistics are also presented in Table 3. Pearson's product-moment correlational data is presented as the achievement (LITERACY-4 and LITERACY-5) and English language proficiency (ACCESS-4) measures all meet the assumptions for using this type of statistic, and the data met the assumptions for regression. Point-biserial correlations are reported for language proficiency redesignation as this is a dichotomous variable. As can be seen from the correlational data, several significant patterns emerge. Primarily, language proficiency redesignation status (CLD/Exited) is significantly correlated (point-biserial) with all continuous variables (ACCESS-4, $r_{pb} = -.35$,

LITERACY-4, $r_{pb} = -.43$, and LITERACY-5, $r_{pb} = -.44$) indicating that students still receiving language support services (CLDs) are scoring lower than students that have been exited; as is to be predicted. However, these moderate correlations do not reveal the significant overlap in achievement variables. As expected, measures of standardized English literacy achievement in fourth and fifth grade are strongly correlated at .80. The measure of English language proficiency, ACCESS-4, was also highly correlated with the measures of standardized English literacy achievement.

Table 3
Descriptive Statistics, Correlational, and Multiple Regression Data for Sample 1
(n = 873)

Variable	CLD/Exited	Pearson's r^*			β
		ACCESS-4	LIT.-4	LIT.-5	
LIT.-4				0.80	0.65
ACCESS-4			0.63	0.62	0.19
EL/Exited***		-0.35	-0.43	-0.44	-0.06**
Mean	0.77	352.85	544.76	569.42	
S.D.	0.42	14.15	39.33	46.17	
					$R^2 = .66$

*All correlations and beta coefficients are significant at $p < .001$ level

**Beta for CLD/Exit is significant at $p < .05$ level

*** CLD/Exit is dichotomous and represents a point-biserial correlation

Multiple Regression Analyses

Moderator analysis. A moderator analysis was conducted to determine if there was a significant effect of language proficiency redesignation status (CLD/Exited) on the relationships between ACCESS-4 and LITERACY-5 as well as LITERACY-4 and LITERACY-5. This type of analysis is also known as a moderated multiple regression or MMR (Aguinis, 2004). In this particular case, the researcher is interested in knowing if

status as a CLD or exited student differentially impacts the relationship of English language proficiency (ACCESS-4) and prior standardized English literacy achievement (LITERACY-4) on the outcome of interest, standardized English literacy achievement (LITERACY-5). Statistically significant findings would reveal that CLD and exited students' scores on these measures are impacted by their language proficiency redesignation status, an interesting finding for education policy and one that would possibly support current redesignation practices. First, a moderator analysis of the effect of language proficiency redesignation status on the relationship between ACCESS-4 and LITERACY-5 was explored, followed by the effect of redesignation status on the relationship between LITERACY-4 and LITERACY-5.

Effect of redesignation status on relationship between ACCESS-4 and LITERACY-5. A hierarchical multiple regression was run to determine the increase in variance explained by the inclusion of an interaction term between language proficiency redesignation status (CLD/Exited) and the measure of English language proficiency (ACCESS-4). Language proficiency redesignation status moderated the effect of ACCESS-4 on LITERACY-5, as demonstrated by a statistically significant, yet trivial, increase in total variance explained of 1.5%, $F(1, 869) = 24.486, p < .001$. The coefficient of the interaction term ($b = -.16, SE = .22$) was also statistically significant ($p < .001$), indicating that language proficiency redesignation status moderated the relationship between standardized literacy achievement and English language proficiency.

Effect of redesignation status on relationship between LITERACY-4 and LITERACY-5. A hierarchical multiple regression was run to assess the increase in variation explained by the addition of an interaction term between prior standardized English literacy achievement (CSAP-4) and language proficiency redesignation status (CLD/Exited) to a main effects model. Language proficiency redesignation status did not moderate the effect of prior standardized English literacy achievement (in fourth grade) on subsequent standardized English literacy achievement (in fifth grade), as evidenced by an increase in total variance explained of 0.01%, which was not statistically significant $F(1, 869) = 1.264, p = .261$. As there is no significant moderation effect of language proficiency redesignation status on the relationship between LITERACY-4 and LITERACY-5, this interaction term will not be used in the multiple regression equation (Hayes, 2013).

Effect of LITERACY-4 on relationship between ACCESS-4 and LITERACY-5. A hierarchical multiple regression was run to determine the increase in variance explained by the inclusion of an interaction term between prior standardized English literacy achievement (LITERACY-4) and the measure of English language proficiency (ACCESS-4). This interaction term had a statistically significant, yet trivial, impact on the dependent variable, LITERACY-5, as demonstrated by an increase in total variance explained of 0.5%, $F(1, 869) = 9.982, p = .002$. The coefficient of the interaction term ($b = -.005, SE = .002$) was also statistically significant ($p = .002$), indicating that the interaction term combining LITERACY-4 with ACCESS-4 had a significant but trivial relationship with the dependent variable, fifth grade standardized English literacy

achievement. However, the increase in explained variance of 0.5% did not justify its inclusion in the overall multiple regression equation for subsequent analysis.

Multiple regression analysis. Multiple regression analysis was used to test if fifth grade CLD/Exited status (receiving language support services or not), prior English language proficiency (ACCESS-4), and prior standardized English literacy achievement (LITERACY-4) significantly predicted culturally and linguistically diverse students' fifth grade standardized English literacy achievement (LITERACY-5). Results of the regression analysis indicated that the three-predictor model explained 66% of the variance ($R^2 = .66$, $F(3,875) = 525.2$, $p < .001$). Additionally, CLD/Exited language designation was a statistically significant predictor of fifth grade standardized English literacy achievement ($\beta = -.06$, $p < .05$), as were both ACCESS-4 ($\beta = .19$, $p < .001$) and LITERACY-4 ($\beta = .65$, $p < .001$). Results from ACCESS aligned with previous research (Mahon, 2006) and thus provided a rationale for its inclusion in language redesignation policies and practices. Standardized English literacy achievement, currently employed in only six states' redesignation practices (Wixom, 2015), was also a significant predictor of future success and should be considered in redesignation policy and practice. Language redesignation status was more concerning; while significant, this variable's small beta coefficient ($\beta = -.06$) is cause for alarm. Interpreting this coefficient means that a student receiving language support services (a CLD student) is only negatively impacted at a level of -0.06 multiplied to their fifth grade standardized English literacy achievement score. More specifically, if language redesignation is not a strong predictor of subsequent achievement, what purpose does it serve? One would expect that an exited student would

score much better longitudinally than a CLD student still receiving language support services, but the data suggests otherwise. This low predictive ability must be further investigated. Post-hoc power analysis indicates that with three independent variables, an R^2 of .66, and with 873 participants, the sample is adequate and sufficient in size given the observed effect to support rejection of the null hypothesis (Faul, Erdfelder, Buchner, & Lang, 2009).

Results of the logistic regression predicting the dichotomous variable language proficiency redesignation status (CLD/Exited) indicated that the model was statistically significant $\chi^2(2) = 239.119, p < .001$. The model explained 36% (Nagelkerke R^2) of the variance in language proficiency redesignation status and correctly classified 81.1% of cases. Sensitivity was 93.9%, specificity was 38.7%, positive predictive value was 83.53% and negative predictive value was 65.83%. Both predictor variables were statistically significant. These results reveal that both prior standardized English literacy achievement (LITERACY-4) and prior English language proficiency (ACCESS-4) were significant in predicting subsequent language proficiency redesignation status. This analysis was performed to better understand the relationship between the predictor variables in the overall multiple regression equation-ACCESS-4, LITERACY-4, and fifth grade language proficiency redesignation status in predicting fifth grade standardized English literacy achievement.

In order to test the unique variance explained by each of the predictor variables, a hierarchical multiple regression was performed. ACCESS-4 was entered as block/step one, LITERACY-4 as block/step two, and CLD/Exited status as block/step three, all

predicting LITERACY-5. This order was selected as ACCESS-4 is generally administered mid-year while LITERACY-4 is administered at the end of the year, both for fourth grade students. CLD/Exited status data is from fifth grade, thus establishing a temporal sequence to the entry of data (Keith, 2015); no theoretical explanation is appropriate for this sequence. Results from this hierarchical multiple regression analysis are presented in Table 4. The measure of English language proficiency (ACCESS-4) explained 39% of the variance in fifth grade standardized English literacy achievement. This is to be expected, as this measure was designed to predict reading, writing, speaking, and listening proficiency in a culturally and linguistically diverse student's second language. This information also presents as evidence for the continued inclusion of ACCESS, or any other evidence-support measure of English language proficiency, in determining whether a CLD is ready for redesignation into mainstream English classes. As expected, the prior year's standardized English literacy achievement also explained a significant amount of variance at 28%; this confirms research on prior standardized achievement predicting current and future achievement (Hemmings, Grootenboer, & Kay, 2011). The inclusion of standardized achievement tests in determining language proficiency redesignation status is useful only as they can shed light on future achievement; there are numerous aforementioned negative implications and effects of using standardized achievement tests in such important decisions (Abedi, 2008; Linquanti, 2001). However, by explaining 28% of the variance, this measure provides significant insight into the future academic achievement of CLD students in English, the outcome variable of interest.

Finally, based on the multiple regression model presented in Table 4, CLD/Exited status in fifth grade accounts for 0.2% of the variance in predicting fifth grade standardized English literacy achievement. When language proficiency redesignation status was entered as block/step one, it explained 19.3% of the variance, a significantly higher level of variance. This latter modeling would infer that language proficiency redesignation status is a significant predictor of standardized literacy achievement in English. However, entering redesignation status first into the hierarchical model is not theoretically supported, as it is the last variable administered on a temporal basis. This low predictive ability, as mentioned previously, will be discussed further in the discussion section.

Table 4

Results from hierarchical regression predicting fifth grade literacy achievement from ACCESS-4, LITERACY-4 and CLD/Exited status (n = 873)

Step	Measure	Unstandardized Coefficient		Standardized	<i>p</i>	<i>F</i>	<i>R</i> ²	ΔR^2
		B	SE	Coefficient β				
1	-	-	-	-	-	549.79	0.386	-
	Constant	-146.74	30.57	-	< 0.001	-	-	-
	ACCESS-4	2.03	0.09	0.62	< 0.001	-	-	-
2	-	-	-	-	-	849.96	0.661	0.275
	Constant	-87.78	22.84	-	< 0.001	-	-	-
	ACCESS-4	0.64	0.08	0.2	< 0.001	-	-	-
	LIT.-4	0.79	0.03	0.68	< 0.001	-	-	-
3	-	-	-	-	-	572.57	0.663	0.002
	Constant	-61.71	24.90	-	0.017	-	-	-
	ACCESS-4	0.63	0.08	0.19	< 0.001	-	-	-
	LIT.-4	0.76	0.03	0.65	< 0.001	-	-	-
	CLD/Exited	-6.41	2.48	-0.06	0.016	-	-	-

Research Question Two

Research question two follows research question one in terms of approach and semantics, but looks specifically at how native language proficiency contributes to long-term standardized English literacy achievement, and how it fits in a multiple regression model. Additionally, unique variance explained by each predictor variable was analyzed and discussed with a specific focus on how native language proficiency contributes and the implications of such findings. Specifically, research question two asks: can the standardized literacy achievement of fifth grade CLDs be significantly predicted from native language proficiency in kindergarten, prior English language proficiency, and prior standardized English literacy achievement? If so, how much unique variance in standardized literacy achievement is explained by each of the predictor variables? Figure 2 is presented on the following page to depict the temporal and predictive relationships among all variables utilized in research question two.

Exploratory Analysis and Assumptions Testing

Prior to applying multiple regression statistics to the sample, it was tested against the assumptions of regression: independence, linearity, homoscedasticity, multicollinearity, and normality. Additionally, significant outliers and influential points were examined. To test each of these assumptions, several statistical analyses were conducted. Years in district was explored for inclusion in the regression model, but resulted in an insignificant predictor and demonstrated high multicollinearity; thus it was omitted from analysis. Socioeconomic status was also explored for inclusion in the regression model, but with only 14 students that did not qualify for free/reduced lunch,

these students were omitted because of their small sample size (1.6%). Gender effects were explored, but were considered irrelevant for inclusion in the regression model, as specifying gender is not a valid approach for this research. Future research could examine the unique gender differences in the contribution of native language proficiency to subsequent academic achievement.

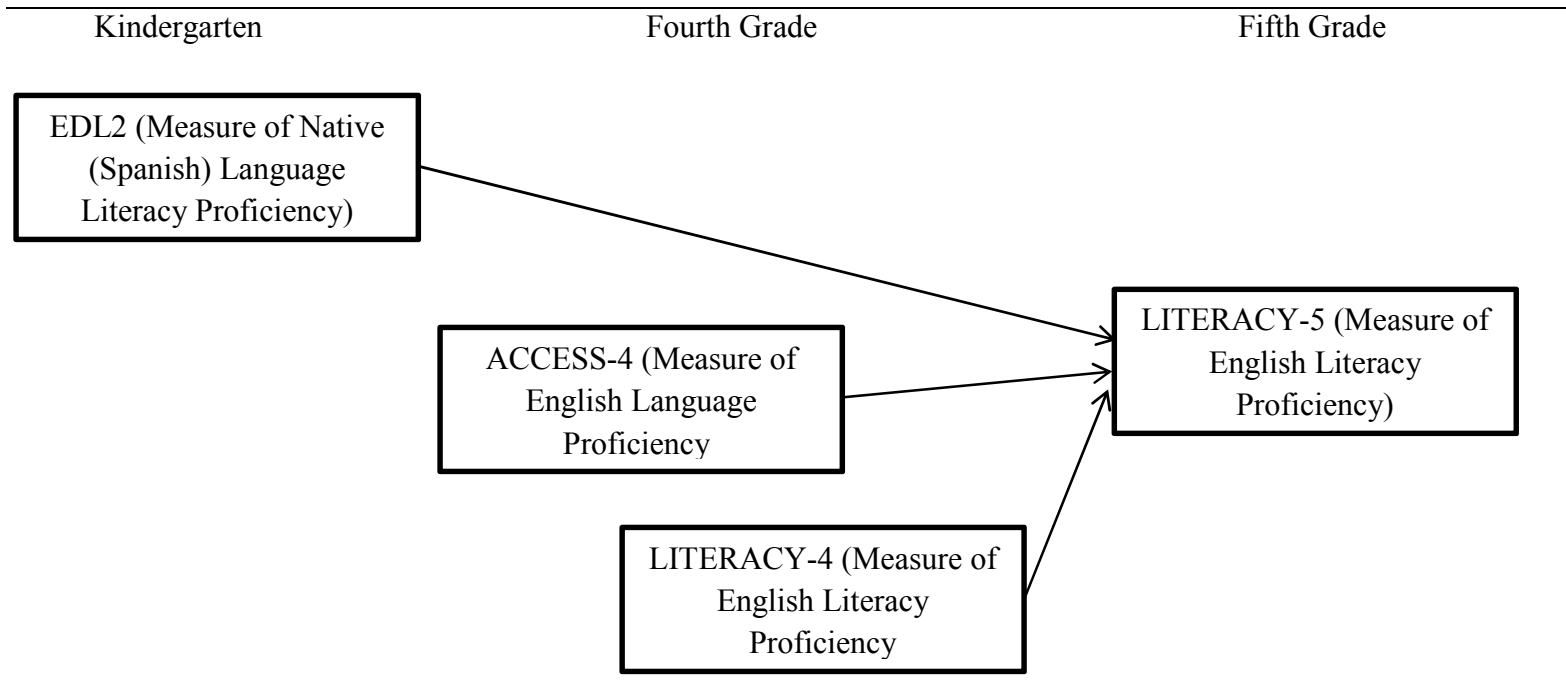
Independence. To test the first assumption of independence, regression analyses were conducted in order to allow for inspection of residuals. There was independence of residuals, determined by a Durbin-Watson statistic of 2.002 (Appendix B.1). This value, close to the desired level of 2, indicates non-autocorrelation and demonstrates independence (Wesolowsky, 1977); this information is displayed in Appendix B.1. As mentioned in the first research question, not addressing the clusters of data (students within classes within schools) is a significant limitation and could be addressed through a hierarchical linear modeling (HLM) approach.

Linearity. To test linearity, graphical representations of the data were examined. Scatterplots for all combinations of variables are presented in Appendix B.2. As can be seen from these plots, data are linear in nature. Positive linear correlations exist for all continuous variables (ACCESS-4, LITERACY-4, and LITERACY-5). Scatterplots depicting kindergarten EDL2 proficiencies also present linear relationships, albeit for categorical variables, which are not required to meet the same assumptions of linearity (Tabachnick & Fidell, 2013).

Homoscedasticity. To test the assumption of homoscedasticity, that the variance around the regression line is the same for all values of the predictor variables, a

Figure 3.

Predictive and Temporal Relationship among Predictor and Outcome Variables for Research Question Two



*Moderator analyses were conducted for all predictor variables

scatterplot plotting unstandardized predicted value against studentized residual was examined (Appendix B.3). As in research question one, plots were assessed to determine that residuals did not differ from a rectangular shape (Kelley & Bolin, 2013). A statistical test for homoscedasticity was conducted for the predictor variable kindergarten native language literacy proficiency (EDL2) on fifth grade standardized English literacy achievement (LITERACY-5). Levene's statistic was determined to be .800, which was not significant ($p = .45$). This result fails to reject the null hypothesis that the variance is homogenous, thus there is no violation of homoscedasticity.

Multicollinearity. Collinearity was assessed and results are presented in Appendix B.4. Tolerance levels for kindergarten EDL2, ACCESS-4, and LITERACY-4 are 0.89, 0.55, and .56 respectively; these are below the threshold of .90 (Tabachnick & Fidell, 2013). While the EDL2 tolerance level approaches the .90 cutoff, it must be recognized that this is categorical data with more chances for collinearity than the continuous data of ACCESS-4 and LITERACY-4. Variance inflation factors (VIFs) for the three predictor variables are 1.13, 1.83, and 1.79 for EDL2, ACCESS-4, and LITERACY-4 respectively. These values indicate low variance inflation due to multicollinearity (Tabachnick & Fidell, 2013). Lastly, variance proportions were examined for multicollinearity; Appendix B.4 also presents this data. Dimensions (rows) one through three each have only one variance proportion greater than .50, which provides no evidence of multicollinearity.

Normality. To test the assumption of normality, graphical representations of the data were analyzed to determine if they fit under the normal curve. Standardized residuals

for the language proficiency measure (ACCESS-4) and the standardized English literacy achievement measures (LITERACY-4 and LITERACY-5) all appear to fall under the normal curve (Appendix B.5). The normal percentile-percentile plot (P-P Plot) of regression standardized residuals is highly linear as well, as these points do not differ in a trivial way from the equiangular line (Kelley & Bolin, 2013).

Outliers. Students' scores identified as falling outside of three standard deviations from the mean on the scaled variables (ACCESS-4, LITERACY-4, and LITERACY-5) were omitted from analyses, as these were considered to be significant outliers, resulting in the deletion of nine cases. Further, the Mahalanobis distance was examined for values greater than the critical chi-square value (3, 369) at $p < .001$ of 16.27, resulting in one case being dropped from analysis (18.58). No Cook's distances exceeded the critical value of one, and no centered leverage values were identified for removal. Casewise diagnostics (Appendix 2.6) revealed that three cases had standardized residuals falling outside of three standard deviations, and were also omitted. Overall, thirteen cases were omitted from the final sample for research question two resulting in a sample of 369 students.

Descriptive Statistics

Means and standard deviations for sample two are presented in Table 5. From this table, standard deviations on measures of standardized English literacy achievement, LITERACY-4 and LITERACY-5 increase from fourth to fifth grade as students are becoming increasingly variable in their standardized English literacy achievement. On average, students scored slightly above grade level on their EDL2 proficiency at the end

of kindergarten; however, standard deviations indicate that there is great variability here as well. As seen from the sample in research question one, students in sample two are also representative of the CLD population at large in this state, scoring well below their non-CLD peers. In comparing group means, kindergarten students scoring above-grade level ($n = 158$) on the EDL2 had statistically significantly higher standardized English literacy achievement in fifth grade on the LITERACY-5 ($594.40 \pm 42.57, p < .001$) compared to kindergartners scoring below-grade level ($n = 91$) ($552.19 \pm 50.51, p < 0.01$) and those at-grade level ($n = 124$) ($567.21 \pm 46.01, p < .001$). This indicates that native language literacy proficiency in kindergarten is a significant factor in longitudinal standardized English literacy achievement and could be potentially included in language redesignation decisions.

Correlational Statistics

Correlational statistics are presented in Table 5. Pearson's product-moment correlation statistic was selected as the achievement and English language proficiency measures are continuous data; assumptions for this statistic were all satisfied during the assumptions testing for multiple regression analyses. Correlations for kindergarten EDL2 proficiency are represented by Spearman's rank-ordered correlation as the EDL2 is an ordinal variable (below-, at-, or above-grade level). As can be seen from the correlational data, several significant patterns emerge. Primarily, kindergarten EDL2 proficiency is moderately correlated with standardized English literacy achievement at fifth grade ($r_s = .36, p < .001$). This informs the possible inclusion of measures of native language proficiency to inform language redesignation practices, as a significant correlation

indicates that there is a latent factor of native language proficiency that is associated with second language literacy achievement (Cummins, 1979). Appendix B.6 is a figure that captures the relationship between EDL-2 status and subsequent achievement in fifth grade; it is clear from this figure that a positive linear relationship exists. Kindergarten EDL2 was also significantly correlated with English language proficiency in fourth grade (ACCESS-4, $r_s = .32, p < .001$) and standardized English literacy achievement (LITERACY-4, $r_s = .29, p < .001$). All correlations between measures of English language proficiency (ACCESS-4) and standardized English literacy achievement (LITERACY-4, $r = .66, p < .001$, and LITERACY-5, $r = .67, p < .001$) are significant; as these measures have been demonstrated to be highly correlated with each other in previous research (Parker, O'Dwyer, & Irwing, 2014). This correlational evidence also validates the inclusion of measures of English language proficiency and argues for the addition of measures of standardized English literacy achievement in the language redesignation process. However, caution must be used, as standardized English literacy achievement tests have been demonstrated to be unreliable and invalid for CLDs. At this current point in educational assessment, however, these are seen to be the best available measures. Additionally, long-term achievement in English is the outcome of interest, so including this measure provides insight into an EL's potential for achievement. The correlation between LITERACY-4 and LITERACY-5 is very strong ($r = .82, p < .001$) and was analyzed during assumptions testing for multicollinearity; researchers have pointed out that variables correlated at less than 0.9 are acceptable for inclusion (Tabachnick & Fidell, 2013).

Multiple Regression Analyses

Moderator analysis. A moderator analysis was conducted to determine if there is a significant effect of kindergarten native language literacy proficiency (EDL2) on the relationships between ACCESS-4 and LITERACY-5 as well as LITERACY-4 and LITERACY-5. This type of analysis is also known as a moderated multiple regression or MMR (Aguinis, 2004). In this particular case, the researcher is interested in knowing if scoring at- or above-grade level (versus below-grade level) in kindergarten native language proficiency differentially impacts the relationship of their English language proficiency (ACCESS-4) and prior standardized English literacy achievement (LITERACY-4) on the outcome of interest, standardized English literacy achievement (LITERACY-5). Statistically significant findings would reveal that CLD students' scores on these measures are impacted by their native language literacy proficiency in kindergarten, an interesting finding with regards to educational policymaking. First, a moderator analysis of the effect of native language literacy on the relationship between ACCESS-4 and LITERACY-5 was explored, followed by the effect of native language literacy on the relationship between LITERACY-4 and LITERACY-5.

Effect of EDL2 on relationship between ACCESS-4 and LITERACY-5. A hierarchical multiple regression was run to determine the increase in variance explained by the addition of an interaction term between kindergarten native language literacy proficiency (EDL2) and English language proficiency (ACCESS-4) to a main effects model. Kindergarten EDL2 did not moderate the effect of ACCESS-4 on fifth grade standardized English literacy achievement (LITERACY-5), as evidenced by an increase

in total variance explained of 0.03%, which was not statistically significant ($F(1, 369) = 1.899, p = .169$). In summary, whether a student was at- or above-grade level compared to below-grade level on the kindergarten EDL2 did not significantly impact the relationship between their ACCESS-4 and LITERACY-5 scores.

Effect of EDL2 on relationship between LITERACY-4 and LITERACY-5. A hierarchical multiple regression was run to determine the increase in variance explained by the addition of an interaction term between kindergarten native language literacy proficiency (EDL2) and standardized English literacy achievement (LITERACY-4) to a main effects model. Kindergarten EDL2 did not moderate the effect of LITERACY-4 on fifth grade standardized English literacy achievement (LITERACY-5), as evidenced by an increase in total variance explained of 0.00%, which was not statistically significant ($F(1, 369) = 0.000, p = .991$). In summary, whether a student was at- or above-grade level compared to below-grade level on the kindergarten EDL2 did not significantly impact the relationship between their LITERACY-4 and LITERACY-5 scores. This result could potentially be explained by the strong association in scores between fourth and fifth grade standardized English literacy achievement (Parker, O'Dwyer, & Irwing, 2014).

Multiple regression analysis. Multiple regression analysis was used to test if kindergarten EDL2 proficiency, prior English language proficiency (ACCESS-4), and prior standardized English literacy achievement (LITERACY-4) significantly predicted culturally and linguistically diverse students' fifth grade standardized English literacy achievement (LITERACY-5). Results of the regression indicated that the three-predictor

model explained 71% of the variance ($R^2 = .71$, $F(3,365) = 296.230$, $p < .001$).

Additionally, EDL2 proficiency significantly predicted fifth grade standardized English literacy achievement ($\beta = 0.09$, $p < .01$), as did both ACCESS-4 ($\beta = 0.20$, $p < .001$) and LITERACY-4 ($\beta = 0.66$, $p < .001$). These significant findings confirm the use of measures of English language proficiency (i.e. ACCESS-4) and prior standardized English achievement, but also inform the adopted use of measures of native language proficiency. Although its predictive ability is relatively low at 12%, measures of native language proficiency could improve the language redesignation of culturally and linguistically diverse students and contribute to an asset-based framework, one that recognizes and respects these students' native language, culture, and values.

Table 5

Descriptive Statistics, Correlational, and Multiple Regression Data for Sample 2
($n = 369$)

Variable	Pearson's r^*				β
	EDL2	ACCESS-4	LIT.-4	LIT.-5	
LIT.-4				0.82	.66*
ACCESS-4			0.66	0.67	.20*
EDL2***		0.30	0.29	0.36	.09**
Mean	2.18	353.17	550.83	575.52	
S.D.	0.80	15.41	40.25	47.37	
					$R^2 = .71$

*Beta coefficients and correlations are significant at $p < .001$

** EDL2 beta coefficient is significant at $p < .01$

***EDL2 represent Spearman's rank-ordered correlations

Post-hoc power analysis indicates that with three independent variables, an R^2 of .71, and with 369 participants, the sample is adequate and sufficient in size given the

observed effect to support rejection of the null hypothesis (Faul, Erdfelder, Buchner, & Lang, 2009).

In order to test the unique variance explained by each of the predictor variables, a hierarchical multiple regression was performed. Kindergarten EDL2 was entered as block/step one, ACCESS-4 as block/step two, and LITERACY-4 as block/step three, all predicting LITERACY-5. A temporal rationale was utilized, as kindergarten EDL2 was administered well in advance of the other measures (Keith, 2015). Additionally, ACCESS-4 is generally administered mid-year while LITERACY-4 is administered at the end of the year. Results from this hierarchical multiple regression test are presented in Table 6. In total, and confirming the standard multiple regression results, 71% of the variance is explained by the three predictor variables. It can be seen that the students' native language proficiency (EDL2) at the end of kindergarten explained 12% of the variance in their fifth grade standardized English literacy achievement. As native language proficiency is currently omitted from this district's language redesignation process (and in general across the country), this evidence supports its potential inclusion. Further, ACCESS-4 explains 35% of the explained variance and LITERACY-4 explains 24% of the explained variance. Explaining 71% of the variance, the examined model provides a strong approach to refining language redesignation policy and practice. While additional measures such as teacher recommendations and other assessments may account for additional variance, 71% is a strong place to start.

Table 6

Results from hierarchical regression predicting fifth grade literacy achievement from kindergarten EDL2, ACCESS-4 and LITERACY-4 (n = 369)

Step	Measurement	Unstandardized Coefficient		Standardized	<i>p</i>	<i>F</i>	<i>R</i> ²	ΔR^2
		B	SE	Coefficient β				
1	-	-	-	-	-	50.311	0.12	-
	Constant	530.61	6.74	-	< 0.001	-	-	-
	K-EDL 2	20.59	2.90	0.35	< 0.001	-	-	-
2	-	-	-	-	-	160.091	0.47	0.35
	Constant	-117.34	42.38	-	0.006	-	-	-
	K-EDL 2	8.89	2.39	0.15	< 0.001	-	-	-
	ACCESS 4	1.91	0.12	0.62	< 0.001	-	-	-
3	-	-	-	-	-	296.230	0.71	0.24
	Constant	-84.62	31.41	-	0.007	-	-	-
	K-EDL 2	5.48	1.78	0.09	0.002	-	-	-
	ACCESS 4	0.63	0.12	0.20	< 0.001	-	-	-
	LIT.-4	0.78	0.05	0.66	< 0.001	-	-	-

Chapter 5

Discussion

The education of culturally and linguistically diverse students is at a critical juncture; continuing down the current path and maintaining the status quo will fail too many CLDs. Findings from the current research demonstrate the need for reform and refinement to CLD language redesignation policy and practice. After analyzing and testing the data to meet the assumptions of multiple regression, descriptive, correlational, and multiple regression results were presented. Several interesting findings emerged from the data; some confirmed prior research and hypotheses, while others presented new information that could prove useful for reform of the language redesignation process. Primarily among new findings is the low predictive ability of whether a student has been exited or is still receiving language support services in predicting longitudinal standardized literacy achievement.

Research Questions. The first research question posed at the outset of this dissertation asked: Can fifth grade CLDs' standardized literacy achievement be significantly predicted from prior English language proficiency, prior standardized English literacy achievement, and current language proficiency redesignation status (exited or receiving language support services)? How much unique variance in

standardized literacy achievement is explained by each of the predictor variables? The answer to the first part of this question is yes, fifth grade standardized English literacy achievement was significantly predicted from a host of independent variables. The model explained 66% of the variance and was significant ($p < .001$). The unique variance contributed by each of the predictor variables was as follows: prior English language proficiency (ACCESS-4) = 39%, prior standardized English literacy achievement (LITERACY-4) = 28%, and current language proficiency redesignation status (CLD/Exited) = 0.2%.

The second research question asked: Can fifth grade CLDs' standardized literacy achievement be significantly predicted from prior English language proficiency, prior standardized English literacy achievement, and native language literacy proficiency in kindergarten? How much unique variance in standardized literacy achievement is explained by each of the predictor variables? The answer to the first part of this question is yes, fifth grade standardized English literacy achievement can be significantly predicted from the independent variables. The resulting model explained 71% of the variance ($p < .001$) with native language literacy proficiency in kindergarten accounting for 12%, prior English language proficiency 35%, and prior standardized English literacy proficiency 24%. Explanations of these findings will be extrapolated in the following sections.

Language redesignation status. Whether a student was exited or still receiving language support services in fifth grade was a significant predictor. However, the beta coefficient was only 0.06, indicating a low predictive ability in determining longitudinal

achievement and accounting for only 0.2% of the variance in fifth grade standardized English literacy achievement. This finding directly rejects an asset-based mindset in favor of deficit-based thinking towards culturally and linguistically diverse students and is close to assigning these students at random for language redesignation, with regards to future academic achievement. What is likely occurring is that the policies in place are capturing the average of scores (i.e. the mean effect) but completely ignoring the variation of CLD scores and the significant overlap between groups (see Appendix A.7). This is clearly not a research-supported policy, and reaffirms the deficit-based thinking and policy discourse surrounding educational policies for CLD students. This is additional evidence that language redesignation policies and practices need refinement; while t-test statistics indicated that the CLD and exited student groups were significantly different, the overlap in score ranges is a cause for concern, namely that redesignation decisions appear to have random effects on achievement outcomes on both measures of ELP and standardized English literacy achievement. From the figure in Appendix A.7, one would expect to see CLD students cluster below the proficient line and exited students to cluster above. This is certainly not the case and this figure alone warrants further investigation and future research. Primarily, why such variation for CLDs? Why are some exited students scoring below proficiency? What are the long-term consequences of these redesignation decisions in middle and high school? This figure poses a myriad of questions and the purpose of the presented research is merely to begin exposing this issue. Combining these findings causes one to seriously doubt the efficacy and effectiveness of the language redesignation process, as these high-stakes decisions

hold tremendous accountability and impact for not only CLD students, but their teachers and principals as well.

Examining the large range of scores for CLD students presented in Appendix A.7 leads one to question CLD language support services and how the vast amount of financial support allocated to them is being utilized. Title I and Title III funding is used in most and it is clear that the millions of dollars spent are producing variable outcomes for the examined district. Explanations are not very clear, but include that the supports work for some CLDs and not others, that some schools more effectively use these funds and have strong fidelity to core instructional processes and that transitional bilingual education (TBE) may not be effective; above all, extreme variation in implementation exists. Applying systems theory to the CLD language redesignation process points to the need for reinforcing and balancing feedback loops to provide policymakers with valuable information (i.e. educational success of CLDs, implementation issues, long-term outcomes and implications) that would help to revise and improve policy for future iterations (Meadows, 2008). Clearly, educational outcomes for CLD students are stagnating and better policies, those founded on longitudinal empirical research and employing reinforcing and balancing feedback loops are critical. Another significant finding is how native language literacy proficiency is related to longitudinal standardized English literacy achievement.

Native language literacy proficiency. Native language proficiency in kindergarten was determined to account for a significant amount of variance (12%, $p < .001$) in fifth grade standardized English literacy achievement; corroborating previous

findings (Mahon, 2006). Considering that after five years of schooling and all of the other variables that are potentially impacting this long-term achievement, explaining 12% of the variance is highly significant and should not be ignored. While EDL2 scores may represent a latent intelligence or language acquisition factor (Cummins, 1979), these scores are largely ignored in language redesignation policies and practices even though they may have significant predictive ability. Currently, no states require any measure of native language proficiency to be factored into redesignation policy or practice (Wixom, 2015). While the native language proficiency measure accounted for relatively little variation, explaining 12% is still incredibly valuable when discussing redesignation decisions as these decisions hold incredible impact and accountability for CLDs' educational trajectories and achievement. T-tests also confirmed multiple regression results as kindergartners scoring above-grade level in native language literacy proficiency ($n = 157$) (593.69, 41.77) $p < .001$, significantly outperformed those scoring at-grade level ($n = 122$) (568.39, 44.19) $p < .001$, and those below-grade level ($n = 90$) (553.50, 49.21) $p < .001$ on the fifth grade measure of standardized English literacy achievement. Assessing CLDs in their native language has been shown to provide a more comprehensive and accurate portrait of their academic abilities, among other benefits (Abedi & Gándara, 2006; Cummins, 1979, 2000; Francis & Rivera, 2007).

English language proficiency. From both research questions and samples, the measure of English language proficiency (ACCESS-4) explained a significant amount of variance (39% and 35% in research questions one and two, respectively) in fifth grade standardized literacy achievement (LITERACY-5). This supports the federally-mandated

use of annual ELP assessments and their state-level inclusion in determining language redesignation decisions. However, English language proficiency in isolation should not be the sole predictor of redesignation status; strong ELP does not denote improved academic development. While a correlation may exist, it is by no means a causal notion (Gándara & Merino, 1993). Combining ELP and native language assessments into a comprehensive redesignation process accounts for increased variance to be explained (between 47-51%) based on the presented research evidence. As *ACCESS for ELLs* is already a widely-used and empirically-validated assessment, its inclusion in the language redesignation process is recommended. However, researchers have argued for the use of all available sub-scores on this measure instead of solely using the composite score (Sawaki, Stricker, & Oranje, 2007). Additionally, less variation in favor of higher cut-scores is recommended (Williams, 2014). The last assessment analyzed in the language redesignation process is standardized English literacy.

Standardized English literacy achievement. Including the results of standardized achievement testing should also be considered as it explained 28% and 24% of fifth grade standardized English literacy achievement, respectively, in research questions one and two. However, only six states (Colorado, Florida, Louisiana, Nebraska, New Jersey, and Texas) were identified as using a standardized measure of achievement in their language redesignation determination (Wixom, 2015). While it is understood that the prior year's standardized achievement will be highly correlated and have high predictive ability for future standardized achievement, having a measure in place that examines a CLD's content knowledge in English provides a safeguard, and potentially

useful insight, into longitudinal achievement. While standardized tests have been determined to misrepresent CLDs' true abilities and are not normed for this population (Abedi, 2008a; Solano-Flores & Li, 2013), they do provide some additional information on the students' content knowledge and account for significant variation in subsequent achievement. Further exploration as to appropriate cut-scores linked to enhanced longitudinal achievement is warranted but beyond the scope of this research. To summarize all relevant findings, Figure 3 is presented on the following page to provide a conceptual framework for future iterations of state-level language redesignation policy.

Limitations

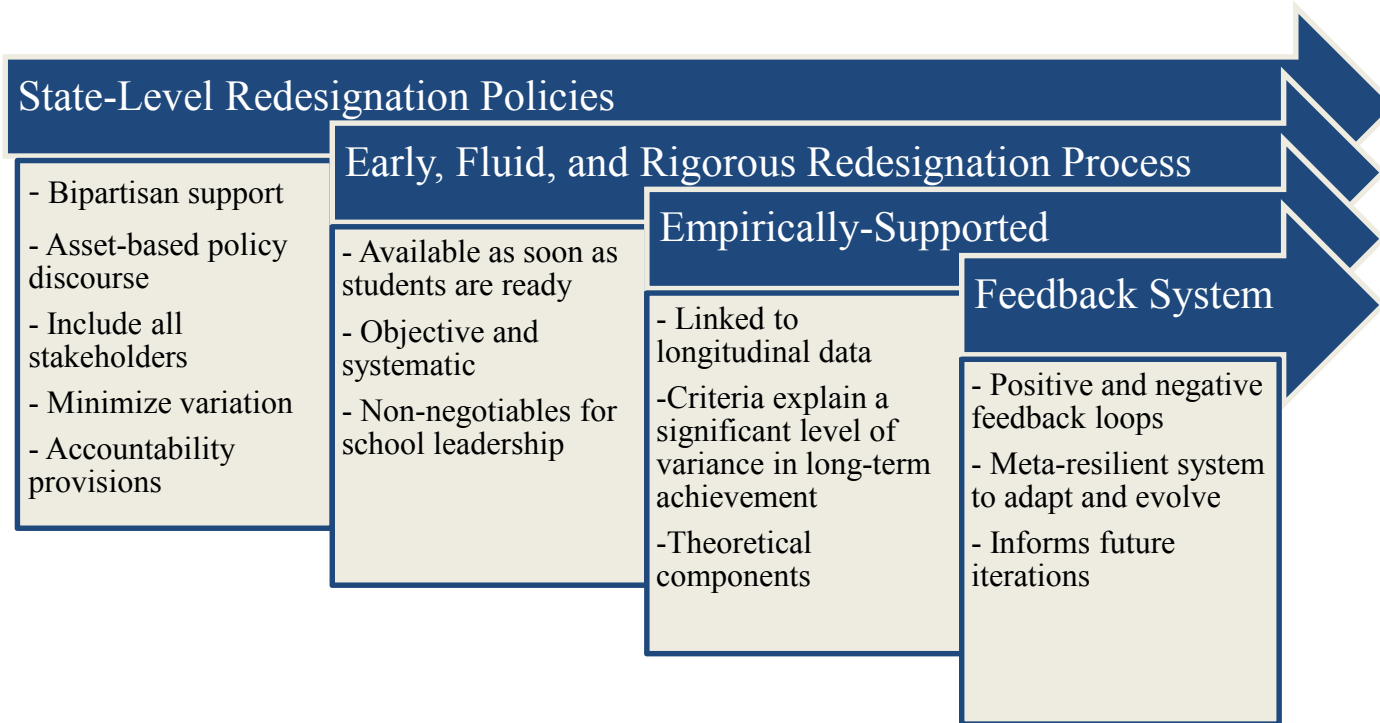
Rejecting deficit-based worldviews in favor of developing those that are asset-based is a difficult, ambiguous and often avoided process. It begins with acknowledging and truly understanding one's own worldview. Next, this worldview must be deconstructed into pieces and each piece must be critically analyzed. Next, those pieces that are deficit-based must be systematically rejected towards developing an asset-based worldview. This process is never fully achieved nor is it objective; it requires critical conversations that must occur in trusting and safe contexts and relationships and be done with the utmost consideration of other's experiences, beliefs, and values. Thus a central limitation to asset-based thinking is its difficulty of development and implementation; this is not a process that can be simply built into policy discourse, legislated, and enacted. While systems theory was generally applied to educational policies affecting culturally and linguistically diverse students, with language redesignation policies in specific focus, a limitation is that this theory does not account for all of the nuanced differences in

personnel, resources, demographics, and implementation at the local-level. There are certainly instances where policymakers, district- and state-level leadership and building-level officials work in harmony to create iterative policies that are well-intentioned and provide improved outcomes for CLDs. There are also contexts in which the exact opposite is possible, where CLDs are viewed within a deficit-based framework and negative outcomes result. Systems theory is applied in this analysis to support a broad movement toward more equitable CLD policies that are steeped in theoretical frameworks, supported by research, and examine academic achievement over a CLD's educational trajectory from kindergarten through high school graduation. These policies should also have strong reinforcing and balancing feedback loops that ensure effective, equitable, and sustainable policies that are able to adapt over time and include all stakeholders involved in the process.

It is also important to acknowledge the limitations of the proposed theoretical frameworks. Baker (1998) cites that developing the native language does not necessarily promote achievement in the L2, contradictory to the developmental interdependence hypothesis. Aukerman (2007) identifies limitations with CALP and proposes an alternative simply described as recontextualization; arguing that instead of CALP, children appropriate the language they need to fulfill a range of purposes, both academic and nonacademic. She argues that CLDs must recontextualize and transform their linguistic resources in new contexts. While this is an interesting viewpoint, there is little evidence to support this position. Cummins' (1979, 1980, 1981) theories and hypotheses

Figure 4.

Conceptual Framework for Future Iterations of State-Level Language Redesignation Policies



have faced scrutiny but still remain among the most commonly used in second language acquisition research. Further support for the developmental interdependence hypothesis was uncovered through significant regression equations and explained variance, it must be explicitly addressed and built into CLD language redesignation policies, primarily by assessing CLDs' native language proficiency.

While it would have been ideal to run multiple regression analyses with more comprehensive data to determine the most significant predictive model, the dataset did not allow for such analyses. Fourth grade English literacy achievement and English language proficiency assessments were used as predictors with fifth grade language designation status and kindergarten Spanish language literacy proficiency. Ideally, these scores would have all come from the same grade (possibly third) and would potentially include data from kindergarten through fifth grade and beyond to continue developing statistical models for exiting language support services. Such data collection and analyses could be made possible in many large districts with research and evaluation departments and the capacity and resources to undertake such analyses in order to inform and create more effective and equitable language redesignation policies and practices. In smaller districts that lack such research and evaluation departments, language redesignation teams could study the longitudinal outcomes of their redesignated and CLD students to determine if their current process is effective. Also, state-level research and evaluation leadership could provide technical assistance in this area to establish a strong system for language redesignation that is sustainable and effective.

Implications

Several direct and indirect benefits and implications could result from an improved language redesignation process. First, an effective redesignation system that enhances the long-term outcomes for culturally and linguistically diverse students would lessen the political strain and negative public perceptions around the effectiveness of legislation such as Title I and Title III. Currently, these funding streams are incredibly large and spend millions of dollars to lessen the gaps between socioeconomic and non-native English-speaking groups and make educational outcomes more equitable, however, patterns of educational achievement between these groups still remain (Reardon, 2011; U.S. Department of Education, 2015). A cost-benefit analysis (Gilead, 2014) of improved language redesignation policies would begin to create transparency and help keep the appropriate funding streams alive.

Addressing the loosely-coupled policy decisions and the resulting variability of these decisions is also paramount. Grounding language redesignation policies in theoretical and empirical research is not just necessary, it is critical. The resulting variability in academic outcomes of culturally and linguistically diverse students has been directly attributed to this inconsistency in policy (Okhremtchouk, 2014). If the presented analyses only do as much as begin to disrupt the deficit-based thinking of those who prescribe educational policies to millions of CLDs, then it has been effective. Considering the systematic use of theoretical and empirical data to inform policy decisions is just a beginning. Even starting to experiment with the data towards creating more effective language redesignation policies would be better than maintaining the

status quo; eventually, a strong iteration of policies could be parsed out and implemented. This idea of utilizing data to inform decision-making should also be implemented at the school- and teacher-levels.

Principals should be readily aware of the long-term outcomes of their CLDs and the connections back to their language proficiency redesignation status. Significant amounts of data are constantly at the fingertips of school leaders and teachers and the utilization of this data to improve outcomes of students should be non-negotiable. Additionally, the presented data demonstrates lack of fidelity in the district and points to stronger school-level processes for principals to monitor these redesignation decisions and for district-level leadership to monitor these decisions across several schools. Are some schools redesignating higher percentages of CLDs than others? Are these redesignated CLDs more successful in their long-term achievement? These are just a few questions that begin to unravel findings at the school-level similar to Motamedi (2015) who discovered that CLDs in certain schools, with high percentages of CLDs, were being redesignated at faster rates than other schools with lower percentages of CLDs.

Mapping the outcomes and implications of this study onto non-native English speakers of languages other than Spanish is also possible. Thirty-five different languages were represented in the examined district alone and there is no reason that a similar methodological approach and analysis of longitudinal data could not result in similar recommendations for these students. Lastly, with the strong push for early education access for all students, stronger native and second language acquisition policies need to be put in place at the earliest stages of schooling. More specifically, by informally

assessing and systematically monitoring young culturally and linguistically diverse students' capabilities in their native language and in English and keeping anecdotal and quantitative records of this data could allow for a much more comprehensive assessment to be in place. In schools with large numbers and percentages of CLDs, a specific staff member could be assigned full-time to systematically monitor the language acquisition of all CLDs, working with families and teachers to align instruction and support at home, and be responsible for utilizing current and longitudinal data to inform language redesignation practices, all towards improving the long-term academic achievement of culturally and linguistically diverse students.

Conclusion

Analyzing a current language redesignation model using rigorous statistical analyses predicting longitudinal English achievement was the goal of this dissertation. Through multiple and hierarchical regression analyses, several significant outcomes were realized. According to the findings of this dissertation, the current majority practice of states across the country in solely using a measure of English language proficiency accounts for between 35-39% of the variance in fifth grade standardized English literacy achievement. This leaves 61-65% of the variance unexplained, a deplorable amount. In this specific case, current language redesignation policies should be considered institutionalized inequities afflicting the marginalized population of CLDs, their families, communities, and their economic and social mobility (Alemán, 2009). The predictive ability of language proficiency redesignation status in determining longitudinal outcomes was significant, however extremely low and only explains 0.2% of the variance. Again,

the language redesignation process was exposed in terms of its lack of theoretical basis steeped in deficit-based thinking. In light of these alarming findings, several positive discoveries emerged.

The use of measures of ELP in the language redesignation process were validated, and standardized achievement tests explained significant variance, as did native language proficiency, leading to their potential inclusion in this process. Additionally, while a small significant predictor, language proficiency redesignation status was linked to variable achievement outcomes. Aligning policy and practice with the findings of the analyses is not recommended until further corroboration. At that point, a weighted system using the most significant predictors might be ideal for exiting language services (Hopkins, Thompson, Linqunti, Hakuta, & August, 2013). Future research in this field might determine that ELP assessments, standardized achievement tests and native language proficiency should be weighted or assigned a numerical value (i.e. point system). Combining CLDs' points in each of these areas and linking the point total to longitudinal achievement might create a specific threshold for language redesignation. In any case, future models must approximate a system that accounts for and analyzes culturally and linguistically diverse students' long-term achievement. This practice must be grounded in rigorous statistical research in order to be equitable, ethical, and result in more optimal long-term achievement outcomes.

While there is a lack of educational policies that utilize educational research and longitudinal data, some exemplary legislation does exist. In the 2015 Massachusetts legislative session, representative Jeffrey Sanchez introduced House Bill 498, entitled the

“Language Opportunity Act for our Kids.” This bill, however still pending, primarily aims to remove “Question Two” legislation as a one-size-fits-all structured English immersion instructional model for culturally and linguistically diverse students and replaces it with precise definitions of culturally and linguistically diverse students, the language programming available, requires strict adherence to educational research, and provides strong accountability frameworks in addition to multiple other provisions (see Appendix C). Legislation in Arizona and California has also been introduced to remove the current deficit-based legislation requiring structured English immersion instructional models (Propositions 203 and 227 respectively) and replace them with more equitable, research-based practices.

Ultimately, in all non-bilingual settings, standardized achievement in English is the primary outcome of interest for CLDs. Determining the most significant contributors with regards to developing language designation policy and practice is a critical area for analysis. Currently, systems affecting CLDs are variable (Abedi & Dietel, 2004; Linquanti & Cook, 2013) and largely ineffective as evidenced by the low predictive ability of language proficiency redesignation status on fifth grade achievement, the significant overlap in scores between CLDs and those that have been exited, and the continued presence of the achievement gap between CLDs and non-CLD students (National Center for Education Statistics, 2015). Methodical analyses can identify the most significant contributors to long-term achievement and inform effective policy development.

Improving the validity of the testing and assessment of CLDs, providing precise definitions, and improving language redesignation policies are all prospective solutions. There are also solutions to be addressed at the policymaking-level: establishing a weighted system for interpreting performance on ELP assessments and standardized achievement tests (Linguanti & Cook, 2013), requiring empirical evidence for redesignation policies, and combining CLD groups into one overall group to more accurately measure their achievement and to lessen the negative punishments of NCLB on schools and districts (Hopkins, et al., 2013). Multiple researchers (Abedi, 2008a; Linguanti & Cook, 2013) point to the need for an improved, operational definition of CLDs and to define explicitly when and how they should participate in taking content-based assessments in their L2. The formation of this definition is a critical piece for states to tackle when educating and redesignating CLDs (Williams, 2014). Linguanti (2001) argues for an expanded time of monitoring CLDs' development of their second language; "beginning long before and continuing long after reclassification, a much longer trajectory of progress... must be monitored, reported, and acted upon" (p.ii).

Above all, an asset-based view of CLDs would result in improved educational outcomes for these students. By critically examining the hegemonic policies and practices negatively impacting these students, and applying rigorous statistical methodologies to longitudinal datasets, educational researchers can provide direct evidence of more practical and effective solutions in the areas of language redesignation, identification, programming, among several others. Continuing down the road of mediocrity and the status quo will leave generations of CLDs systematically marginalized and unable to

reach their full academic, economic and social potentials. It is unacceptable to continue our inaction and ineffective treatment of this group. Now is the time to act or this country will certainly be faced with a more serious problem in the near future—that of a majority minority that is undereducated and poorly prepared to contribute to the economy. An educated, enabled and effective citizenry of non-native English speakers provides the potential for a thriving economic, political, and social future for this country.

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Appendix A.1
Assumption Testing-Independence

Model Summary

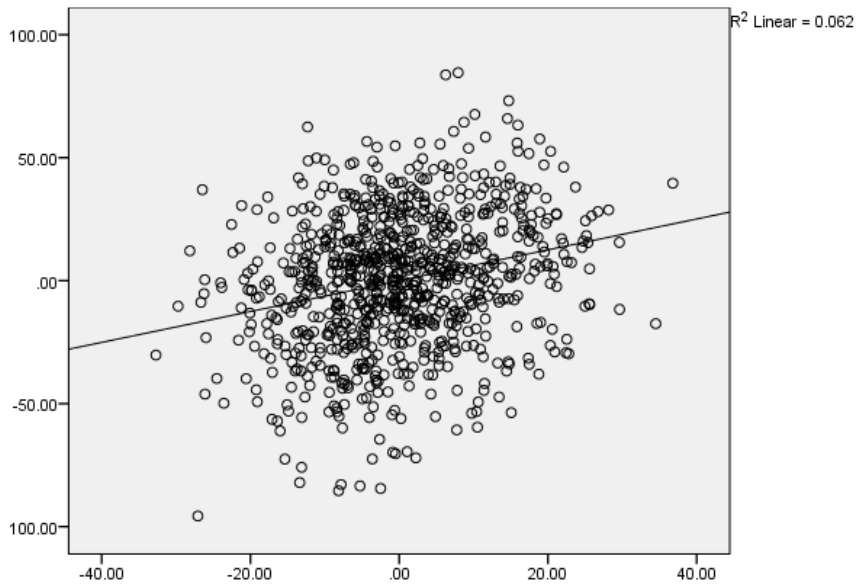
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.815	0.664	0.663	26.80637	2.103

- a. Predictors: (Constant), CLD_Exited_5, ACCESSOverall_4, LITERACY-4
- b. Dependent Variable: LITERACY-5

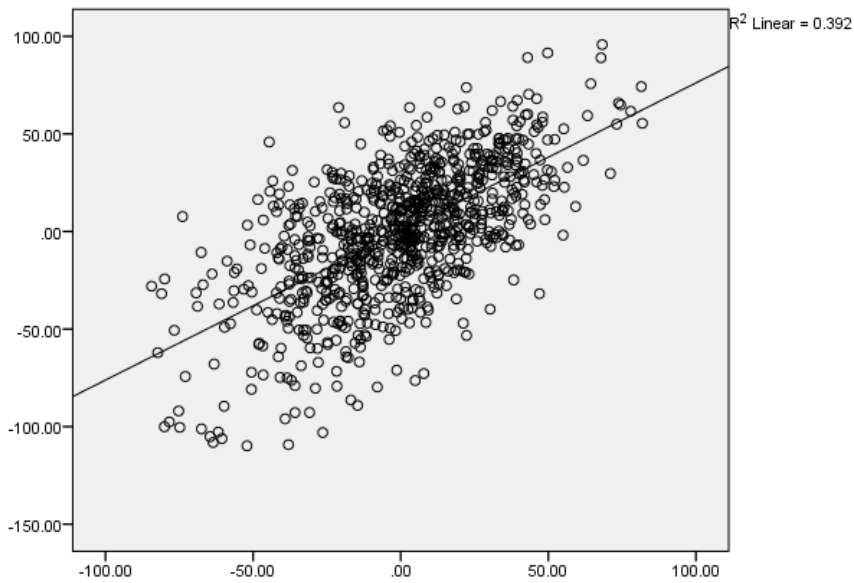
Appendix A.2

Assumption Testing-Linearity (Partial Regression Plots with LITERACY-5 as dependent variable on y-axis)

a. ACCESS-4

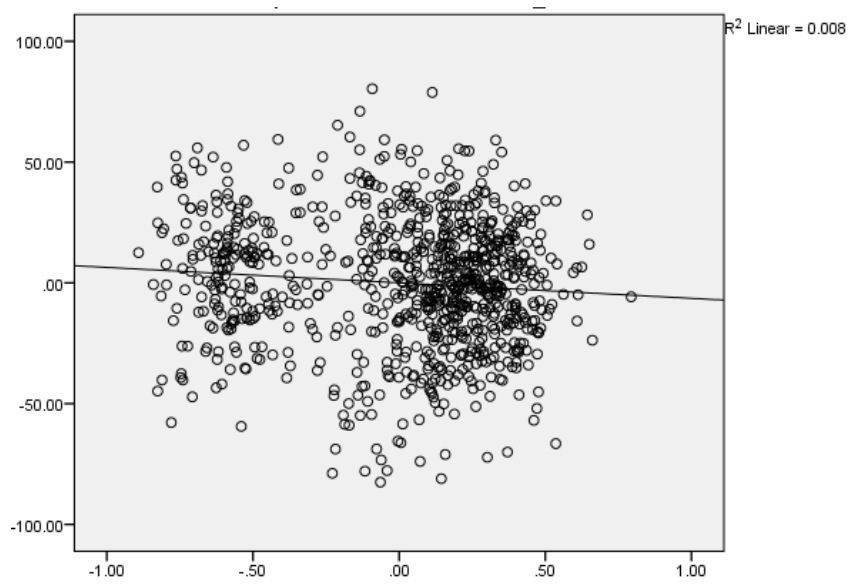


b. LITERACY-4

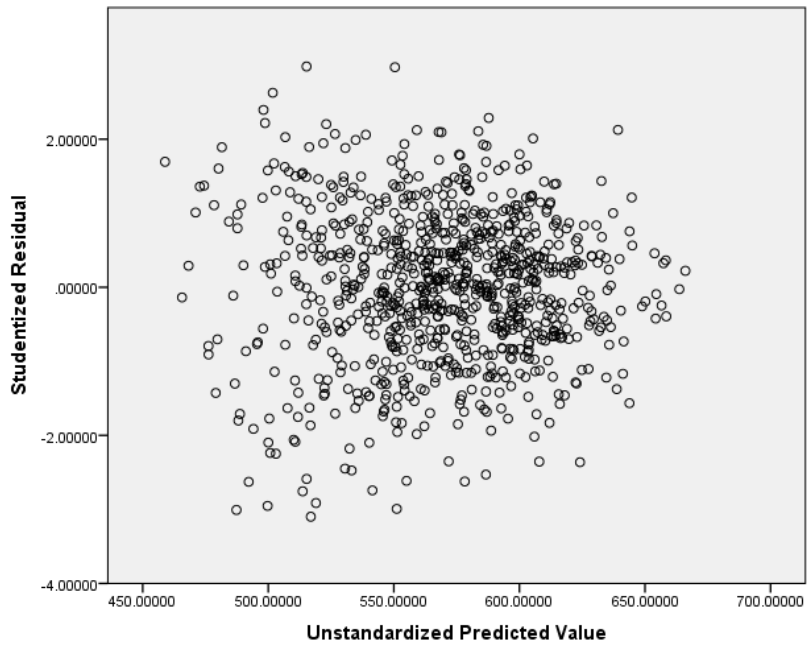


Appendix A.2 (Continued)
Assumption Testing-Linearity

c. Language Redesignation Status (CLD = 1 / Exited = 0)



Appendix A.3 Assumption Testing-Homoscedasticity



Appendix A.4

Assumption Testing-Multicollinearity

Collinearity Diagnostics

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				Constant	ACCESS-4	LITERACY-4	CLD/Exited-5
1	1	3.802	1	0	0	0	0.01
	2	0.196	4.407	0	0	0	0.69
	3	0.002	44.305	0.23	0.03	0.83	0.27
	4	0.001	79.251	0.77	0.97	0.17	0.03

a. Dependent Variable: TCAPReading_5

Correlations (Significance level under diagonal)

	LITERACY-5	ACCESSOverall_4	LITERACY-4	CLD/Exited_5
LITERACY-5	1	0.62	0.80	-0.45
ACCESSOverall_4	0.001	1	0.63	-0.35
LITERACY-4	0.001	0.001	1	-0.50
CLD/Exited_5	0.001	0.001	0.001	1

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-61.71	24.896		-2.479	0.013
	ACCESS-4	0.627	0.083	0.192	7.572	0.001
	LITERACY-4	0.761	0.032	0.649	23.647	0.001
	CLD/Exited-5	-6.408	2.478	-0.059	-2.586	0.01

a. Dependent Variable: LITERACY-5

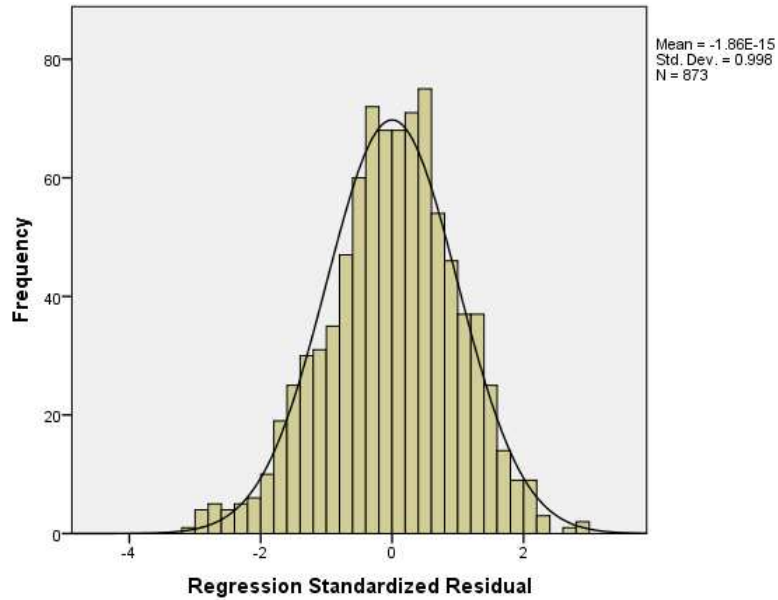
Appendix A.4 (Continued)
Assumption Testing-Multicollinearity

Model		95% Confidence Interval for Beta		Collinearity Statistics	
		Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-110.573	-12.847		
	ACCESS-4	0.465	0.79	0.6	1.667
	LITERACY-4	0.698	0.825	0.514	1.946
	CLD/Exited-5	-11.272	-1.544	0.751	1.332

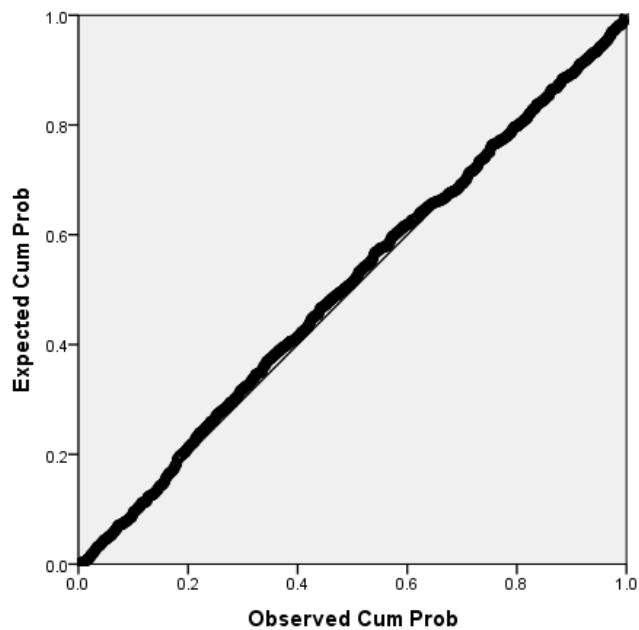
a. Dependent Variable: LITERACY-5

Appendix A.5 Assumptions Testing-Normality

a. Histogram for LITERACY-5 (Dependent Variable)



b. Normal P-P Plot of Regression Standardized Residual (LITERACY-5)



Appendix A.6
Assumptions Testing-Detecting Outliers

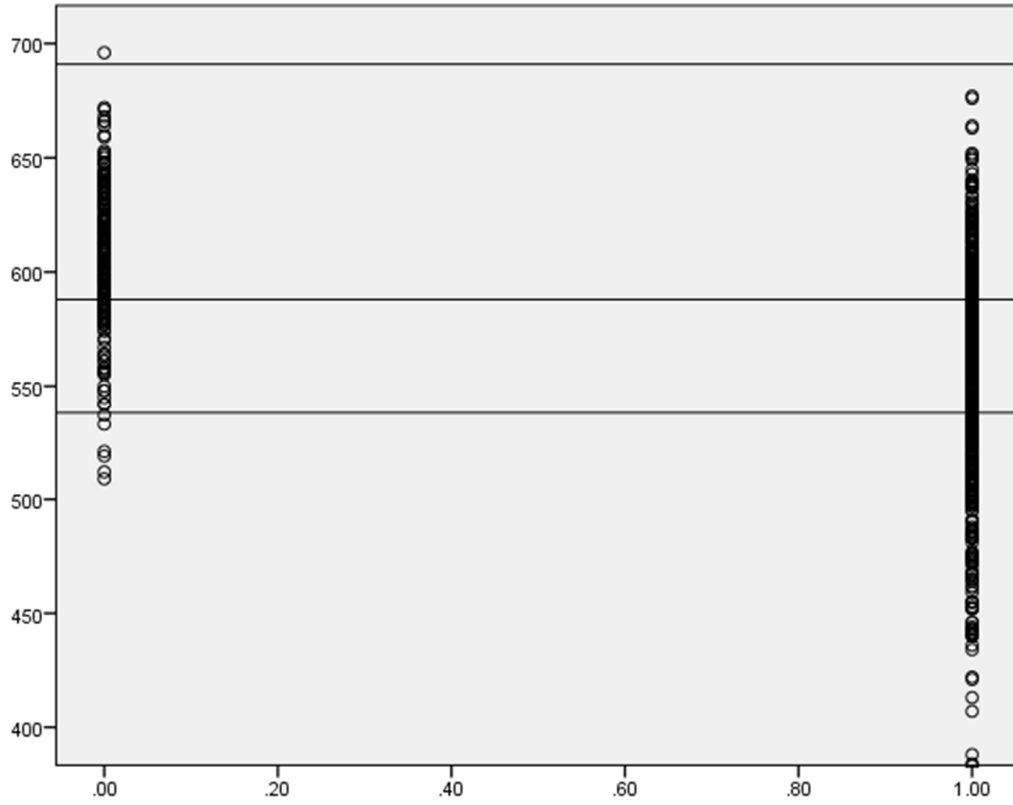
Casewise Diagnostics

Case Number	Std. Residual	LITERACY-5	Predicted Value	Residual
6	-3.437	521	617.08	-96.08
89	-4.072	413	526.82	-113.83
147	3.168	589	500.43	88.87
150	3.578	578	477.98	100.02
522	3.315	676	583.33	92.67
757	-3.678	436	538.83	-108.83

a. Dependent Variable: LITERACY-5

Appendix A.7

LITERACY-5 (y-axis) x Resignation Status (CLD = 1 / Exited Status = 0, x-axis)



LITERACY-5 (y-axis):
Bottom line = partially proficient
Middle line = proficient
Upper line = advanced

Appendix B.1
Assumption Testing-Independence

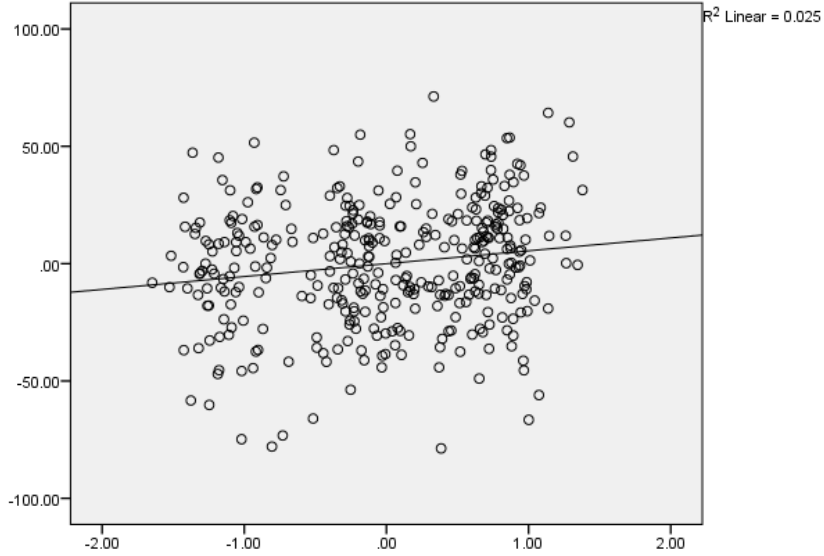
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.842	0.709	0.706	25.66354	2.002

- a. Predictors: (Constant), KinderEDL2Prof, LITERACY-4, ACCESSOverall_4
- b. Dependent Variable: LITERACY-5

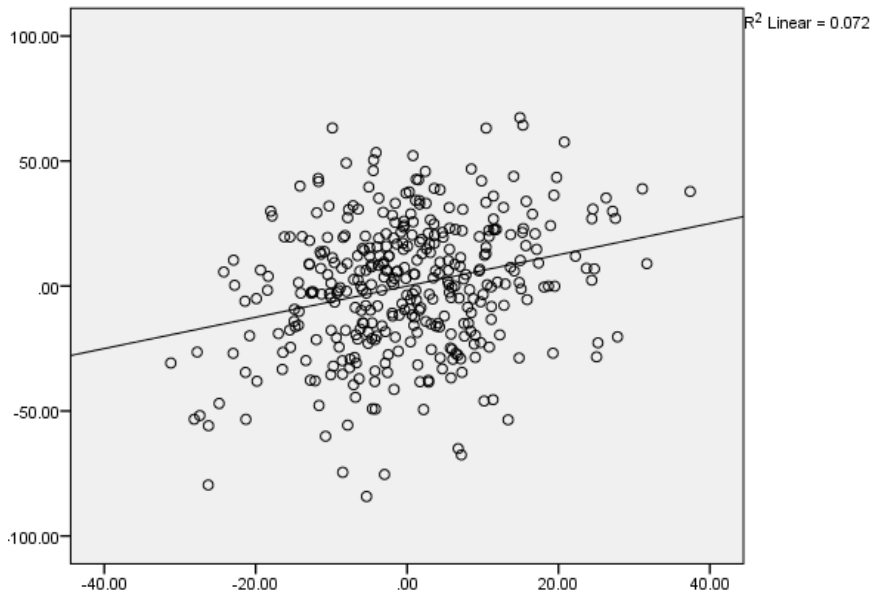
Appendix B.2

Assumption Testing-Linearity (Partial Regression Plots with LITERACY-5 as dependent variable on y-axis and independent variable on x-axis)

- a. Kinder EDL2 Proficiency (1 = below-grade, 2 = at-grade, 3 = above-grade)

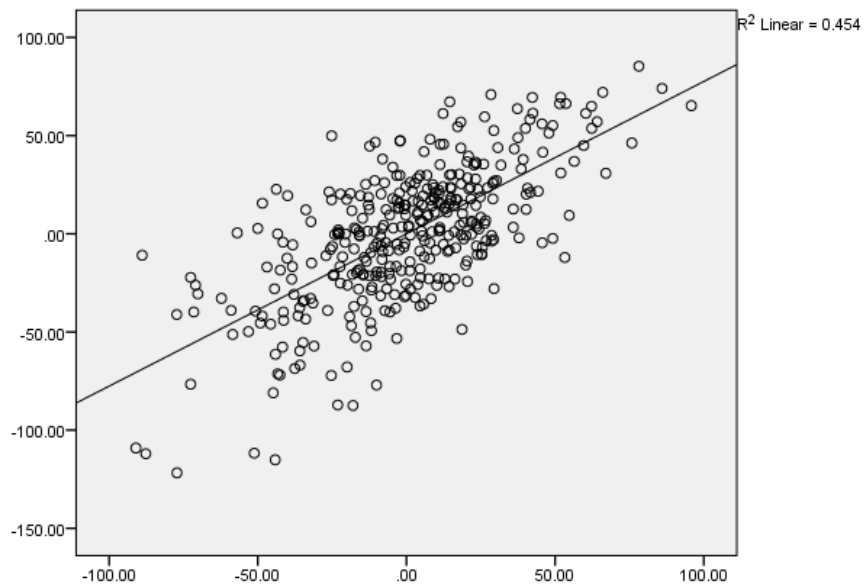


- b. ACCESS-4

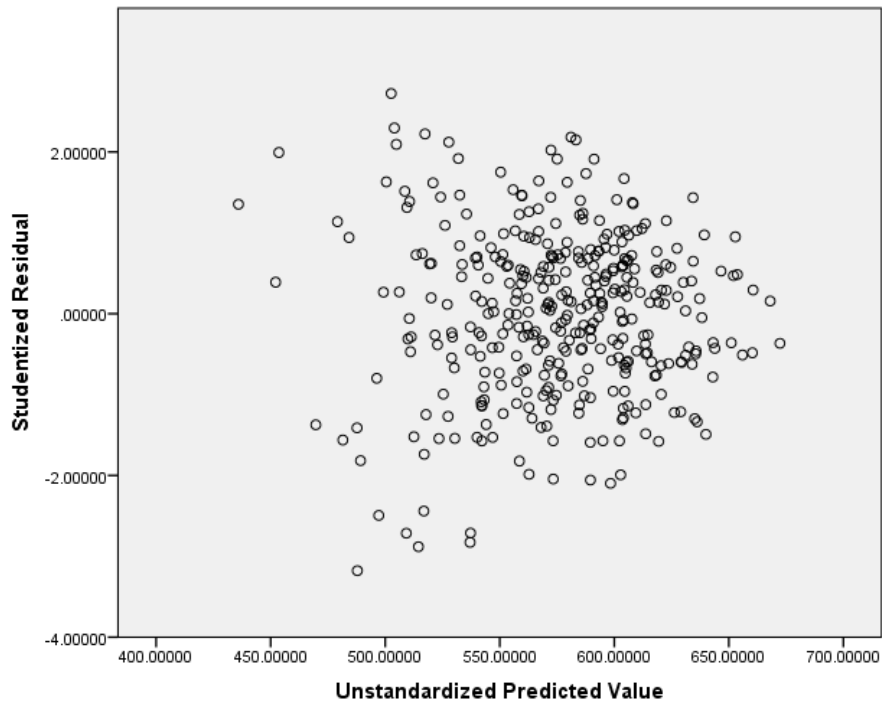


Appendix B.2 (Continued)
Assumption Testing-Linearity

c. LITERACY-4



Appendix B.3
Assumption Testing-Homoscedasticity



Appendix B.4

Assumption Testing-Multicollinearity

Correlations (Significance Levels below Diagonals)

	LITERACY-5	ACCESSOverall_4	LITERACY-4	KinderEDL2Prof
LITERACY-5	1	0.668	0.82	0.35
ACCESSOverall_4	0.001	1	0.66	0.32
LITERACY-4	0.001	0.001	1	0.29
KinderEDL2Prof	0.001	0.001	0.001	1

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-84.62	31.406		-2.694	0.007
	ACCESSOverall_4	0.625	0.117	0.203	5.325	0.001
	LITERACY-4	0.776	0.045	0.659	17.427	0.001
	KinderEDL2Prof	5.484	1.777	0.092	3.086	0.002

a. Dependent Variable: TCAPReading_5

Coefficients (Continued)

Model		95.0% Confidence Interval for Beta		Collinearity Statistics	
		Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-146.38	-22.86		
	ACCESSOverall_4	0.394	0.856	0.546	1.83
	LITERACY-5	0.688	0.863	0.557	1.794
	KinderEDL2Prof	1.989	8.979	0.888	1.126

Appendix B.4 (Continued)

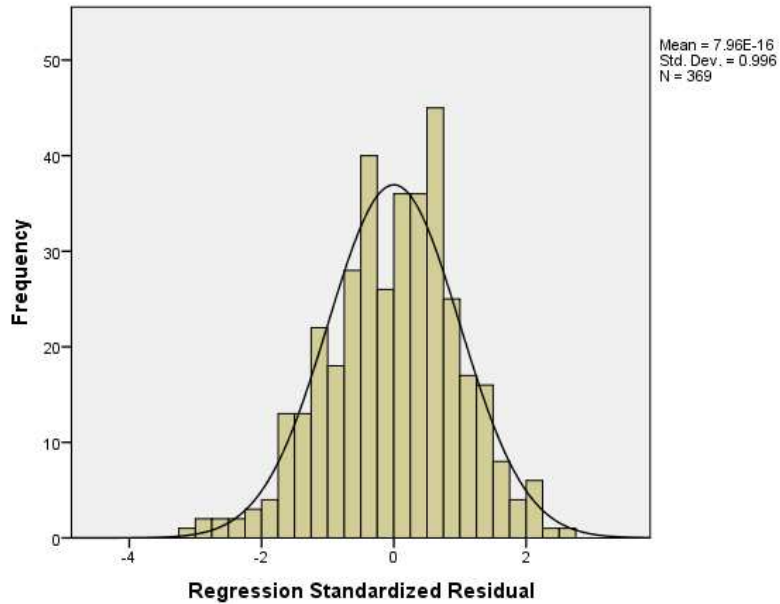
Assumptions Testing-Multicollinearity

Collinearity Diagnostics

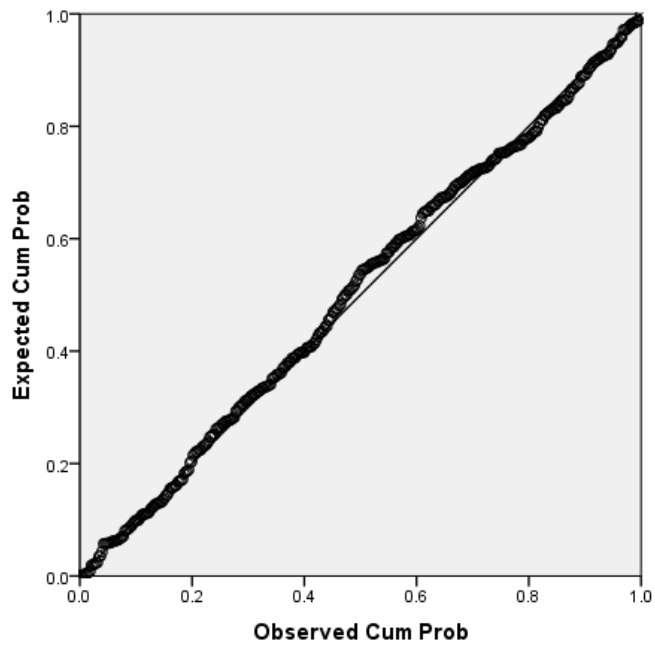
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	ACCESSOverall_4	LITERACY-4	KinderEDL2Prof
1	1	3.911	1	0	0	0	0.01
	2	0.086	6.76	0	0	0	0.93
	3	0.003	38.729	0.26	0.01	0.69	0.04
	4	0.001	75.848	0.74	0.99	0.31	0.03

Appendix B.5 Assumptions Testing-Normality

- a. Histogram with LITERACY-5 as dependent variable

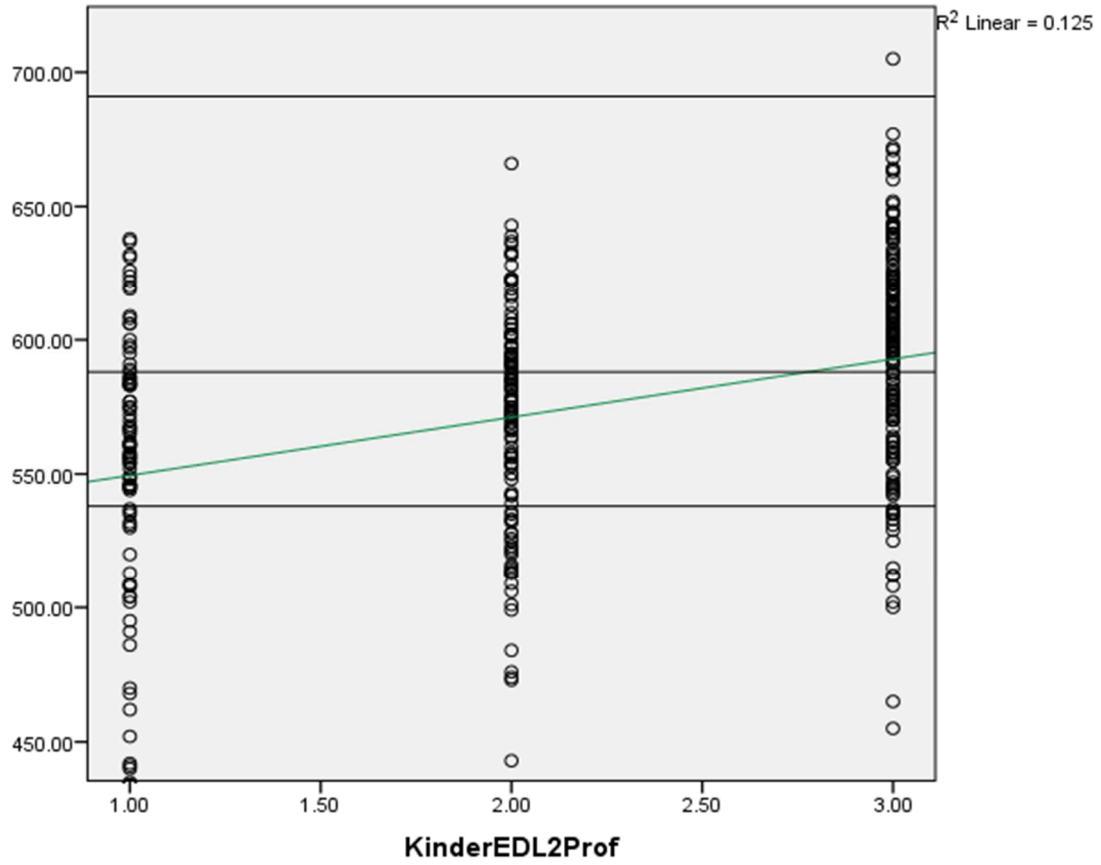


- b. Normal P-P Plot of Regression Standardized Residual (with LITERACY-5 as dependent variable)



Appendix B.6

LITERACY-5 achievement (on y-axis) x EDL-2 Proficiency Status (1 = below-grade, 2 = at-grade, 3 = above-grade)



For LITERACY-5 (y-axis):
Bottom line = partially proficient
Middle line = proficient
Upper line = advanced

Appendix C.1

2015 Massachusetts House Bill 498 (Bill text as introduced)

SECTION 1. Chapter 71A of the General Laws, as appearing in the 2012 Official 2 Edition, is hereby amended by striking sections 1 through 8 and inserting in place thereof the 3 following:

Section 1. Findings and Declarations

Whereas, all children are entitled to a high quality education that prepares them to participate and succeed in a global economy;

Whereas, for Massachusetts to remain a national and global leader in educational achievement, it must recognize, value, and invest in programs that help students acquire 21st century skills, including multilingualism, both through English language acquisition and dual language learning;

Whereas, bilingualism, biliteracy, and multicultural understanding are skills essential to improving career and college readiness, and enhancing social and economic growth within a global economy;

Whereas, the current “one-size-fits-all” model for English language learners will continue to disadvantage students who are increasingly coming from diverse linguistic and cultural, and socio-economic backgrounds; and that the existing laws and practices are failing Massachusetts students, constraining teachers and school districts;

Whereas, providing parents with the opportunity to select the best education for their children, including language instruction educational programs, will enhance parental engagement in education

Whereas, celebration of linguistic and cultural diversity and understanding how the strength of values, practices, and linguistic and cultural capital are resources to our communities.

Therefore, it is resolved that: all children in Massachusetts public schools shall be provided with the highest quality education through access of innovative and research-based language education instructional programs that provide effective academic English language and/or dual language proficiency and high academic achievement as effectively as possible.

Section 2. Definitions 29 In this chapter;

(a) “Language acquisition program” or Language Instruction Educational Program refers to an instructional program that includes English language acquisition for English learners as a component. Language acquisition programs are not limited to any single program design or pedagogical style.

(b) “English learner” (also called an “English language learner”) means a child who does not speak English or whose native language is not English, and who is not currently able to perform ordinary classroom work in English.

(c) “Sheltered English immersion” a program composed of two instructional components: sheltered content instruction that focuses on teaching academic content using English as the primary language of instruction and English language development instruction that focuses on explicit and systematic English language instruction.

(d) “English Language Development” (ELD) or “English as a second language” (ESL), a specially designed course of study that focuses on the acquisition of the English language and is designed according to a student's English proficiency, performance and developmental level. It is a component of all comprehensive language acquisition programs, and explicit, systematic, developmental, proficiency-driven English language and literacy are the primary content.

(e) "Dual language education", (also called two-way bilingual) any program that integrates language learning and academic instruction for native speakers of English and native speakers of another language, with the goals of high academic achievement, first and second academic language proficiency, and cross-cultural understanding.

(f) “Transitional bilingual education,” an English learner program that follows a bilingual approach to learning in which the native language of the ELL is used to support and scaffold the student’s development of English and then gradually phase instruction in the native language out while delivering content instruction.

(g) “Foreign language” means a language other than English, and includes American Sign Language.

Section 3. Census. Local school districts shall annually ascertain, not earlier than the first day of April, under regulations prescribed by the Department of Education, the number of English learners within their school system in grades pre-Kindergarten through twelve, and shall classify them according to grade level, the language of which they possess a primary speaking ability, and the English learner program type in which they are enrolled, with all such information being made publicly available by school and school

district on a website. Districts shall also monitor students who have exited English learner programs when assessing the academic achievement of English learners and the effectiveness of language acquisition programs.

Section 4. English Language Education. English learners enrolled in a Massachusetts public school district or charter school shall be educated through a comprehensive, research-based instructional program that includes a content component to ensure appropriate acquisition of subject matter content and a language acquisition component to ensure appropriate acquisition of the English language. The programs for English learners may include sheltered English Immersion, dual language education or transitional bilingual education but shall not be limited to any specific program or instructional design provided that any such programs shall include the acquisition of the English language. The department shall promulgate regulations to allow districts to choose one or more programs that meet the requirements of this section based on best practices in the field, the linguistic and educational needs, and the demographic characteristics of their students. Districts may incorporate opportunities for students to develop and maintain native language proficiency as part of a formal or extracurricular academic program. The department shall also promulgate regulations to ensure that English language learners receive English language development instruction at a level and frequency that is appropriate for their level of English language proficiency and educational needs and instructed by teacher holding an English as a second language license. Each school district shall employ at least one teacher licensed in English as a Second Language. Any student who has exited an English learner program and attained English proficiency as determined by the Department regulations and guidelines shall have access to tutoring, English language development instruction or other instructional modifications as necessary in order to perform ordinary grade level classwork. Local schools shall be permitted but not required to place in the same classroom English learners of different ages but whose degree of English proficiency is similar. Local schools shall be encouraged to mix together in the same classroom English learners from different native-language groups but with the same degree of English fluency. Once English learners acquire a good working knowledge of English and are able to do regular school work in English, they shall no longer be classified as English learners. Foreign language programs and special education programs for physically or mentally impaired students shall be unaffected. 96

Section 5. Parental Choice. Parents or legal guardians of students who are deemed eligible to enroll in an English language learner program shall have the right to select any available English language learner program offered within the district. Parents or legal guardians may refuse enrolling a child or remove their child from any English language

learner program provided that written confirmation of any such request is retained in the student's cumulative folder. The student shall continue to be designated as limited English proficient and retain the right to return to an English language learner program at any time. A school district may allow a nonresident English language learner to enroll in or attend its English language learner programs. The tuition for such student, which shall be established by the department, shall be paid by the school district in which the student resides. Any school district may join with any other school district or districts to provide English language learner programs required or permitted by this chapter. The parents or legal guardians of 20 pupils or more in any grade may request a specific program within a single district or charter school that is designed to provide language instruction. Within 90 days the school district must respond and either provide the plan for implementation or provide written informed reason for denial. Any district operating a language acquisition program for English learners shall establish an English learner parent advisory council. The parent advisory council shall be comprised of parents or legal guardians of students who are enrolled in language acquisition programs within the district. Membership shall be restricted to parents or legal guardians of students enrolled in English learner programs, dual language programs or other language acquisition programs within the district. The duties of the parent advisory council shall include, but not be limited to, advising the school on matters that pertain to the education of students in language acquisition programs, meeting regularly with school officials to participate in the planning and development of programs designed to improve educational opportunities for English learners, and to participate in the review of school improvement plans established under section 59C of chapter 71 as they pertain to English learners. Any parent advisory council may, at its request, meet at least once annually with the school council. The parent advisory council shall establish by-laws regarding officers and operational procedures. In the course of its duties under this section, the parent advisory council shall receive assistance from the director of language acquisition programs for the district or other appropriate school personnel as designated by the superintendent.

Section 6. Legal Standing and Parental Enforcement. The Department shall issue regulations regarding additional communication to parents of English learners in compliance with all state and federal requirements. Any such communication shall annually inform such parents or legal guardians of their rights to choose any language acquisition program among those that are offered at the school district, to request a new language acquisition program under Section 4, or to withdraw their child from a particular language acquisition program. Furthermore, should the school district issue a recommendation to place an English learner in an language acquisition program, the parents or legal guardian of such student shall have the right, either at the time of the

original notification, or at any point thereafter, to withdraw the student from such program by sending written notice of such decision by mail to the school authorities of the school district in which the student is enrolled.

Section 7. Monitoring Language Acquisition Programs. A nationally-normed test of English proficiency shall similarly be administered at least once each year to all Massachusetts schoolchildren in grades Kindergarten and higher who are English learners. English learners classified as severely learning disabled may be exempted from these tests. The particular tests to be used shall be selected by the Board of Elementary and Secondary Education, and it is intended that the tests shall usually remain the same from year to year. The national percentile scores of students shall be confidentially provided to individual parents, and the aggregated percentile scores and distributional data for individual schools and school districts shall be made publicly available on an internet web site; the scores for students classified as English learners shall be separately sub-aggregated and made publicly available there as well, with further sub-aggregation based on the English learner program type in which they are enrolled. The results of any such assessments shall be used as evidence of efficacy of programs. The results of any single annual assessment of English proficiency under this section are considered inappropriate for use in the evaluations of districts, schools or individual teachers. The district shall send report cards and progress reports including, but not limited to, progress in becoming proficient in using the English language and other school communications to the parents or legal guardians of students in the English learners programs in the same manner and frequency as report cards and progress reports to other students enrolled in the district. The reports shall, to the maximum extent possible, be written in a language understandable to the parents and legal guardians of such students.

Section 7A. Evaluation of Programs. The department shall conduct on-site visits to school districts at least once every 5 years for the purposes of evaluating the effectiveness of programs serving English learners and to validate evidence of educational outcomes. The evaluation shall include, but not be limited to, a review of individual student records of all English learners, a review of the programs and services provided to English learners and a review of the dropout rate of English learners formerly enrolled in the district within the prior 3 years. The ELL/Bilingual Advisory Council established under MGL Ch 15, Section 1G shall annually review the policies and procedures of 169 on-site visits to schools districts.

Section 8. Community-based English Tutoring. In furtherance of its constitutional and legal obligation to provide all children with an adequate education, the state shall encourage family members and others to provide personal English language tutoring to

such children as are English learners, and support these efforts by raising the general level of English language knowledge in the community. Subject to appropriation by the General Court, commencing with the fiscal year in which this initiative is enacted and for each of the nine fiscal years following thereafter, a sum of five million dollars (\$5,000,000) per year shall be spent for the purpose of providing funding for free or subsidized programs of adult English language instruction to parents or other members of the community who pledge to provide personal English language tutoring to Massachusetts school children who are English learners. Programs funded pursuant to this section shall be provided through schools or community organizations. Funding for these programs shall be administered by the Department of Education, and shall be disbursed at the discretion of the local school committees in each district, under reasonable guidelines established by, and subject to the review of, the Board of Education.

SECTION 2. Chapter 71A of the General Laws, as so appearing, is hereby further amended by adding the following new sections:

Section 9. Educator Certification and Endorsement All teachers and administrators assigned to language acquisition programs shall hold the appropriate educator licensure and endorsements for the program type. The Department shall promulgate regulations creating a pathway to for endorsement of educators who have completed coursework and field-based experiences in providing instruction within dual-language programs. The Department shall promulgate regulations creating a Language Acquisition Program administrator licensure pathway. Educators qualifying for such licensure shall have demonstrated experience working in language acquisition programs, experience engaging parents and guardians from diverse backgrounds, graduate level coursework in education administration and field-based experiences in meeting local, state and federal requirements for language acquisition programs.

Section 10. Language Acquisition Program Administrator. (a) A school district with 200 or more students who are designated as English learners shall appoint a person to be its administrator of language acquisition programs. Such administrator shall devote full time to the duties involved in supervising the provision of all language acquisition programs in the school system. (b) A school committee with fewer than 200 students designated as English learners shall appoint a person to be its administrator of language acquisition programs. Such administrator shall have the duties involved in supervising the provision of all language acquisition programs in the school system for not less than 25 percent of the duties assigned to such a positions. (c) Notwithstanding the provisions of paragraphs (a) and (b), the school committee of any city, town, or school district may, to meet its

obligations under this section, with the approval of the department, enter into an agreement with any other school committee to jointly appoint an administrator of English language learners.

Section 11. State Seal of Biliteracy. (a) Chapter 69 of the General Laws as appearing in the 2012 Official Edition is hereby amended by adding after Section 10 a new section: Section 1P. The board shall establish the State Seal of Biliteracy to recognize high school graduates who have attained a high level of proficiency in speaking, reading, writing and listening in one or more languages in addition to English. The purposes of the State Seal of Biliteracy are as follows: (1) To encourage students to study languages; (2) To certify attainment of biliteracy; (3) To provide employers with a method of identifying people with language and biliteracy skills; (4) To provide universities with a method to recognize and give academic credit to applicants seeking admission; (5) To prepare pupils with 21st century skills; (6) To recognize and promote foreign language instruction and native and heritage language instruction in public schools; (7) To strengthen intergroup relationships, affirm the value in diversity, and honor the multiple cultures and languages of the Commonwealth. The Secretary of Education shall be responsible for administering the State Seal of Biliteracy program including preparing and delivering to participating school districts an appropriate insignia to be affixed to the diploma or transcript of the student indicating that the student has been awarded a State Seal of Biliteracy. The Department of Elementary and Secondary Education, in consultation with the Massachusetts Foreign Language Association, and in alignment with national trends for existing state Seals in the nation, shall promulgate regulations governing criteria for the awarding of the State Seal of Biliteracy. A school district that participates in the program under this section shall: maintain appropriate records in order to identify pupils who have earned a State Seal of Biliteracy and affix the appropriate insignia to the diploma or transcript of each pupil who earns a State Seal of Biliteracy. State Seals of Biliteracy shall also be available electronically.