

AN EVENT HISTORY ANALYSIS
EXAMINING THE RATE OF RECLASSIFICATION
FOR ENGLISH LANGUAGE LEARNERS

By

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TABLE OF CONTENTS

	Page
DEDICATION	iv
ACKNOWLEDGEMENTS	v
LIST OF TABLES	x
LIST OF FIGURES	xii
Chapter	
I. INTRODUCTION	1
Research Questions	3
Significance of the Study.....	4
Overview of the Study.....	5
II. IDENTIFICATION OF THE PROBLEM	7
What Does It Mean to Be an ELL?	7
Historical and Legal Context of the Study	9
Current Legislation Regarding the Education of ELLs	15
ELLs in Texas.....	18
Contributing Research	26
III. CONCEPTUAL FRAMEWORK.....	37
Theoretical Contributions	38
Theoretical Framework & Hypotheses.....	43
IV. RESEARCH METHODOLOGY	74
Data.....	74
Sample	78
Variables.....	83
Methods	95
Limitations.....	102
V. RESULTS.....	106
Results: Descriptive Statistics	106

Results: Event History Analysis	115
Discussion of Findings	150
VI. CONCLUSION	163
Review of the Study	163
Substantive Implications	168
Theoretical Contributions	179
Methodological Contributions	182
Concluding Comments	183
Appendix	
A. CONCEPTUAL MODEL FOR THE RECLASSIFICATION OF ELLS	185
B. IRB APPROVAL LETTER	186
REFERENCES	187

LIST OF TABLES

Table	Page
1. Summary of Sample Construction	82
2. Students with Missing Test Scores by Year.....	82
3. Students Reclassified Each Year	84
4. Means for Variables in Analysis, by ELL Status in 2003.....	107
5. Descriptive Statistics for State Assessment Variables in 2005, By Years Classified as ELL	111
6. Descriptive Statistics for Student Characteristic Variables in Analysis in 2003, by Years Classified as ELL.....	112
7. Descriptive Statistics for Local Context Variables in Analysis, by Years Classified as ELL	114
8. Descriptive Statistics for State Assessment Variables in EHA Analysis, 2005-2009	117
9. Descriptive Statistics for Student Characteristic Variables in EHA Analysis, 2005-2009	119
10. Descriptive Statistics for Local Context Variables in EHA Analysis, 2005-2009	121
11. Correlations between State Assessment Variables	123
12. Correlations between Student Characteristic Variables.....	123
13. Correlations between School Environment Variables	123
14. Comparison of Baseline Hazard Specifications.....	124
15. Survivor and Hazard Functions for Students Experiencing Reclassification by Year.....	127
16. Event History Analysis Results: Time to Reclassification Final Model.....	129

17. Predicted Survival Probabilities for Reclassification in 2009 for TELPAS Covariates.....	139
18. Probability of Reclassification by Education Service Center Region.....	150
19. Probability of Reclassification by Education Service Center Region with ELL Information	160
20. Summary of Hypotheses and Results.....	166

LIST OF FIGURES

Figure	Page
1. Education Service Center Regions.....	70
2. Percent of population linguistically isolated.....	70
3. Comparison of baseline hazard specifications.....	126
4. Survivor function of time to reclassification.....	127
5. Proportional hazards plot by special education.....	132
6. Proportional hazards plot by bilingual program participation.....	132
7. Reclassification survival function by met TAKS proficiency standards.....	135
8. Reclassification survival function by language of TAKS test.....	136
9. Reclassification survival function by proficient on English TAKS Interaction.....	137
10. Reclassification survival function by advanced-high TELPAS rating.....	138
11. Reclassification survival function by gender.....	140
12. Reclassification survival function by economic disadvantaged status.....	141
13. Reclassification survival function by native language.....	142
14. Reclassification survival function by special education status.....	144
15. Reclassification survival function by gifted status.....	145
16. Reclassification survival function by English language development program.....	146
17. Reclassification survival function by urbanicity.....	149

CHAPTER I

INTRODUCTION

In recent decades, the face of the United States has shifted dramatically. Once dominated by a large white majority, the United States has become more racially, ethnically and linguistically diverse. The Latino population has grown at a steady pace from 22.4 million in 1990 to 35.3 million in 2000 to 50.5 million in 2010 (Guzmán, 2001; Humes, Jones & Ramirez, 2011). The 2000 Census revealed that Latinos had become the nation's largest minority group (Clemetson, 2003). Similarly, the Asian population grew at a faster rate than any other major racial group between 2000 and 2010 increasing from 10.2 million in 2000 to 14.7 million in 2010 (Humes, Jones & Ramirez, 2011). These demographic changes have largely been driven by immigration; as of 2008, foreign-born residents comprised 12.5 percent of the U.S. population in the United States, a proportion that was last witnessed during the waves of European migration in the early 20th century (Shrestha & Heisler, 2011). The high birthrates of the Latino and Asian populations also substantially outpace those of the white population (Shrestha & Heisler, 2011; Suro & Passel, 2003). Thus, the demographic shift is being driven by new arrivals to the United States as well as uneven growth between different racial groups within the United States.

These population shifts are reflected in school buildings across the country. A particularly prominent change has been the surge in the English language learner (ELL) population. ELLs are one of the most rapidly growing demographic groups of students in this country. In 1990, one in 20 students in the United States was classified as an ELL, whereas the prevalence as of 2008 was one in nine (Goldenberg, 2008). During the past decade, the overall

student population in the United States grew less than three percent while the number of ELLs expanded by more than 60 percent (Batlova, Fix & Murray, 2006; Office of English Language Acquisition [OELA], 2008).

Moreover, the immigrant population is on the move; many states that are not accustomed to receiving a steady influx of immigrants are experiencing a surge in the immigrant population. As such, schools outside of traditional immigrant gateway states have faced sudden sharp increases in ELL students as immigrants began settling in ‘new destination’ states (Massey & Capoferro, 2008; Millard, Chapa & Burillo, 2004; Wortham, Murillo & Hamann, 2002; Zúñiga & Hernández-León, 2008). States such as Indiana, North Carolina, South Carolina and Tennessee saw their ELL student populations grow by at least 300 percent between 1995 and 2005 (Goldenberg, 2008). The academic performance of ELLs has gone from being a concern for a handful of states to quickly mushrooming into a national issue.

Simultaneously, federal legislation has motivated states and school districts to focus attention on ELLs. Title III of the Elementary and Secondary Education Act, which was implemented as part of the No Child Left Behind Act of 2001 (NCLB), requires states to identify and monitor students who are ELLs and provide them with effective English instruction programs as well as develop standards and targets for English acquisition and the demonstration of knowledge in content areas such as reading, math and science (No Child Left Behind [NCLB], 2002). This legislation emphasizes the importance of addressing the unique needs of ELLs more than ever before (OELA, 2008).

The concurrent rise in the ELL population, the geographic diffusion of ELLs across the United States, and the increased performance accountability pressure from NCLB have shone a spotlight on the underachievement of ELL students. Results from the National Assessment of

Educational Progress (NAEP) reveal a large and persistent gap between ELL and non-ELL students in the percent scoring at or above basic proficiency on reading and math assessments (OELA, 2008). ELLs also have lower grade point averages, higher dropout rates, and reduced postsecondary aspirations (Portes & Rumbaut, 2001b; Suárez-Orozco, Suárez-Orozco & Todorova, 2008).

It is important to note that unlike other subgroups that are specified in NCLB (e.g., racial groups, economically disadvantaged, students with disabilities, etc.), a key goal for ELL students is to *transition out of ELL status* by demonstrating English proficiency. The timing of when a child exits ELL status has been found to influence his educational outcomes; children who remain classified as ELLs for an extended period of time experience disproportionately high course failure rates, a lack of course credit accrual, increased dropout rates and reduced college entrance rates (Flores, 2011; Olsen, 2010; Ruiz-de-Velasco & Fix, 2000). While there is a growing body of literature that highlights the disparate outcomes between ELLs who remain classified as ELLs for an extended period of time and their peers who are reclassified more rapidly (e.g., Estrada, Goldenberg & Shields, 2011; Flores, 2011; Olsen, 2010; Robinson, 2011), little is known about what facilitates or hinders the reclassification process. Possessing knowledge surrounding factors that are related to the probability of reclassification has the potential to help educators and policymakers better serve the ELL population. Thus, understanding the factors that shape the pace and likelihood of reclassification may provide a means for improving school success for ELLs.

Research Questions

This dissertation investigates ELL reclassification, a critical event in the education of

ELLs in which students meet English proficiency standards and are exited from ELL status.

Specifically, this study asks the following research questions:

1. How do non-ELLs, ELLs who are reclassified quickly and ELLs who take longer to be reclassified compare to one another in terms of performance on assessments, student characteristics and local context?
2. How do state assessments, student characteristics, and local contexts influence the *rate* at which ELLs are reclassified as English proficient?
 - a. What is the role of achievement tests in the reclassification process? How does the role that achievement tests play compare to the role of English proficiency tests?
 - b. Do students' social demographic characteristics and educational profile characteristics influence reclassification decisions?
 - c. Are reclassification rates uniform across the state of Texas reflecting a high level of centralization, or is there evidence of local decision-making?

In an effort to enhance the policy dialogue and inform school efforts to serve ELL students, this dissertation contributes to the investigation of improving educational outcomes for ELLs by unpacking the underlying mechanisms that drive ELL reclassification.

Significance of the Study

The analysis in this dissertation extends the research on one particularly disadvantaged group of students, ELLs, and makes important methodological and theoretical contributions in several ways. First, this dissertation capitalizes on the one of the few longitudinal student-level statewide datasets to follow students for seven years to conduct an event history analysis that

examines factors that predict time to reclassification. This is a novel application of this analytic technique, and it paves the way for additional research that models the timing of key learning events that influence students' educational trajectories. Second, this study makes a timely and unique contribution to the research literature on improving educational access and equity for ELLs by disentangling how state assessments, student characteristics and local context drive the rate of the reclassification process, which may in turn determine how quickly ELLs are granted access to valuable educational resources such as more advanced academic tracks, higher quality teachers and meaningful social networks with peers who are proficient in English.

Overview of the Study

This dissertation is organized into six chapters. Following the introductory chapter, Chapter II provides a brief historical overview and describes the legal context of language instruction in the United States. It explains current federal guidelines that shape the way schools serve ELLs and examines the implementation of these federal guidelines in the state of Texas. Lastly, this chapter discusses the problem of ELL underachievement, emphasizing the relationship between ELLs' educational outcomes and reclassification.

Chapter III lays out the conceptual framework for this study. This chapter begins by explaining the importance of acquiring English proficiency and the significance of reclassification for ELLs, tying English language acquisition and reclassification to increased access to social and cultural capital. This chapter then discusses three frameworks, each of which is linked to a cluster of antecedent factors that this dissertation posits may facilitate or hinder reclassification. These clusters include performance on assessments, student characteristics, and local context. Following each framework is a series of hypotheses that

motivate the specific analyses conducted.

Chapter IV explains the methodology employed in this dissertation by providing detailed information on the datasets utilized, research design and analytic plan. In particular, this chapter describes the context being studied, provides a detailed list of variables that will be incorporated and introduces and previews the analytic models. This chapter also includes a description of the limitations of this analysis.

Chapter V presents the results of the analysis, including descriptive statistics and event history analyses. In addition, this chapter includes an interpretation and discussion of the results and a summary of the findings.

Lastly, Chapter VI offers a discussion of the implications of this study, as well as extensions of this dissertation for future research. Specifically, this chapter extends beyond the scope of the research questions to explain how the findings from this study contribute to the broader literature regarding educational access and equity for ELLs. In particular, the findings from this study make broader theoretical contributions regarding the measurement and assessment of English proficiency, policy implementation, and methodological approaches to measuring students' progress over time. This chapter concludes with a synopsis of the substantive, theoretical and methodological contributions of this dissertation.

CHAPTER II

IDENTIFICATION OF THE PROBLEM

This chapter commences by explaining what it means to be an ELL. It then describes the historical and legal context of this study. The federal policies that govern the way ELLs are educated in the United States have shifted and evolved over time reflecting an increased sense of urgency regarding the education of this growing group of students. These federal policies are often formulated in response to actions taken by states or local school districts. Therefore, the historical and legal context surrounding the education of ELLs in Texas is also highlighted in this chapter because this is the specific context under study in this dissertation. Then this chapter focuses on the current guidelines regarding the identification and reclassification processes for ELLs. Finally, this chapter will explain the significance of reclassification for ELLs by reviewing the empirical literature that specifically examines the relationship between reclassification and educational outcomes.

What Does It Mean to Be an ELL?

ELLs are students who have been identified by educators as exhibiting a lack of English proficiency that has the potential to impede their learning in a mainstream classroom. As such, ELLs are provided with special language support services until they can demonstrate English proficiency. This definition is based solely on English proficiency level and is not based on immigration status; while many ELLs were born outside the United States, more than half (56 percent) are U.S. born, and are therefore American citizens (Capps et al., 2005).

Title IX of NCLB uses the term Limited English Proficient (LEP)¹ instead of ELL and defines a LEP student as an individual who (A) is between the ages of 3 and 21; (B) is enrolled or preparing to enroll in an elementary or secondary school; (C) was born outside United States, speaks a native language other than English, is a Native American, Alaska Native or a native resident of outlying areas; (D) comes from an environment where a language other than English has had a significant impact on the individual's level of English language proficiency; (E) is migratory, speaks a native language other than English, and who comes from an environment where a language other than English is dominant; and (F) whose difficulties in speaking, reading, writing, or understanding the English language may be sufficient to deny the individual the ability to meet the State's proficient level of achievement on State assessments, the ability to successfully achieve in classrooms where the language of instruction is English, the opportunity to participate fully in society (NCLB, 2002). This initial classification is largely based on two sources of information: 1) students' language background, and 2) students' level of English proficiency as measured by an assessment (Abedi, 2008).

Current federal legislation recognizes ELLs as a subgroup of students in need of improvement because their patterns of underachievement have been pronounced for generations. As such, this group of students is a key group emphasized in current federal legislation. However, the focus on this group has evolved over time. The following section explains the historical and legal context of educating ELLs in the United States.

Historical and Legal Context of the Study

For many years, decisions regarding the education of ELLs were left to state

¹ The terms "limited English proficient" (LEP) and "English learner" (EL) are widely recognized as alternatives to "English language learner". "ELL" is thought to be a more positive term than

policymakers and local education agencies. The most common method of instruction for ELLs was “sink or swim” immersion, in which ELLs were provided with no support services and expected to overcome language barriers on their own (Cardenas, 1984; Garcia, 2005).² It was also conventional practice for ELLs to be placed in segregated schools away from their English-proficient peers. These practices were challenged following the passage of the Civil Rights Act of 1964. Title VI of this legislation explicitly states, “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance” (Civil Rights Act, 1964). This piece of legislation paved the way for the first set of federal guidelines regarding the education of ELL students.

The Bilingual Education Act of 1968 (Title VII of the Elementary and Secondary Education Act of 1968 [ESEA]) emerged out of a concern that ELLs were being denied an equal opportunity to learn in American schools. Following the Civil Rights Act of 1964, the courts began to define discrimination differently by choosing to focus on the effects of a policy rather than the policy’s intent (Davies, 2007). The Bilingual Education Act follows this line of thinking asserting that equal treatment of all students does not necessarily bring in equal results, but that students with special educational needs, such as ELLs, require additional support in the classroom to fully take advantage of the educational opportunities a public education affords. This belief is reflected in the underlying purposes of Title VII of ESEA: 1) to encourage states to recognize the special needs of limited English speaking students, and 2) to provide financial assistance to local educational agencies to assist them in designing and implementing new public

² There were a handful of examples of successful programs that employed ELLs’ native languages in instruction. One example is a highly regarded two-way bilingual program for Cuban refugees that was implemented in Dade County, Florida. See MacKey (1977) for more information.

school programs created to meet these special needs (San Miguel, 1984). This act “transformed bilingual education from a minor curricular innovation aimed at teaching English-only into a major reform aimed at introducing the non-English languages of low-status groups into the public schools” (San Miguel, 1984, p. 506). However, the Bilingual Education Act of 1968 was poorly enforced and consequently states and local education agencies were slow to implement changes in schools.

Several court cases led to a turning point in the enforcement of bilingual education programs. In 1970, the Justice Department sued the state of Texas accusing the state of discriminating against both Mexican American and black students. The Fifth Circuit U.S. Court of Appeals sided with the plaintiffs and ruled that Texas had to account for the unique needs of Latino ELLs in their desegregation plan in order to avoid violating the Fourteenth Amendment (Davies, 2007). Later the same year, lower federal court judge William Justice ordered that the state of Texas provide bilingual instruction that would “celebrate cultural diversity, rather than simply permitting the absorption of Mexican Americans in to Anglo society” (Skrentny, 2002, as cited in Davies, 2007). A few years later, the 10th Circuit Court of Appeals ordered Portales Municipal Schools in New Mexico to begin offering a bilingual and bicultural curriculum, review assessment procedures and hire bilingual school personnel in response to “undisputed evidence...that Spanish surnamed students do not reach the achievement levels attained by their Anglo counterparts” (*Serna v. Portales Municipal Schools*, 1974). Together these cases illustrate the increasing momentum to address the rights of ELL students.

In 1974, the Supreme Court heard *Lau v. Nichols*. A group of Chinese-American parents whose children attended public schools in San Francisco petitioned federal courts to provide English language instruction to approximately 3,000 Chinese students who were not proficient in

English. Justice Department attorney Robert Bork argued that “deny[ing] petitioners any assistance in learning the language of instruction in the schools excludes them from the educational program because of a national-origin related characteristic, just as effectively as would placing a policy of barring them from the school house. This unequal treatment...is a constitutionally impermissible act of de jure discrimination, from which petitioners are entitled to relief” (*Lau v. Nichols*, 1974). The Court found that the San Francisco school system violated the Department of Health, Education and Welfare federal regulations:

Where inability to speak and understand the English language excludes national origin-minority group children from effective participation in the educational program offered by a school district, the district must take affirmative steps to rectify the language deficiency in order to open its instructional program to these students. (Pottinger, 1970)

The revisions formally stated the importance of providing instruction in ELLs’ primary language as well as incorporating their cultural heritage into instruction (San Miguel, 2004).

One year after the *Lau* decision, civil rights leaders and minority groups were still dissatisfied with the number of school districts that had not embraced the *Lau* ruling nor the Bilingual Education Act. In 1975, the Office of Civil Rights (OCR) drew up the *Lau Remedies*, which outlined specific guidelines for teaching limited English speaking students, including developing a procedure for identifying these students, assessing students’ English language proficiency, and stipulating that English as a Second Language instruction was not sufficient (San Miguel, 2004). The Department of Health, Education and Welfare released the *Lau Remedies*, which listed new requirements for testing and mandated that all language minority students have access to an unspecified type of language assistance program, in 1975. This set of guidelines “translated schools’ legal obligations into pedagogical directives...[r]esolving to

prevent local districts from choosing the cheapest ‘band-aid’ treatments, such as remedial English classes” (Crawford, 1994). After the Lau remedies, districts could not implement bilingual education voluntarily. Rather, they were required to design extensive English acquisition programs if the district contained 20 or more language minority students and obligated to take steps even if the district contained only one language minority student in order to comply with the federal mandate and escape the jeopardy of losing federal funding (Teitelbaum & Hiller, 1977).

The effect of the Lau Remedies was curtailed because it was never printed in the Federal Register, and therefore did not have legal standing. Nonetheless, OCR did make a greater effort to ensure compliance. In 1975, 333 districts in 26 states were asked to submit a plan explaining what they would do in one year’s time to comply with the Lau Remedies. OCR had the power to reject their plans and mandate bilingual education instead (Davies, 2007). Schools that did not comply were subject to losing funding. School districts were often faced with a difficult decision: spend the money on implementing expensive bilingual education programs (often for multiple language groups) or risk being sanctioned by OCR. Five years after the Lau Remedies, OCR had been able to review 600 school districts and negotiate 359 plans (Davies, 2007). The Lau remedies ultimately prompted the development of plans to serve language minority students in 500 school districts across the country (Crawford, 1994).

In addition to the Lau Remedies, judges in New Mexico and New York made rulings that forced these states to implement bilingual education programs. In *Serna v. Portales* (1974), mentioned earlier, the judge found that “bilingual education was the only appropriate remedy for the discrimination that Mexican-Americans in New Mexico had experienced (Davies, 2007). The *Aspira v. New York* (1976) case resulted in a guarantee that Puerto Rican children in the

New York City School District would have access to bilingual instruction. States such as California, Texas, Michigan, Colorado, New Jersey and Illinois were among those that repealed English-only laws during this time period and permitted (but did not necessarily encourage) bilingual instruction (Davies, 2007).

In 1974, the Bilingual Education Act was reauthorized, but little changed. Appropriations increased to \$68 million, but this amount was relatively trivial considering the number of students entitled to language support services. Congressional involvement did draw national attention to the issue, but bilingual education was coming under increased scrutiny. Criticism of bilingual education began to gain momentum as the third reauthorization of the Bilingual Education Act approached in 1978. The American Institute for Research evaluated 38 bilingual programs and found that fewer than 30 percent of the students who had been placed in bilingual education were actually limited English speakers, and that 86 percent of the bilingual education programs actually kept children in bilingual education long after they should have been mainstreamed into regular classrooms. In addition, they found that bilingual education programs cost an average of \$376 more per student than regular programs, and that there is not evidence that bilingual programs were having a “consistent significant” impact on limited English speakers (American Institute for Research, 1977, as cited in San Miguel, 1984, p. 511). Another critical report was published by well known *Washington Post* journalist Noel Epstein, who claimed that the half billion dollars that the federal government had spent on bilingual education since the inception of the Bilingual Education Act of 1968 is a waste because “the government has not demonstrated whether such instruction makes much difference in the students’ achievement, in their acquisition of English, or in their attitudes towards school” (Epstein, 1977, p. 1). The reauthorized Bilingual Education Act of 1978 reflected these

criticisms by stressing the importance of gaining English proficiency rather than the importance of including ELLs' primary language in classroom instruction.

The subsequent growth of the English-only movement gave rise to increasing attacks on bilingual education. The Lau remedies were unpopular with many local school boards and the Reagan administration chose to withdraw the Lau Remedies of 1975 just before they had been formalized, and returned the right to determine how to teach ELLs to school districts. Monitoring of school districts was significantly curtailed, and little was done to ensure that schools were in compliance with *Lau v. Nichols* (Crawford, 1994). During a time in which immigration was increasing, federal funding for bilingual education decreased from \$158 million to \$133 million. Although the number of ELLs continued to rise, the number of students actually being served went from 300,000 in 1978 to 182,000 in 1984 (San Miguel, 2004).

Simultaneously, reports were published by the Department of Education that were highly critical of bilingual education, particularly the developed system in Texas.³ The Secretary of Education, William Bennett, spoke in favor of English-only methods of instructing ELLs, and harshly criticized dual language methods stating, "after seventeen years of federal investment and after \$1.7 billion of federal funding, we have no evidence that the children whom we sought to help...have benefited" (Bennett, 1988, p. 185).

The debate settled somewhat during the early 1990s as president Bill Clinton reauthorized the fifth and final version of the Bilingual Education Act in 1994 as part of the Improving America's Schools Act. This reauthorization reaffirmed the use of ELLs' native language as part of instruction through bilingual education programs. However, this legislation was soon to be replaced with the NCLB in 2002, which strengthened the federal role in

³ See for example Inspector General (1982).

education and required that states be held accountable for the progress of subgroups of students, including ELLs, in an unprecedented way.

Current Legislation Regarding the Education of ELLs

The Bilingual Education Act (Title VII of the Elementary and Secondary Education Act) became Title III of NCLB entitled “Language Instruction for Limited English Proficient Students”. As is evident in the name change, Title III of NCLB focuses on English acquisition and no longer specifically promotes bilingual education, but does not explicitly favor one type of English language instruction program over another. Title III requires that all school districts that receive federal funds submit an annual evaluation which describes the English language instruction program, in addition to three Annual Measurable Achievement Objectives (AMAOs) including the percentage of ELLs who a) make progress in attaining English proficiency, b) attain English proficiency and exit ELL status, and c) successfully meet academic achievement standards according to reliable and valid assessments.

All states recommend, and most require, the use of a home language survey to initially generate a pool of students who may be ELLs (Bailey & Kelly, 2010; Kindler, 2002). The purpose of this survey is to determine which students are language minorities, or students who come from homes where a language other than English is used in the home. Generally, a home language survey contains between two and six questions⁴ that gather information to create a

⁴ Between July 2009 and March 2011, the state of Arizona restricted its mandatory home language survey such that it only included one question, “What is the primary language of the student?” The U.S. Department of Education’s Office for Civil Rights and the Civil Rights Division of the U.S. Department of Justice challenged the implementation of the one-question home language survey and in March 2011 reached a settlement agreement with the Arizona Department of Education. This agreement reinstated Arizona’s previous three-question survey. For more information, refer to Zehr (2010).

language profile for each student (Bailey & Kelly, 2010).⁵

Upon flagging potential ELLs, NCLB requires that states determine students' English proficiency level using an assessment of English language proficiency (NCLB, 2002). English language proficiency assessments are designed to gauge students' English proficiency in four domains: listening, speaking, reading and writing. These assessments have four primary purposes. The first is to systematically identify and classify students as ELLs based on their English proficiency level. Students who score below a certain level are classified as ELLs. The second purpose is to determine the level of ELL services and accommodations a student may require. For example, an ELL who is just beginning to learn English may be placed in a transitional bilingual program, in which academic instruction begins in the student's native language and transitions into English, whereas an ELL with a greater command of English may be placed in a pull-out English as a second language program in which students leave the mainstream classroom for part of the day to receive English language instruction and support.⁶ Third, English language proficiency assessments monitor English language acquisition over time such that schools can track the progress ELLs are making. NCLB requires that states report on the progress that ELLs are making in terms of English proficiency on an annual basis (NCLB, 2002). Finally, English language proficiency tests are used to inform decisions regarding exiting ELL status. Once ELLs are determined to have reached a sufficient level of English proficiency so that they no longer need special language support, ELLs are reclassified as fluent English proficient (FEP). NCLB also requires that states report the number and percentage of ELLs who

⁵ Bailey and Kelly (2010) provide examples of home language survey questions. They include: Which language did your child learn when he/she first began to talk? (California), What language is spoken in your home most of the time (Texas), What is the native language of each parent/guardian? (Vermont).

⁶ In three states bilingual education has been severely restricted by a voter referendum. In these states, it is unlikely that large numbers of ELLs will be placed in bilingual programs.

attain English proficiency by the end of each academic year (NCLB, 2002).

While NCLB legislation helps to better define the term “ELL” and sets performance accountability standards for the ELL subgroup, this legislation leaves decisions regarding ELL identification and reclassification, curriculum and instruction, and measurement and assessment up to states and school districts. As such, there is substantial variability in terms of how different states identify, teach and test their ELL students (Kim & Herman, 2009). As Abedi (2008) notes, one would expect that a student who is classified as an ELL in one state would carry the same classification in another state, but this is not always the case. This may be due to differences in the criteria used to initially identify ELL students (varying questions on a home language survey, different assessments of English proficiency, different cut-points on assessments of English proficiency, etc.) or in ELL reclassification requirements (Linguanti, 2001). For example, Kim and Herman (2009) examined the reclassification standards across three states and found that there was variability in the stringency of these standards. This variability was evidenced in the achievement gap between ELLs and non-ELLs; states with more stringent reclassification standards had less of a gap while states with more lenient standards had more of an achievement gap.

ELLs in Texas

Because this study employs data from the state of Texas, the paragraphs that follow focus specifically on describing the ELL student population in Texas as well as explaining the identification and reclassification process for ELLs in this one state. Texas is an important state to explore with regard to ELL policies because as illustrated above, this state has been a driving force in setting policies regarding the education of ELL students.

Texas is second only to California in terms of the number and proportion of ELLs enrolled in public schools in the state. The percentage of ELLs students enrolled in Texas more than doubled to 15 percent between 1979 and 2005 (*United States v. Texas, 2008*). In many ways, ELLs have become “the typical public school student in some districts in Texas, which gives Texas a critical role in forecasting the ELL policy issues that will be addressed in the ongoing debate about the need for language proficiency programs across the United States” (Flores & Park, 2012, p. 3-4).

Texas has long been at the center of policy formulation regarding the education of ELL students. Policymakers in this state designed and implemented many of the programs that guide the instruction of ELL students throughout the United States. U.S. Senator Ralph Yarborough, a Democrat from Texas, authored and introduced the original Bilingual Education Act bill in 1967 as a response to the poor academic performance of Mexican-American students in his home state. At that time, 80 percent of Spanish-speaking children in Texas repeated first grade, and there were 12 times as many Mexican-Americans in first grade as in twelfth grade (Davies, 2007). Another politician from Texas, President Lyndon Johnson, had personal experience working with ELLs; he taught Mexican-American students in south Texas (MacDonald, Botti & Clark, 2007). He eventually signed the original Bilingual Education Act (1968) into law.

Likewise, Texas also has affected education policy reform for ELLs in the courtroom. Several state and local policies regarding the education of ELLs and immigrant students in Texas have been scrutinized and struck down in federal and U.S. Supreme Court cases (e.g., *Plyler v. Doe*, 1982; *United States of America v. State of Texas*, et al., 1971; *Castañeda v. Pickard*, 1981; *United States v. State of Texas et al.*, 1981). In essence, school districts in Texas have wrestled with ELL education for some years because schools in this state have long served ELL students,

particularly Latinos. In many ways Texas reflects the struggles that states across the country are presently grappling with as they formulate policy regarding the education of ELLs.

Students in Texas also have acted as leaders in motivating policy reform for ELLs in Texas. In 1968, the same year of the enactment of the original Bilingual Education Act, 150 students from rural south Texas walked out of class as a means of challenging their school system to implement the desegregation mandates laid out by *Brown v. Board*. The Edcouch-Elsa walkout in 1968 signaled a shift in power from Anglo to Hispanic in south Texas (Guajardo & Guajardo, 2008).

Despite the steps that have been taken to improve ELL education in Texas, there continue to be questions that challenge whether or not ELLs' needs are being sufficiently addressed. Of late, TEA was scrutinized for their English as a Second Language (ESL) program for ELLs in secondary school. The U.S. District court initially sided with the plaintiffs in 2008, finding that the ESL program was failing to overcome language barriers for more than 140,000 Latino ELLs in grades 7-12. However, the Fifth Circuit Court reversed this decision in 2010, citing the insufficient amount of data on the ESL program since it had been in place only for two years. These recent cases illustrate two important points. First, it is evident that there continues to be scrutiny regarding the adequacy and equity of educational programs for ELLs. Second, there is increasing attention being paid to older ELL students, many of whom are "long-term ELLs" who have lingered in bilingual and ESL programs since the beginning of elementary school.

Language Proficiency Assessment Committee

Since 1981, state legislation has required that every district that serves ELL students establish a Language Proficiency Assessment Committee (LPAC) to review all pertinent

information on ELL students and make decisions about their program placement. By law the LPAC consists of a bilingual educator, a transitional language educator (such as a bilingual or ESL teacher), a parent of an ELL (who is not an employee of the school district) and a campus administrator (Texas Education Code [TEC] §29.063, 1996).⁷ In districts where there are a large number of ELLs, it is common for LPACs to be established at the school level so that review of ELLs files can take place in a timely fashion. Individual teachers of students being considered for reclassification may or may not be on the committee.

Specifically, the LPAC is responsible for 1) designating students' language proficiency level and using this information to identifying which students are ELLs, 2) making a determination about the instructional placement of each ELL, 3) determining the appropriate state criterion-referenced assessment option for each ELL annually (administration of the English version test, Spanish version test or exemption from the test), 4) reviewing and monitoring the annual progress of ELLs in terms of both English proficiency and academic achievement, 5) deciding when to ultimately reclassify ELL students as English proficient, and 6) monitoring the academic progress of students who have exited from ELL status (TEC §89.1220, 1996). While other members of school staff (classroom teachers, aides, etc.) help to provide information on ELL students' academic and English proficiency progress, key decisions regarding ELL placement and reclassification are ultimately made by the members of the LPAC.

⁷ If the district does not have one of the individuals required to serve on the LPAC, the district designates another professional staff member to serve. In addition, it is the district's prerogative to add other members to the committee of any of the required categories.

Identification of ELLs in Texas

Much like many other states, the process of identifying ELL⁸ students in Texas begins with a home language survey. The Texas Education Agency (TEA) requires by law that the parent or guardian of every student must complete the home language survey when the child is being enrolled for the first time in Texas public schools as well as whenever students are new to the school district (TEC §89.1215, 1996).⁹ This survey must ask the following two questions: 1) “What language is spoken in your home most of the time?” and 2) “What language does your child (do you) speak most of the time?” (TEC §89.1215, 1996).^{10,11} If the response to either of these questions is a language other than English, the student is flagged to be assessed on his English language proficiency. To gauge English proficiency, districts are required to administer a TEA-approved oral language proficiency test for students in prekindergarten through first grade, while students in grades 2-12 also take a state-approved reading and language arts English proficiency assessment.^{12,13} If students’ scores are found to be lower than the TEA-established cut point on the assessment, the LPAC formally identifies the student as an ELL. The home

⁸ It should be noted that the Texas Education Code uses the term ‘limited English proficient’ (LEP) to describe ELLs.

⁹ It is permissible for students in grades 9-12 to complete the survey for themselves without a parent or guardian’s signature (TEC §89.1215, 2010).

¹⁰ Districts may opt to add additional questions to their home language survey in order to collect additional information, but these two questions must remain on the survey unaltered.

¹¹ Due to the dominance of Spanish-speakers in the ELL population in Texas, the survey is required to always be administered in English and Spanish, and shall be translated for other language groups whenever possible. At present, TEA offers 26 translations of the home language survey.

¹² A complete list of TEA-approved tests that can be used to identify ELLs and their respective cut points are available at <http://elltx.org/assessment.html>.

¹³ It is interesting to note that districts that provide a bilingual education program must administer an oral language proficiency exam in the home language of the student. Students who are native Spanish speakers are administered the Spanish version of the TEA-approved oral language proficiency test, while students who speak another native language are assessed through informal oral language assessment measures.

language survey, assessment and formal identification process must take place within four weeks of students' initial enrollment in the district (TEC, §89.1215, 1996).

The purpose of classifying students as ELLs is to be able to identify which students will need supplementary language support structures in order to be successful in American schools. ELLs in Texas are placed into either a bilingual or an English as a second language (ESL) program. The state of Texas specifies that a bilingual education program should be “a full-time program of dual language instruction that provides for learning basic skills in the primary language of the students enrolled in the program and for carefully structured and sequenced mastery of English language skills” whereas an ESL program should include “intensive instruction in English from teachers trained in recognizing and dealing with language differences” (TEC, §29.055, 1995).¹⁴ This programmatic determination is made based on the concentration of ELLs from the particular language group within the district as well as the grade level of the student. Since 1995, the TEA has required that “each district with an enrollment of 20 or more students of limited English proficiency in any language classification in the same grade level shall offer a bilingual education or special language program” (TEC §29.052, 1995). The law also specifies that a bilingual education must be offered in kindergarten through the end of elementary school (5th or 6th grade depending on elementary school structure in the school district), a bilingual or an ESL program may be offered during middle school grades (through 8th grade), and instruction in an ESL format will be offered during high school grades (9th grade through 12th grade).

Texas Education Code requires that the LPAC notify parents that their child has been

¹⁴ More information on the specific program content and design of bilingual and ESL programs can be found in Chapter 89. Adaptations for Special Populations Subchapter BB. Commissioner's Rules Concerning State Plan for Educating Limited English Proficient Students, §89.1210.

classified as an ELL and recommended for placement in either a bilingual or ESL program. This notification includes information that describes the elements of the language instruction program and provides an explanation of the benefits of participating. In order to formally enter a bilingual or ESL program, parents must provide written approval of the child's participation. Parents have the right to opt out of these programs on behalf of their children, and if they do, ELLs are placed into mainstream English classrooms and are not provided with any supplemental language support.¹⁵ However, these students are still classified as ELLs and as such, are assessed annually to monitor their progress in acquiring English proficiency.

Reclassifying ELLs in Texas

During the spring of each academic year, the LPAC convenes to review the files of ELL students' in first grade and beyond to determine if students are ready to exit ELL status and be reclassified.¹⁶ The goal of the committee is to identify which students have a sufficient level of English proficiency to be successful in mainstream English classrooms without additional language support structures because, upon reclassification, previously offered supports (e.g. bilingual education program, summer school opportunities for ELLs, etc.) are withdrawn.

Reclassification decisions take into account a series of assessments as well as teachers' recommendations. Much like the assessments used to initially identify ELLs, the assessments used for reclassification decisions are also selected from a list of TEA-approved tests with TEA-

¹⁵ Students whose parents have chosen to opt out of language services are colloquially referred to as "parent denials" or simply "denials" by educators across Texas.

¹⁶ Texas state law prohibits ELL students from being reclassified in prekindergarten or kindergarten.

determined cut points that measure listening, speaking, reading and writing.¹⁷ While districts generally have choices in terms of the assessments they can use, there are times when the specific assessment is prescribed by the state. For example, the reading assessment that is used for reclassification decisions for students in grades 3-11 during the years included in this study was the English version of the Texas Assessment of Knowledge and Skills (TAKS), the assessment used to measure reading achievement,¹⁸ whereas students in first and second grade need to show satisfactory reading performance by scoring at or above the 40th percentile on a TEA-approved norm-referenced test. Similarly, the English writing TAKS is used to determine written English proficiency in grades 4, 7, 10 and 11, the grade levels at which the writing assessment is given, whereas in other years the district selects the writing assessment from the TEA-approved list.

The way in which teacher recommendations are to be factored into reclassification decisions is somewhat unclear. The chart provided by TEA indicates that “Subjective Teacher Evaluation” should be based on “[a]ssessments, anecdotal notes, portfolios, etc.” (TEA, 2010a, p. 73). However, there is little guidance as to the weight that subjective teacher evaluations should carry in the process or how information about teachers’ evaluations of their ELL students should be conveyed to the LPAC, whose members are the ones actually making reclassification decisions.

Accountability for ELLs in Texas

In accordance with Title III of NCLB, the state of Texas developed a single assessment

¹⁷ A complete list of tests approved by TEA to make decisions about reclassification is available at: <http://elltx.org/assessment.html>.

¹⁸ The TAKS was replaced by the State of Texas Assessment of Academic Readiness (STAAR) for students in grades 3-9 during the 2011-2012 school year.

system so that it has a standardized measure of English proficiency across the state. This assessment battery, the Texas English Language Proficiency Assessment System (TELPAS), was implemented during the 2004-2005 academic year. It assesses the four language domains of listening, speaking, reading and writing on an annual basis. These domains are holistically rated with the exception of the reading domain for students in grades 2-12, which instead consist of a standardized multiple-choice test.

While the primary purpose of the TELPAS is to report out English proficiency progress for accountability purposes, the writing TELPAS doubles as one of the TEA-approved writing assessments that can be used for reclassification decisions. It is quite common for districts to use the TELPAS writing assessment as their English proficiency writing assessment of choice for reclassification purposes because doing so prevents them from having to purchase and administer a separate writing test. Similarly, while the primary purpose of the TELPAS is to measure English proficiency for accountability purposes, it is often the case that classroom teachers will consider all four TELPAS domain scores as they make recommendations regarding reclassification, and members of the LPAC will consider these scores as they make the recommendations about whether to exit ELL students. More detailed information on the TELPAS is discussed below in the measures section.

The reason for the keen focus on ELLs in Federal policy is because of the persistent discrepancy that exists between the educational outcomes of ELLs and non-ELL students. A key outcome of interest in this legislation is reclassification. This chapter now turns to the research literature that examines the significance of reclassification for ELL students.

Contributing Research

One of the primary goals of any program that serves ELLs is for students to acquire a sufficient level of English proficiency such that they will no longer require language supports. Because of this goal, one of the most common educational milestones used to measure ELLs' progress is reclassification (Linguanti, 2001). Linguanti (2001) explains that reclassification is expected to demonstrate three things: 1) Students have the English skills necessary to comprehend and communicate effectively for their age or grade level; 2) Students have adequate English academic language skills to actively participate in rigorous and cognitively demanding work without modifications, accommodations or supports beyond what would be offered for students in the general population; and 3) Students are prepared to meet academic achievement performance expectations using English.

As the number of ELLs increases and more districts are responsible for educating ELLs, there is increasing attention being paid to the risks and benefits associated with being classified as an ELL and being reclassified as English proficient. As Linguanti initially asked a decade ago, "How do LEP students profit—or not—as a result of their classification? What do [fluent English proficient] students gain—or possibly lose—as a result of their reclassification?" (p. 7). Some scholars posit that students who are not reclassified within a reasonable time period may be confined to:

ESL ghettos—that is, hermetically sealed tracks from which English-language learners are seldom exited. State guidelines for assessing the language proficiency of students whose primary language is not English are elaborate and take the position—when convenient—that students need extensive support until they acquire enough English to succeed in mainstream courses thus justifying their continued segregation. (Valdés,

Fishman, Chávez & Pérez, 2006, p. 31)

Conversely, if ELLs are reclassified prematurely when they are still in need of language supports students are similarly at risk for academic failure (Linguanti, 2001).

Researchers have begun to descriptively compare the outcomes of ELLs who remain classified for different periods of time. Ruiz-de-Velasco and Fix (2000) document concerns surrounding “long-term LEP” students, those who have been educated in American elementary schools and demonstrate oral English fluency, but are unable to meet grade-level reading comprehension and writing standards in English. They note that one concern for this group is that the typical language support programs (e.g., ESL or bilingual programs) are not designed to meet the unique needs of this group of students, and continued emphasis on language instruction for this group rather than a focus on basic reading and writing skills may not help long-term ELL students bridge the literacy gap.

Olsen (2010) examined survey data from 40 districts in California to elicit the differences between long-term ELL students (which this report defines as those who remained classified as ELLs after being in United States schools for more than six years) and their peers who are reclassified more rapidly. She found that 59 percent of the total secondary school ELL population comprised long-term ELLs, but that the concentration of long-term ELLs varied widely across districts. In addition, Olsen’s report showed that long-term ELLs in California tend to struggle academically; they have average grade point averages of less than 2.0 and reading and mathematics achievement tests reveal that these students are performing two to three years below grade level, with the gap becoming increasingly wide as students progress through middle and high school. This demonstrates that students who remain classified as ELLs upon entering 8th grade comprise one of the lowest performing student groups; their peers who have

already been reclassified meet grade-level expectations more than five times the rate of their ELL peers (Olsen, 2010). Similar patterns emerge when examining data from Texas. Flores, Batlova and Fix (2012) study the first grade cohort of 1995, which includes the population of first graders from across the entire state, to compare the outcomes of “quick exiters” (students who were reclassified by the end of third grade) as compared to “long-term ELLs” (students who remained classified as ELLs for five or more years). They find that quick exiters consistently met math and reading achievement standards more than students who were never identified as ELLs whereas long-term ELLs were much less likely to demonstrate proficiency. For example, 86 percent of quick exiters met math standard in eleventh grade, while only 59 percent of long-term ELLs who remained classified as ELLs for five or more years and a mere 44 percent of long-term ELLs who remained classified as ELLs for seven or more years met standards.

Two clear patterns emerge from these descriptive reports. First, the number and proportion of students who become “long-term ELLs” is surprisingly large. The second is that students who remain classified as ELLs for an extended period of time face severe academic challenges, which tend to be exacerbated as each year passes. What is unclear based on this descriptive research is whether or not these gaps can be attributed solely to differences between the students who have and have not been reclassified or if the act of reclassification serves as a type of treatment providing new learning opportunities and advantages to reclassified ELLs. In an effort to better understand what reclassification means for ELL students, recent research has attempted to disentangle the specific *effects* of reclassification.

Studying the causal relationship between reclassification and academic outcomes can be complex since students cannot simply be randomly assigned to a reclassified “treatment” group and a “control” group of students who remain classified as ELLs. That being said, there are a

number of estimation techniques that researchers have employed in recent years to shed light on the specific effects of reclassification. Researchers have made use of ordinary least squares and logistic regression models to gauge the influence of the timing of reclassification on a variety of educational outcomes. Flores, Painter and Pachon (2009) control for previous academic performance and find that being reclassified earlier tends to be statistically significantly related to a number of important student outcomes for ELLs in California's largest school district, Los Angeles Unified. Particularly worth noting is that the odds of retention and dropping out of high school are reduced, whereas the odds of passing the state exit exam are increased. This research report also highlights that the vast majority (76 percent) of ELLs in 8th grade are in fact students who have been present in Los Angeles schools since before first grade. Their study calls for research efforts to "focus on why students remain in the system so long without being reclassified" (Flores, Painter & Pachon, 2009, p. 11).

Using a quasiexperimental design, Callahan, Wilkinson, Muller and Frisco (2009) employ propensity score matching with a nationally representative database to estimate the predicted effect of ESL placement (which the authors argue is an indicator of being classified as an ELL) on educational outcomes. This technique allows the authors to create a simulated counterfactual comparison group in order to draw causal conclusions as if ESL placement were randomly assigned. They find that in schools with a low-immigrant concentration, students placed in ESL, particularly those who are first-generation immigrants, are significantly less likely to enroll in courses such as Algebra II and Chemistry, both of which are highly predictive of postsecondary enrollment. However, in high-immigrant-concentration schools, the estimated effect of ESL placement is reversed; students placed in ESL are statistically significantly more likely to enroll in these courses, have higher GPAs and experience lower course failure rates.

These benefits are the greatest for second-generation immigrant students. The authors posit that the opportunities available for ESL students in low-immigrant-concentration schools “appear to be insufficient for academic progress at parity with mainstreamed immigrant students” (Callahan et al., 2009, p. 377). The findings from this study suggest that both individual student attributes (e.g., generational status) as well as collective school context (e.g., the concentration of immigrant students) contribute to the effect of ESL placement.

In a subsequent study that also employs propensity score matching, Callahan, Wilkinson and Muller (2010) use nationally representative data to study the 2001-2002 sophomore cohort of the Educational Longitudinal Study to explore the effect of ESL placement on ELLs’ academic achievement while taking into account language proficiency, prior achievement, student demographics, and school characteristics. Their results suggest that ELLs who are recent arrivals to American schools and possess lower levels of English proficiency may have higher mathematics scores due to ESL placement, while ELLs with higher levels of English proficiency and long-term ELLs may in fact be hindered by continued ESL placement in high school. Callahan and colleagues attribute this to “possible problematic school processes either in placement or in the opportunities afforded to ESL students” (Callahan, et al., 2010). This research suggests that if students remain classified as ELLs for an extended period of time and language instruction continues to take priority over rigorous academic coursework, the academic achievement of ELLs may be undermined.

These discrepancies are also present when considering other meaningful educational outcomes such as high school graduation and college enrollment. Flores and Park (2012) used longitudinal data from Texas to follow first graders beyond high school to examine both the effect of ever being identified as an ELL and the time spent classified as an ELL on enrolling in

college preparatory coursework, earning a high school diploma and enrolling in college. Also using propensity score matching, Flores and Park find that being classified as an ELL for any period of time has a weak negative influence of ELL identification on all three of these academic outcomes. However, this negative effect “either vanishes or becomes positive for students identified as ELL for a select number of years (e.g., three years)” (p. 24). Conversely, students who remain classified as ELLs beyond three years were significantly less likely to enroll in college preparatory classes, graduate from high school on time, and enroll in college immediately following high school. These negative differences were even larger in magnitude for those students who remained classified as ELLs for an extended period of time (seven years or more). The authors argue that this illustrates the benefit of participating in a language program for a reasonable period of time, and they stress that “the long-term academic success story seems to depend greatly on the point at which a student exits the language program” (p. 25).

Robinson (2011) investigates the effect of reclassification for students in one urban school district in California using a fuzzy regression discontinuity design. This type of design mimics an experimental design by “randomly assigning” the reclassification treatment due to measurement error for students who are just above and just below the cut point for reclassification standards. While this method allows for causal conclusions to be drawn, it only allows the researcher to test the effect of reclassification for students who just barely missed reclassification criteria and those who just met reclassification criteria; it does not allow for generalizations across all students. Robinson (2011) argues that reclassification should not have any effect on student outcomes, course enrollment, course completion or attendance if it occurs at the “correct” time; for example, if reclassification takes place too early it will result in a

sudden drop in students' academic achievement scores as a result of necessary language supports being withdrawn too quickly whereas reclassification that occurs too late will prompt a sudden increase in students' achievement as students gain additional exposure to academic content. This way of thinking about reclassification suggests that the effects of exiting ELL are not necessarily positive, but should in fact be neutral. It also suggests that the effect of reclassification will be highly dependent on the rigor of the reclassification criteria; overly stringent criteria would prompt delayed reclassification whereas overly simple criteria would result in reclassification too quickly.

The research discussed above provides useful information about the complex relationship between reclassification and educational outcomes. These studies focus on examining the effects of reclassification by thinking of exiting ELL status as a cause or a treatment. They have established that reclassification can benefit students if it occurs early enough during students' educational trajectories to prevent academic tracking and social stigmas being formed around ELL status. They also emphasize that reclassification can have deleterious results if it occurs too early when students' English language skills are still being developed. This research also raises a number of additional questions regarding the determinants of reclassification: How does the tension between the roles of academic and linguistic criteria play out in the reclassification process? How can educators prevent the growth of the long-term ELL population, a group that often experiences academic marginalization in American schools? And, how do the reclassification criteria differ across districts and states?

Although the knowledge base on reclassification has certainly grown in recent years, it largely centers on the *aftermath* of reclassification. This research establishes that there are often consequences of being reclassified (or not reclassified) but it does not speak to factors that

explain when and why students are reclassified to begin with. However, a small group of researchers have begun to explore the timing and prevalence of reclassification as well as some of the precursors that lead to reclassification.

Parrish et al. (2006) also use event history analysis to examine the probability of reclassification across the state of California as well as a comparison across six school districts with a high proportion of ELL students. This study reports broad variation in reclassification rates across these six school districts as well as differences in probability of reclassification between different ethnicities. However, this study is limited in that only a small portion of California school districts are studied, the dataset employed is cross-sectional, and the analysis does not net out the influence of covariates that potentially explain some of this variation.

Recently, three multivariate event history analysis studies have been conducted that examine the amount of time it takes for ELL students to be reclassified in individual school districts.¹⁹ Using six years of longitudinal data on middle and high school students from one school district in California, Abedi (2008) explored how several factors influence the amount of time students are classified as ELLs. While this work does find that several factors (e.g., ethnicity and reading achievement) are significantly related to students' probability of reclassification, this study is limited by the inability to model or describe students' educational

¹⁹ It is worth noting that several other studies have been conducted that estimate time to *English proficiency acquisition* rather than reclassification. Hakuta, Butler and Witt (2000) examined cross-sectional data in two districts in California and two in Canada in an effort to determine how long it takes for ELLs to acquire English proficiency. Similarly, Cook, Boals, Wilmes and Santos (2007) explored a limited three-year longitudinal dataset from three states to estimate the amount of time necessary for ELL students to acquire English proficiency. Conger (2009) employs longitudinal data from New York City public schools and uses event history analysis to model the rate at which ELLs who enter school at different ages acquire oral English proficiency. While these studies make important contributions to the scholarly literature on English language acquisition, they do not speak to *when and why students experience reclassification*, the policy-relevant event that corresponds to the withdrawal of English language development support services.

backgrounds or experiences prior to middle school. It also does not include students who were reclassified prior to middle school, thereby only analyzing time to reclassification for a specific group of ELLs who have either struggled to meet reclassification criteria for many years or are recent immigrants.

Thompson (2012) investigates the probability of reclassification in the context of studying English language acquisition process and trying to establish empirically based targets for becoming proficient in English. This study estimates the time it takes for ELLs to attain English proficiency (as indicated by experiencing reclassification), explores how various factors explain the variation in time to reclassification, and examine barriers to reclassification using data from the Los Angeles Unified School District. The author finds that approximately one-fourth of students in this district had not been reclassified after spending nine years in Los Angeles Unified schools, and that net of other factors, ELLs with certain student and family characteristics (e.g., those with low levels of primary language proficiency upon entering the district, those with low levels of English proficiency upon entering the district, boys, native Spanish speakers and those who have ever qualified for special education, those who qualify for the National School Lunch Program, those whose parents have lower levels of educational attainment) have lower probabilities of reclassification. In addition, Thompson finds that while students who participated in a bilingual program are less likely to be reclassified overall, their probability of reclassification increases in later years of school. Finally, results from this study indicate that the primary barrier to reclassification is meeting proficiency standards on the state-required English proficiency exam, but that in later years, demonstrating proficiency on the English language arts achievement test has become the most challenging criterion for ELLs to meet. Thompson's study has important implications for informing future assessment and

accountability systems for ELLs as well as establishing appropriate time frames for English proficiency acquisition.

In another district-level event history analysis, Umansky (2012) examines how student and school factors influence rates of reclassification for Latino students and explores how reclassification rates change over time using longitudinal data from one unnamed large urban school district. This study finds that more than one-third of the ELLs studied had not been reclassified after nine years, with meeting academic achievement criteria on the state assessment of English language arts posing the largest barrier. In terms of English language development program, Umansky finds that students in English immersion programs initially have a higher probability of reclassification, but that students in bilingual and dual-language programs are more likely to be reclassified in later years. In addition, results from this study indicate that students' initial English proficiency score upon entering the district, mother's education level, and participating in a gifted and talented program are positively related to probability of reclassification, whereas those receiving special education services are less likely to experience reclassification. These two studies make important contributions to measuring the rate of reclassification, but they are limited in that each of them only studies one school district, so they are unable to examine how reclassification varies between districts or across a state.

To my knowledge, there is only one study that has attempted to examine probability of reclassification across an entire state. Grissom (2004) used a creative matching process based on school identifiers, birth dates and gender to generate longitudinal datasets for three cohorts of second-grade ELL students across the state of California. This study conducts a multivariate event history analysis examining the degree to which several factors, including achievement, gender, free and reduced lunch status and native language influence probability of

reclassification. The author concludes that across the three cohorts studied, performance on achievement tests is the primary driver of reclassification. There are however several limitations to this study, in particular the fact that students are only followed for four years, and only students who remained at the same school for four years were included, introducing the possibility of selection bias since students who exhibit mobility are not included.

While scholarship on reclassification has certainly expanded during the past decade, there are still several gaps in the research literature. This dissertation seeks to make a unique contribution to the reclassification literature by systematically examining how performance on assessments, student characteristics and local context expedite or delay being reclassified as English proficient using longitudinal data that captures ELLs from across the entire state of Texas. This study differs from previous research in important ways. Unlike previous research, this analysis is not limited to one district, nor is it constrained by the limitations of cross-sectional data. Instead, the present study makes use of a rich longitudinal state administrative database that includes a wide array of variables. Using data from across a whole state does not only allow for an exceptionally well-powered study, it also provides for an additional layer of analysis to examine the diversity of probability of reclassification across the state.

Reclassification is a landmark event for ELL students because it signifies a shift in educational experiences. Students experience instructional changes with the withdrawal of English language development services. In addition, “[t]eachers change, peers change, course content changes, instructional techniques change access to resources changes, and assessment changes” (Umansky, 2012, p. 31). Because reclassification has important implications for ELL students, this dissertation seeks to better understand the factors that hinder or facilitate exiting ELL status.

CHAPTER III

CONCEPTUAL FRAMEWORK

Researchers have established a number of significant events in students' educational trajectories that are highly dependent on timing and are predictive of future educational outcomes. Examples of such events include demonstrating reading fluency and basic comprehension by the end of third grade so that students are prepared to make the transition from learning to read to reading to learn, passing Algebra I before entering high school so that students are on-track to take college preparatory coursework in high school, and enrolling in Advanced Placement classes in high school so that students have the necessary skills to be successful in post-secondary settings. For ELLs, a key benchmark is meeting English proficiency standards and exiting ELL status, which is meant to demonstrate that students possess the necessary English language skills to be successful in English mainstream classrooms without special assistance. As discussed in Chapter 2, prior research documents that the timing of this event is critical; students who remain classified as ELLs into middle and high school tend to lag behind their peers who were reclassified earlier on a wide range of educational outcomes (Callahan et al., 2010; Flores & Park, 2012; Flores et al., 2012).

This chapter commences with a discussion of the importance of possessing English language proficiency in this country. It then turns to a comprehensive review of competing frameworks that are used to explain the potential influence of state assessments, student characteristics and local context on the rate of reclassification. This framework will be used to derive three sets of hypotheses that correspond to how each of these spheres of influence may

affect reclassification decisions.

Theoretical Contributions

For many years, the American public school system was seen as the “great equalizer” (MacLeod, 1995, p. 11) that had the “miraculous power of leveling inequalities as it lifts everyone” (Traub, 2000, p. 55). An unwavering belief in the transformative powers of public education was woven into the fabric of the American identity. However, during the 1970s several scholars began to scrutinize the widely held traditional view that schools act as a panacea for a variety of social dilemmas including poverty, injustice and inequality, suggesting instead that schools may in fact reinforce the unequal power distributions in society (Bourdieu, 1977, 1986; Bourdieu & Passeron, 1977; Bowles & Gintis, 1976). Bowles and Gintis (1976) drew their ideas from Marxist theory and argued:

[t]he educational system, basically, neither adds to nor subtracts from the degree of inequality and repression originating in the economic sphere. Rather, it reproduces and legitimizes a preexisting pattern in the process of training and stratifying the workforce. (p. 58)

The heart of their argument is based on the structure of schools. For example, they posit that students who come from working-class families will likely be educated in schools or placed on academic tracks within schools that stress compliance with rules and control of behavior, whereas their more affluent peers will probably be given more freedom and opportunity to actively participate as they learn. In doing so, the schools are promoting values necessary for each stratum of a capitalist society. That is to say, working class children are prepared to assume the same jobs that their parents possess whereas more affluent children are prepared to assume more prestigious positions that mirror those that their parents have.

Pierre Bourdieu focused on how schools transmit a set of specific cultural values that are seen as the values of society at large, when in fact they are those of the dominant classes. The cultural capital that the lowest classes bring to the table are systematically devalued by mainstream social institutions, like schools, and it is evident that “the action of the school, whose effect is unequal...among children from different social classes, and whose success varies considerably among those upon whom it has an effect, tends to reinforce and to consecrate by its sanctions the initial inequalities (Bourdieu, 1977, p. 493). In practice, Bourdieu argued that the children who benefit the most from such a cultural transmission are those who already possess the cultural capital, such as specific linguistic competencies, and are better equipped to access social advantages that often lead to higher status positions in adulthood.

Schools value specific *academic* dimensions of English proficiency (Cummins, 1984; Cummins, 2000). Cognitive academic language proficiency can be defined as “language knowledge together with the associated knowledge of the world and metacognitive strategies necessary to function effectively in the discourse domain of the school” (Cummins, 2000, p. 67). This type of language proficiency allows students to access classroom discourse and complete academic tasks including reading and writing about subject area content (Cummins, 2000). Conversely, conversational language proficiency or “basic interpersonal communicative skills” are the language competencies necessary to interact in informal social situations (Cummins, 1984).²⁰

The distinction between the language of schooling and language used outside of formal settings is particularly important when considering the reclassification of ELLs because many

²⁰ For a thorough review of the literature on the academic-conversational language distinction, see Bunch (2006). Bunch challenges the notion that students who lack “academic English” cannot successfully participate in challenging classroom work in English when provided with the proper instructional conditions.

ELLs are able to attain native-like conversational ability in English within two to three years of entering school, but have not yet demonstrated mastery of academic language skills. For example, long-term ELLs are frequently described as orally bilingual (Freeman, Freeman & Mercuri, 2002; Menken, Kleyn & Chae, 2007; Olsen, 2010; Olsen & Jaramillo, 1999). Consequently, long-term ELLs tend to be high-functioning in casual social situations in both English and their native language, but tend to draw upon “general” and “imprecise” language that does not provide “a strong foundation for the language demands of academic work in Standard English” (Olsen, 2010, p. 23). That said, it does not follow that ELL classification is necessarily the best way to develop academic language. In fact, the opposite could be the case if students who have not yet developed academic language and literacy would benefit from reclassification so that they have access to settings where such language is more likely to be being utilized and therefore have more opportunities to develop academic English skills.

A lack of English proficiency is often cited as a principal barrier that initially limits upward social and economic mobility for immigrants (Portes & Rumbaut, 2006; Rumbaut, 1991). Learning English is a precondition for long-term educational and occupational success in the United States (Portes & Rumbaut, 2001b). Newcomer students who are unable to speak English in Anglo-American society are immediately presented with hurdles to overcome (Portes & Rumbaut, 2006), and learning English is a foundational step that allows students to actively participate in schools and other social institutions. As Gifford and Valdés (2006) explain, “It is only through language acquisition that students can become full participants in their community” (p. 126). However the process of language learning is complex and multi-faceted because it includes “mutual adaptation, of the accommodation of two or more ethnolinguistic groups in diverse structural contexts” (Portes & Rumbaut, 2006, p. 207).

In the United States, speaking fluent, unaccented English is a key signal of Americanization and assimilation and delimits who is “American” (Portes & Rumbaut, 2006; Telles & Ortiz, 2008). Assimilation can be defined as “a social process by which immigrants and their descendants may become integrated with and more like members of the host society through prolonged exposure and socialization to them and their institutions” (Telles & Ortiz, 2008, p. 15). Embedded in this definition is the word “process”, which indicates that assimilation occurs over a period of time. English language acquisition and native language maintenance are seen as key parts of that process.

Because the English language is so intimately tied to American mainstream cultural identity, English acquisition is an important part of the adaptation, acculturation and assimilation processes for immigrant students in the United States. Students who are proficient in English possess additional cultural capital including cross-cultural versatility (the ability to cross racial and ethnic boundaries), skills to overcome adversity and risk taking ability (Stanton-Salazar, 1997, 2001; Stanton-Salazar & Dornbush, 1995; Trueba, 2002). Ultimately, acquiring English proficiency is an important proxy for the accumulation of social and cultural capital for ELLs (Stanton-Salazar & Dornbush, 1995). For disadvantaged students such as ELLs, social institutions have the potential to enable or disable the cultivation of social and cultural capital. This distinction rests with the ability of social institutional agents, such as schools, to provide or withhold valuable knowledge as well as influence the social and institutional forces that decide which students will and will not succeed (Sennett & Cobb, 1972; Stanton-Salazar, 1997).

Stanton-Salazar’s social capital framework for understanding the socialization of racial minority children (1997) argues that the “provision of various funds of knowledge associated with ascension within the educational system” is a crucial element that determines social

integration and success in school (p. 11). While his model puts forth seven forms of knowledge, he argues that “institutionally sanctioned discourses” are particularly important. Institutionally sanctioned discourses can be defined as “socially accepted ways of using language and engaging in communicative behavior” (Stanton-Salazar, 1997, p. 12). Gee (1989) refers to discourse as an “identity kit” that informs one how to act, talk and write in such a way that is standardized and recognizable. Undergirding Gee’s discussion of discourse is the assertion that discourse is intimately tied to ideas of power and exclusion; those who do not possess the necessary skills to participate in the dominant discourse will likely be excluded from privileges that the dominant group enjoys. Therefore, this framework suggests that succeeding in school is predicated on students’ ability to “decode the system” and participate in the dominant discourse (Stanton-Salazar, 1997, p. 13).

The ability to decode the system in schools rests with students’ knowledge and understanding of the rules (including linguistic rules) that govern the social context of schools (Bourdieu & Passeron, 1977; Bowles & Gintis, 1976). Because the rules that govern schools are evident in the homes and communities of the dominant group, children from this group are socialized to these rules before entering school. Members of the subordinate group (e.g., language minorities) must “[tap] into the cultural logic of the dominant group” to readily access these funds of knowledge (Stanton-Salazar, 1997, p. 13). However, acquiring these cultural competencies is a difficult process that is often wrought with stress, apprehension and fear (Phelan, Davidson & Yu, 1993). In order to decode the system and participate in the dominant discourse of schooling, students must overcome a number of obstacles²¹ (Barth, 1969; Phelan et

²¹ The concept of overcoming obstacles to decode institutionally sanctioned discourse is well-recognized by the theoretical literature, but terminology is inconsistent. Barth (1969) refers to

al., 1993; Stanton-Salazar, 1997). Language obstacles are a primary concern for ELLs. This study is grounded in the notion that English proficiency is an essential prerequisite tool that helps provide language minority students with the necessary foundation, vis-à-vis access to mainstream educational settings, to overcome social barriers and access key institutional supports that exist within schools and as well as in other mainstream institutions.

Theoretical Framework & Hypotheses

The reclassification process is complex and multifaceted; decisions to exit students from ELL status are based on much more than English proficiency alone. This study considers three clusters of antecedent factors that may facilitate or hinder reclassification. These clusters include performance on state assessments, student characteristics, and local context. The first cluster, performance on state assessments, is comprised of English proficiency and achievement assessments, both of which are common reclassification criteria in states across the nation. While the practice of using English proficiency assessments to make reclassification decisions is rarely questioned, using achievement assessments is rather controversial and has received much scrutiny. This highlights an overarching debate about the use and misuse of achievement assessments to inform a wide array of decisions in education including not only student-level decisions such as reclassification and retention, but also teacher-level decisions (e.g., evaluating teachers for tenure and merit pay) and school-level decisions (e.g., determining which schools will be sanctioned and restructured).

The second cluster, student characteristics, includes both social demographics as well as students' individual educational profiles. While reclassification policies do not explicitly include

these obstacles as “boundaries”, and Phelan and colleagues (1993) and Stanton-Salazar (1997) uses the term “borders”.

students' characteristics as reclassification criteria, this dissertation argues that schools may draw upon students' characteristics in different ways, systematically valuing and devaluing students with certain attributes. While previous scholars have argued that the ELL subgroup as a whole is systematically disadvantaged through lowered expectations, segregation and academic stratification, this study posits that these discriminatory practices may not be uniform across all ELLs. Instead, ELLs with certain characteristics may be more or less likely to be "favored" by schools, and these differences will be reflected in the rate of reclassification.

Finally, the third cluster, local context, includes both the attributes of the specific within-school context (e.g., composition of the student body) as well as the broader context outside the school. In recent years, more emphasis has been placed upon national standards and state and federal mandates. This has resulted in the centralization of a number of educational policies, including efforts to increase the standardization of policies and procedures designed to monitor ELLs. Some states, such as Texas, have responded to this pressure by moving toward more standardized reclassification criteria and processes. Simultaneously, there has been a movement to emphasize the importance of local control and decision-making. This suggests that despite a push to centralize reclassification policies, districts and schools will likely continue to use other locally determined criteria to evaluate reclassification readiness, illustrating the tension between centralization and the "new localism" movement in education. Appendix A contains an illustration of this framework.

The remainder of this chapter is devoted to fleshing out the tripartite conceptual frameworks that are used to explain the potential influence of state assessments, student characteristics and local context on the rate of reclassification, as well as generating a series of hypotheses that will guide the analysis. Each of these areas reflects the tensions that can be

found in broader educational debates. Thus, this dissertation makes not only a substantive contribution to the literature on reclassification, but helps to inform theoretical questions that cut across different areas of education.

Assessments, Accountability and Reclassification

In recent years, assessments have become a central aspect of education reform. This movement has been driven by large-scale education reform efforts, particularly the movement to hold teachers, schools and local education agencies accountable for student performance (Hamilton, 2003; Hamilton et al., 2007). The current emphasis on standards and assessments is a continuation of trends set by previous federal and state policies (Hamilton, 2003; Hamilton et al., 2007), but NCLB has arguably increased the prominence of assessments through the emphasis on test-based accountability systems that employ high-stakes tests and are designed to motivate teachers and schools and prompt them to make improvements based on a system of rewards and sanctions (Linn, 2000; 2003). This study posits that the weight that educators give assessments as they make decisions about the students they serve has shifted, likely prompting educators to pay more attention to how students perform on these tests.

English proficiency assessments. States have been using English proficiency assessments to identify and reclassify ELLs for many years. Kindler (2002) found that 94 percent of states that responded to *The Survey of the States' LEP Students* used some type of English proficiency assessment for classification and placement of ELLs. However, “pre-NCLB assessments were developed by different organizations at different times based on different needs and requirements” resulting in major limitations because they provide different outcome measures (Abedi, 2008, p. 19). A study that compared English proficiency assessment test

content and structure, test administration procedures, theoretical underpinning and reliability and validity of the test found notable differences in all of the areas of comparison (Zehler, Hopstock, Fleishman & Greniuk, 1994). These differences and disparities prompted concerns surrounding the accuracy and consistency of the measures used to identify and reclassify ELLs (Abedi, 2008).

Title III of NCLB requires that states monitor students' English proficiency in four language domains (listening, speaking, reading and writing) on an annual basis using both reliable and valid measures that incorporate the concept of academic language and are aligned with states' English language proficiency standards (Abedi, 2008). In essence, this legislation has prompted states to develop higher quality English proficiency assessments. For example, Texas developed the TELPAS in 2005 to meet AMAO standards required by NCLB.²²

As federal legislation prompts states to standardize and emphasize new English proficiency assessment systems, it follows that schools will turn to these assessments to inform reclassification decisions.

Hypothesis 1A: Students who demonstrate a high level of English proficiency, as indicated by performance on an English proficiency assessment in each of the four language modalities (listening, speaking, reading and writing), will be more likely to be reclassified.

Achievement assessments. Achievement assessments play a prominent role in the accountability movement. Despite the increasing importance that policymakers and education reformers are attaching to these assessments, it is evident that some tests may be employed in ways for which they were not designed. It is often unclear what the consequences are of using

²² Prior to the 2007-2008 school year, the TELPAS was referred to by its two components: the Reading Proficiency Test in English (RPTE) and the Texas Observation Protocols (TOP).

assessments in a way that is not aligned with specific purpose of the test. Most achievement tests are developed to measure a specific construct such as reading comprehension. In doing so, the test will provide specific information about a sample of students' reading competencies under very specific conditions (Hamilton, 2003). This allows examiners to make inferences about students' broader literacy skills. However, if examiners extend their inferences to other competencies outside the scope of the assessment, the validity of their inferences may be compromised (Hamilton, 2003). This is particularly problematic when assessments are being used not only to provide information but also to influence concrete decisions regarding students' instructional programs and services. That is, a "mismatch between the inferences warranted on the basis of test scores and the inferences made about them" can result in "unintended negative consequences" for students (Hamilton, 2003, p. 26).

One area where inferences drawn from assessments may be overextended is in the evaluation of ELLs for reclassification readiness. Recall that NCLB specifies that ELLs are students whose difficulties in speaking, reading, writing, or understanding the English language may be sufficient to deny the individual the ability to successfully achieve in mainstream classrooms where the language of instruction is English without additional language supports. The defining characteristic of ELLs is that these students are still developing English proficiency. However, it is often the case that students are required to meet academic achievement standards in order to be reclassified.

In recent years, the use of achievement tests to inform reclassification decisions has been widely criticized by those who study language acquisition. Critics argue that these tests were designed and normed to assess monolingual English students' content area knowledge rather than English proficiency (Abedi, 2008; Linquanti, 2001; Mahoney & MacSwan, 2005; Rossell,

2000). As such, the validity of these tests may be undermined when they are being used to evaluate students' English proficiency. Despite the validity issues that arise when academic achievement tests factor into reclassification decisions, this practice continues to be widespread (Kindler, 2002).

In addition, when achievement tests are used to evaluate English proficiency, there is disagreement regarding the level of student performance that should signify that students are ready to exit ELL status (Abedi, 2008). For example, some states see scoring above the 50th percentile as signifying English proficiency, while others use the 40th or even the 32nd percentile as the cut point (General Accounting Office, 2001). This variability is also present within some states; for example districts in California choose different percentile cut points to establish English proficiency on standardized achievement tests (Gándara, 2000; Grissom, 2004; Liguanti, 2001). In Texas, cut points are predetermined by the state so that they are standardized across districts, but it is unclear how the cut point was selected or what levels of English proficiency the score represents.

Setting arbitrary cut points on standardized achievement tests is also problematic because a non-trivial portion of native English speakers score below the standard set for ELL reclassification. As Abedi (2008) questions:

Should these students also be considered ELL? If the answer to this question is 'Yes,' then the concept and operational definition of ELL classification becomes even more controversial. On the other hand, if the answer is 'No,' then one must ask if low-scoring, native English speakers can truly be considered language proficient classified as 'non-ELL,' and be deprived of the additional language skill development they deserve. (p. 21)

Using achievement tests for reclassification purposes is not only a practice that raises questions

for ELLs, it also has implications for low-performing students who are native English speakers.

While states require students to meet achievement standards to try to ensure that reclassified ELLs will be successful in mainstream classrooms, they are arguably missing the spirit of the law, which may in fact have adverse effects for students. A primary goal of Title III of NCLB is to ensure that a lack of English proficiency will not serve as a *barrier to achievement*, but the law's intent is not to guarantee that all ELL students will demonstrate proficiency on content area assessments in order to exit. If students remain classified as ELLs because they are unable to meet academic achievement standards, they will continue to receive language support services, but these services may be misaligned with students' actual needs in areas such as reading comprehension. As a result, students' true needs may be obstructed by their ELL label, and they may not be provided with the instructional programs or interventions that would be best suited to help them improve academically.

In addition, achievement tests are often seen as a way to assess students' academic (as opposed to conversational) English proficiency. Bunch (2006) argues that, under the right conditions, students who may not yet possess high levels of academic English can successfully participate in challenging academic work in English. These opportunities to participate in learning opportunities in English can increase access to subject area content as well as promote English language acquisition. Thus, denying students access to opportunities to perform in meaningful ways in English classrooms because they are unable to demonstrate a high level of academic English proficiency on achievement tests has the potential to be detrimental to ELL students.

Demonstration of academic proficiency. The emphasis placed on achievement testing through NCLB and the broader accountability movement has prompted states to use achievement

tests to inform decisions outside the scope of the intended purpose of these assessments. Despite the potential validity concerns that arise when doing so, states often rely heavily on these tests to make reclassification decisions for ELLs. For example, Robinson (2011) both examined reclassification trends in an urban school district in California and found that the primary barrier to reclassification was passing the state's reading achievement test. Similarly, district administrators in the same state reported that performance on English-language arts assessments is the largest hurdle to reclassification (Parrish et al., 2006). This suggests that it may be more difficult for low-achieving students to be reclassified.

Hypothesis 1B: ELLs who are high achievers, as indicated by demonstrating proficiency on state language arts achievement assessments in English, will be more likely to be reclassified.

Achievement test language. In states that offer bilingual programs for ELLs it is often the case that achievement tests (especially reading and writing assessments) may be offered in languages other than English for early grade levels. For example, Texas, Colorado and New Mexico all offer some of their achievement assessments in Spanish. The reason that some states opt to assess their students in their native language is that they are seeking to capture students' academic achievement in a particular content area as opposed to their English proficiency. ELL students who are being taught in their native language through bilingual programs will arguably be able to better demonstrate their content area proficiency in their native language as opposed to English. While testing students in their native language will likely result in a more valid snapshot of students' academic achievement in a particular area, it may disadvantage students in terms of reclassification. Under NCLB, states are increasingly using reading and writing

achievement assessments to inform reclassification decisions; some even mandate that students pass these tests *in English* in order to be reclassified. This suggests that even if students possess higher levels of English proficiency, their chances of reclassification will likely be diminished if they are tested in a language other than English simply because they have not taken the “right” assessment for the purposes of being evaluated for exiting ELL status.

Hypothesis 1C: Students who are tested in Spanish will be less likely to be reclassified than their peers who are tested in English.

Student Characteristics, Social Reproduction and Reclassification

While assignment to ELL status is in theory based strictly on English proficiency, a number of socio-demographic and residential patterns emerge within this group. Using the 2000 Census data, Capps and colleagues (2005) examined the demographics of ELLs and immigrant students. Their findings paint a portrait of a population that faces multiple barriers. Two-thirds of ELL students come from low-income families, a rate twice as high as the estimate for students who are English proficient (Capps et al., 2005). Half of the parents of ELLs possess low levels of educational attainment having never graduated from high school (Capps et al., 2005). Due to ongoing residential and school segregation along racial ethnic and economic lines, many schools are linguistically segregated (Capps et al., 2005). More than half of the ELL population attends schools where 30 percent of their peers are also ELLs, while 57 percent of English proficient students attend schools where less than one percent of the student body is ELL (Van Hook & Fix, 2000). Additionally, six out of seven ELLs in elementary school live in linguistically isolated households, or those in which all members over age 14 possess limited English proficiency (Capps et al., 2005).

When considered in tandem, these patterns generate an ELL profile that reveals multiple layers of disadvantage that affect such educational outcomes as academic performance, school persistence and college entrance. When examining any educational outcome for ELLs, including reclassification, the influence of these factors must be evaluated as well. Despite the fact that students' social demographic characteristics and their educational profile are not explicit criteria considered in the reclassification process, social reproduction theory suggests that schools may draw upon students' characteristics in different ways and that these differences may shape when a child is reclassified.

By definition ELLs are all in the process of acquiring English proficiency, but it is important to recognize that this group of students is by no means homogeneous. There is a tremendous amount of diversity represented within this group; ELLs speak a wide variety of native languages, have varying levels of literacy in both their home languages and in English, come from different socioeconomic backgrounds and have diverse educational profiles. Bourdieu's social reproduction lens suggests that schools may draw upon ELL students' characteristics in different ways, systematically valuing and devaluing students with certain attributes. As a result, ELL students who possess attributes that parallel those of the dominant group, in this case English speakers, may be unintentionally or intentionally targeted for earlier reclassification. This may occur because educators think that ELL students who have more in common with the dominant group are ready to be reclassified more rapidly because they believe these students have access to valuable sources of social and cultural capital that can serve as a resource that can be drawn upon to overcome limited English proficiency. Or, quicker reclassification may occur as a result of some type of sorting or categorization of students; those who do not fit the stereotype of what an ELL "should" look like may be exited more rapidly

simply because they are seen as not belonging in the group. Social reproduction theory provides a useful framework for considering how the diversity represented within the ELL group may be manifested in the reclassification process. This theoretical framework suggests that inequalities in the rate of reclassification may emerge within the ELL group that are based on observable differences between students, and that these differences would inform decisions to reclassify students independent of performance on English proficiency and achievement assessments.

These posited inequalities may enter into the reclassification decision-making process in two manners. First, LPAC committee members are presented with a packet of basic information on each student's English language proficiency and achievement performance, demographic characteristics and educational profile to consider as they make reclassification decisions. The opinions of the committee members regarding reclassification readiness may be influenced by this descriptive data they receive on each ELL student. Second, classroom teachers (who may or may not serve on the committee) may be influenced by student characteristics when evaluating reclassification readiness, which may be reflected in their subjective evaluations of students that are presented to the LPAC for consideration as part of the annual review process.

Student demographic characteristics. Students arrive at school possessing a series of observable characteristics such as socioeconomic status, home language and migrant status, and gender. These demographic attributes may influence those making reclassification decisions because they are seen as proxies for students' reclassification readiness.

Socioeconomic status. Socioeconomic status is closely tied to social class. It has consistently been shown to be a strong predictor of academic achievement (Bradley & Corwyn, 2002). The literature consistently finds that "the higher the family's social status, the more likely the child is to be successful in school" (Epps, 1995, p. 597). Poverty and economic challenges

are often major concerns for immigrant students, particularly Latinos. The National School Lunch Program provides free and reduced price meals to children from families with an income no higher than 130 percent (180 percent in the case of reduced price meals) of the federal poverty guidelines. As of 2005, 73 percent of Latino students were eligible to receive free or reduced price lunch, the highest of any subgroup of students. As a point of comparison, 24 percent of white students qualified (Institute of Education Sciences, 2006).

Immigrant children and children of immigrants are more likely to be economically disadvantaged than students born to native families (Gándara & Contreras, 2009). While most young children of immigrants (93 percent) are in fact citizens, more than 25 percent of their parents are undocumented (Capps et al., 2004). Conditions of disadvantage can be exacerbated for children of undocumented immigrants because these children are less likely to receive supplemental public benefits, such as Medicaid and food stamps (Capps et al., 2004).

Socioeconomic status has been found to have immediate and enduring consequences for academic achievement and language proficiency (Portes & Rumbaut, 2006; Rumbaut & Ima, 1988). The Children of Immigrants Longitudinal Study, which surveyed more than 2,500 children, found that net of other factors parents' socioeconomic status was positively and significantly associated with fluent bilingualism (Portes & Rumbaut, 2001b). This suggests that a higher socioeconomic status provides students with greater opportunities to become proficient in English (e.g. higher quality schools), thereby influencing the rate with which ELL students are reclassified.

Cultural capital suggests that specific cultural resources are determined at home and are largely tied to families' social class and socioeconomic resources. Social reproduction theory argues that school settings tend to value the culture, preferences, attitude and behaviors of middle

and upper-middle class families (Bourdieu & Passeron, 1977). Students who understand and participate in middle class norms will be more advantaged from the time they start school, while their peers who come from working class and lower class families will have to learn the complexities and codes of middle class society while also trying to learn academic content. When considering reclassification, teachers may view ELLs who come from more advantaged households in a different light than their disadvantaged peers. Those making reclassification decisions may believe students with a middle class background are more prepared to successfully navigate mainstream classrooms without language supports than students from lower class backgrounds with similar English proficiency skills.

Hypothesis 2A: Students who are economically disadvantaged will be less likely to be reclassified than their peers who come from more advantaged households.

Native language. The vast majority of immigrants that have arrived in the United States since the mid-1960s are nonwhite and speak a native language other than English (Kasinitz et al., 2008; Portes & Rumbaut, 2006). Many immigrants do not experience prejudice in their native land, but by virtue of migrating to a new country their racial features are assigned greater importance. The construction of racial categories in the United States make immigrants targets of discrimination, which consequently impact children's academic performance and aspirations (Portes & MacLeod, 1996; Portes & Rumbaut, 2006; Waters, 1994).

There are several theoretical explanations for the relatively low academic success of racial minorities. Some scholars argue that a culture of opposition has emerged among students of color that has prompted them to reject academic success out of fear of appearing too white (Fordham & Ogbu, 1986). Although Fordham and Ogbu's (1986) culture of opposition

hypothesis originally centered on black students rejecting white culture, it can be extended to other minority groups, particularly those who are members of an involuntary minority group. Involuntary minorities are those whose ancestors were incorporated into the United States against their will, generally through enslavement or conquest, which resulted in a castelike system in which these involuntary minorities were relegated to menial status through legal and extralegal devices and systems (Fordham & Ogbu, 1986). Mexican-Americans are one example of an involuntary minority; they were conquered and displaced from power in the Southwest. Mexicans and other Spanish-speaking groups who have since immigrated have been assigned the status of the original conquered group, and treated similarly. As a means of rejecting white culture, ELL students (who are often involuntary minorities) may carefully select members from a similar racial/ethnic group with whom to interact. They may also reject Standard English in favor of non-standardized forms of English.

Native language is deeply tied to ethnicity. One's ethnicity and native language influence the way that society views immigrants (Ogbu & Matute-Bianchi, 1986). For example, Mexican immigrants consistently experience discrimination, racial stigmatization and hostile government immigration policies (López & Stanton-Salazar, 2001; Massey, 2007; Telles & Ortiz, 2008), while Asian immigrants are often perceived to be the "model-minority" because of stereotypes that suggest that they work exceptionally hard and believe in the value of education (Chou & Feagin, 2008; Lee, 1994; 1996). For immigrants who are Latinos this may prompt "downward assimilation", which occurs when factors associated with the reception of new immigrants, such as discrimination, segregation and bifurcated labor markets reduce the upward mobility of immigrants, thereby relegating some members of the group (particularly second-generation youth) into an underclass wrought with unemployment, poverty and crime (Portes & Rumbaut,

2001b; Portes & Zhou, 1993). Other ethnic groups, such as the Vietnamese, have been shown to demonstrate mostly “upward assimilation” which occurs when youth are surrounded by “densely knit ethnic networks, capable of supporting parents’ cultural outlooks and expectations” (Portes & Rumbaut, 2001a, p. 309; Zhou, 2001). How children acculturate and assimilate influences not only the way that they interact with their native languages, but also how they approach and learn English; growing up under conditions of discrimination may “trigger a reactive process, where parental language and culture become symbols of pride against external threats” (Portes & Rumbaut, 2001a, p. 124). These differences may influence the way these students are viewed; social reproduction theory would suggest that regardless of students’ actual English proficiency level, Spanish speaking ELLs may be less favored for reclassification because of negative academic stereotypes associated with this group whereas other language groups may be perceived as more ready for reclassification because of positive stereotypes they experience.

In addition, because Spanish-speakers represent the overwhelming majority of ELLs in the United States, the systems in place in schools are often more sophisticated for native Spanish-speakers. Schools are more likely to have bilingual programs for Spanish speakers, certified bilingual Spanish teachers, and assessments available in Spanish simply because of the size of the Latino population as well as the long-standing presence of this population in American schools. The systems in place designed to support Spanish-speaking ELLs may in fact prompt committee members to keep these students classified as ELLs longer than their peers who speak other native languages because educators believe that the programs and support structures in place are helpful to native Spanish-speakers even after they have acquired a sufficient level of English to be reclassified.

Hypothesis 2B: ELLs who are native Spanish-speakers will be less likely to be

reclassified than their peers who speak other native languages.

Migrant status. The U.S. Department of Education's Office of Migrant Education defines migrant students as those who have moved to a new school district within the past three years to obtain temporary or seasonal work in agriculture or fishing or to join family members seeking migratory work. Typically, these students accompany their family members during the agricultural season and then return to their home in the late fall, but migration patterns vary (Branz-Spall, Rosenthal & Wright, 2003). The vast majority of these students (87 percent) are Latinos of Mexican descent, and many of them are ELLs (Gibson & Hidalgo, 2009).

Migrants are among the most educationally disadvantaged students in the United States because the migrant lifestyle poses challenges for students' social and academic learning including social and cultural isolation, poverty and poor health (Adger & Peyton, 1999; Fix & Passel, 1994; Green, 2003). Often layered on top of these barriers is limited English proficiency (Adger & Peyton, 1999). In response to these educational obstacles, the federal government has provided these students with supplemental education services and resources through the Migrant Education Program since 1966 (Gibson & Hidalgo, 2009). Prior to launching this program, migrant children often never enrolled in school; researchers estimate that less than half of migrant students reached second grade (Branz-Spall & Rosenthal, 2003).

While educational conditions for migrant students have improved markedly, many of these students fall behind academically (Gibson & Hidalgo, 2009). Each time migrant students move to a new school they are faced with a new curriculum, new classroom pedagogies, and quite possibly new academic and English proficiency standards (if they have moved across state lines). In addition, whenever children switch schools their academic record may not follow them

from school to school (Gibson & Hidalgo, 2009). This is of particular concern for students such as ELLs and those with special needs because they are likely to experience gaps in special support services if their records do not arrive in a timely fashion.

Moreover, migrant students, because of their high rate of residential and school mobility, are likely to experience social isolation, which can negatively impact academic achievement, attendance and school engagement (Ream, 2005; Rumberger, 2003). Moving from school to school disrupts important social networks with both their fellow students and teachers and makes these students particularly susceptible to social isolation and alienation. Migrant students are also subject to discrimination and embarrassment. Research has shown that there is a lack of acceptance of migrant children by their non-migrant peers, which may be due in part to visible signs of migrant status, such as students' worn clothing or the fact that migrant children are less likely to participate in school activities (Green, 2003). In addition, migrant students may be particularly prone to experiencing xenophobic discrimination since teachers and classmates have less of an opportunity to get to know migrant students as individuals. Consequently, teachers may view migrant students as less prepared to exit ELL status because they have not had a chance to develop a relationship with migrant students. Consequently, those making reclassification decisions may not feel that such students possess a sufficient amount of knowledge about the student since he or she may have been in a different school setting for a good portion of the school year. Committee members and teachers may believe that keeping a student classified as an ELL would provide that student with additional support, even if the student possess a sufficient level of English proficiency to be reclassified. Migrant students may be less likely to be reclassified for several reasons. First, they may not be present in the state when English proficiency and achievement testing takes place, which would make it difficult to

gauge whether or not a child is ready to be reclassified. Second, if a migrant student is present when teachers are making decisions about whether or not to reclassify students, teachers may not feel that they possess a sufficient amount of knowledge about the student since he or she may have been in a different school setting for a good portion of the school year.

Hypothesis 2C: ELLs who are migrant students will be less likely to be reclassified than their peers who are not migrant students.

Gender. There is well-documented and well-publicized achievement gap that exists between males and females (e.g., Sommers, 2000; Tyre, 2008). In most areas of schooling, female students now outperform their male counterparts. This gap is evident as early as kindergarten and can be detected across ethnic groups (LoGerfo, Nichols & Chaplin, 2006). For example, using data from the National Educational Longitudinal Study (NELS) and the Early Childhood Longitudinal Study (ECLS), LoGerfo and associates found that the reading achievement gap between white girls and boys was two points in kindergarten and had grown to five points by third grade, and the gap between Latino girls and boys was one point and increased to 4.7 points, respectively (LoGerfo, Nichols & Chaplin, 2006).

These gaps are also evident in language proficiency. Researchers have found that native Spanish-speaking girls tend to demonstrate reading comprehension in both English and Spanish more rapidly than boys (Tong, Lara-Alecio, Irby & Mathes, 2011). This may be due to documented differences in the social-emotional development of boys and girls (Doctoroff, Greer & Arnold, 2006; Eccles et al., 1993; Kellam et al., 1998; Webster-Stratton, 1996). This may also be explained by gender differences in emerging language skills; across different language groups, girls tend to be slightly ahead of boys in terms of using early communicative gestures,

producing vocabulary and combining words (Eriksson et al., 2011). These advantages suggest that girls may be perceived as ready for reclassification earlier than their peers who are boys.

Hypothesis 2D: ELL students who are girls will be more likely to be reclassified than their peers who are boys.

Individual educational profile. Beyond demographic characteristics, ELL students also possess an educational profile that consists of easily observable educational attributes such as participation in a gifted and talented or special education program. These educational characteristics may influence reclassification decisions because they are seen as indicators of students' preparedness to enter mainstream English dominant classrooms above and beyond their English proficiency and academic achievement levels.

Identification as gifted. ELLs are underrepresented in gifted and talented programs (Bernal, 2002; Harris, Plucker, Rapp & Martínez, 2009). Researchers argue that this might be the case for several reasons. First, educators tend to focus on the *weaknesses* rather than the cognitive strengths of students who come from culturally and linguistically diverse backgrounds (Barkan & Bernal, 1991). Second, gifted ELLs may simply have fewer opportunities to be noticed by English-speaking teachers who are unable to recognize their talents due to language barriers (Aguirre, 2003). Third, giftedness is culturally embedded; concepts of what talent potential looks like vary across different ethnic and cultural groups (Montgomery, 2001). Critics argue that there is a need to broaden both the conception of giftedness as well as the procedures used to identify gifted children in schools (Johnsen, 1999; Harris, Rapp, Martínez & Plucker, 2007). Finally, teachers may believe that the primary goal for ELL students should be mastering English, and that gifted placement should only occur after language instruction (Harris, Plucker,

Rapp & Martínez, 2007). These barriers have the potential to lead to underachievement for ELL students who are not provided with challenging academic work because they are not appropriately identified as gifted (Castellano & Diaz, 2002).

Despite the fact that ELLs are underrepresented among gifted students, there are ELLs who are identified as gifted and participate in gifted and talented programs, particularly in states that have had long-standing immigrant populations. These students are arguably truly exceptional; their talents have not been obfuscated by their lack of English proficiency. Those making making reclassification decisions may believe that gifted students will be ready to be reclassified earlier because their high level of intelligence will allow them to overcome language barriers in a mainstream classroom.

Hypothesis 2E: ELLs who are classified as gifted will be more likely to be reclassified than their peers who are not in gifted programs.

Special education status. While ELLs are underrepresented in gifted programs, they are overrepresented in special education programs (Artiles, Rueda, Salazar & Higarreda, 2005). This may occur because ELL students' underperformance that is in fact due to a lack of English proficiency is misinterpreted as a learning disability. It may also happen because the assessments used to make special education placement decisions are given in English.²³ Similarly, schools may not have staff with the necessary bilingual skills to administer assessments in languages other than English. While there have been efforts made to address the disproportionate representation of ELLs in special education, there is still a need for additional

²³ While the court ruled that children must be tested in their native language in order to avoid errors in ELL placement in *Diana v. State Board of Education* (1970), it is unclear whether this practice always takes place.

research about how language proficiency impacts ELLs' experience through the special education identification process and services they receive (Artiles et al., 2005).

ELLs are already a group that faces educational obstacles and a special education label arguably only compounds their disadvantage. Disentangling students' English language proficiency from learning disabilities may prove challenging for those making reclassification decisions, prompting a delay in reclassification. In addition, those charged with making and informing reclassification decisions may believe that the extra support services provided to ELL students are particularly beneficial for students with special needs, prompting the decision to leave ELLs who are also special education students classified as ELLs for an extended period of time.

Hypothesis 2F: ELLs who receive special education services will be less likely to be reclassified than their peers who are not receiving such services.

English language development program. The primary reason ELLs are identified by schools is so that they can be provided with English language development services to help them acquire English proficiency while also promoting academic achievement. There are two broad categories of English language development programs: bilingual education and English as a second language (ESL) or English-only. Bilingual education programs consist of instruction that occurs both in English as well as students' native language whereas language instruction occurs solely in English in ESL programs. There is a long and controversial debate about the merits and drawbacks of each of these programs, and the research is somewhat mixed. For example, several meta-analyses have found that students who participate in bilingual programs demonstrate marginally superior achievement in English reading and writing to their peers who were in ESL

programs (August & Shanahan, 2006; Greene, 1998; Slavin & Cheung, 2005). Other studies, such as Slavin and colleagues' (2010) randomized control trial, have found that there is no difference between the two types of programs, arguing instead that it is the quality of classroom instruction rather than the language of the instruction that is important.

Relatively recent scholarship has suggested that the positive effects of bilingual instruction may only be evident after several years of participation in the program, and that in the short-term, students who participate in ESL programs may outpace their peers in the development of English literacy skills (Genesee, 2006). This is particularly plausible in transitional bilingual programs, which abound throughout Texas, because the majority of instruction during early primary grades occurs in students' native language and the proportion of instruction in English increases incrementally as students transition to more English instruction. Therefore, students who participate in ESL programs may appear to acquire English proficiency more rapidly than their peers who are in bilingual programs.

Hypothesis 2G: ELLs who are in ESL programs will be more likely to be reclassified than their peers who are in bilingual education programs.

Students whose parents refused language support services are a different case. These students are immediately exposed to high levels of English since they are instructed in mainstream classrooms, but without appropriate language support services (such as those afforded to their peers in bilingual and ESL programs). Little research has been done on the effects of opting out of English language development instructional programs, but Flores and Park (2012) found there to be a negative effect of denying services in terms of later AP/IB course-taking and high school graduation, suggesting that this group struggles academically. As

such, LPAC members and classroom teachers may perceive this group to be less ready for reclassification, particularly since they are not receiving English language development services.

Hypothesis 2H: ELLs who are parent denials will be less likely to be reclassified than their peers who are in bilingual programs.

Disciplinary infractions. Teachers' perceptions of their relationships with students are often closely aligned to their perception of students' behavior (Pianta & Stuhlman, 2004). Children who experience higher levels of conflict with teachers tend to be less engaged in the classroom (Ladd, Birch & Buhs, 1999) and experience increased risk for poor academic performance (Ladd & Burgess, 2001). This may mean that LPAC committee members and classroom teachers perceive students with behavior incidents to be less ready for reclassification

Hypothesis 2I: Students with behavioral challenges, as indicated by the number of disciplinary infractions, will result in a lower probability of reclassification.

School mobility. Mobility is an important factor in determining educational outcomes for students (Ingersoll, Scamman & Eckerling, 1989). Entwisle and colleagues (1997) studied the effect of switching schools for low-income students attending urban elementary schools and found that students who switch schools are more likely to have higher absence rates, be retained, and struggle with behavioral issues. Mobility disproportionately affects immigrant youth who are more than twice as likely to change schools as their white peers (Ream, 2005).

Changing schools corresponds to a loss in learning time as students adjust to a new classroom, and curriculum (Rumberger, 2003). In addition, switching schools fractures valuable in-school social networks with adults and peers. Ream and Stanton-Salazar (2006) assert:

“Mobility tends to disrupt the social root system of academically oriented friends who would otherwise fortify school success” (p. 7). Switching schools also interrupts connections with teachers, including those who make reclassification decisions. LPAC committee members and classroom teachers may be less inclined to reclassify ELL students who are new to the school because they do not feel that they have enough knowledge to make such a decision.

Hypothesis 2J: Students who are highly mobile, as indicated by number of school switches during each academic year, will be less likely to be reclassified than ELLs who attend one school.

Local Context and Reclassification

For many years, public schooling was seen primarily as a state and local issue, rather than a national one (Herrington & Fowler, 2003; Jennings, 2003; McGuinn, 2006). The federal government was more of a “junior partner” to state and local governments that merely assisted in the financing and operation of public schools (Wirt & Kirst, 2005, p. 282). Policies driving school organization, funding, learning standards, curricula and staffing were designed and implemented at the state or local level. However, “[l]ocalism in American education—to the extent it is defined as an almost complete delegation of decision-making authority—has been waning for a century” (Henig, 2009, p. 364). During the 1950s and 1960s, the tradition of state and local control in education was challenged as the federal government began to take a much broader and more pronounced role in developing policies that guide the education of elementary and secondary students in the United States, particularly regarding traditionally underserved students and those with special educational needs, such as ELLs (Mavrogordato, in press). In recent years increased involvement of state governments and of Congress and the presidency at

the national level has resulted in a greater level of centralization (Henig, 2009; Mokher, 2008).

As the standards and accountability movement continues to expand through NCLB, state and local education agencies have had to determine how to meet requirements laid out in the legislation. At times this involves designing new assessments, policies and procedures in order to demonstrate compliance. At other times, states already have procedures in place, and have had to adjust these procedures such that they meet federal requirements while simultaneously fitting into preexisting local frameworks, norms and expectations. Policies regarding the reclassification of ELLs are an example of the latter. Since the enactment of the Bilingual Education Act in the late 1960s, districts across the United States have had to establish mechanisms to identify and reclassify ELL students. These decisions were traditionally made at the district level, reflecting high levels of local control. As the number of ELLs has increased and accountability for all students, particularly disadvantaged students such as ELLs, has increased, states have established more centralized efforts to coordinate the instruction and assessment of this group.

On the surface, it would appear that these efforts would lead to more centralized, uniform policies as states respond to federal mandates. In fact, many critics of NCLB argue that this federal legislation strips away local educational control (Paige, 2006). However, others posit that despite stricter sets of state and federal controls and standards-based education reforms, there has been a new outpouring of policy issues as local education agencies seek to implement new testing programs and curricula, among other education reforms (Crowson, Goldring & Taylor Haynes, 2010). To this end, there has been a newfound interest in the role of locality in American public education (Crowson & Goldring, 2009). This “New Localism” movement has shifted much of the attention back to local education agencies and communities (Crowson &

Goldring, 2009). Now seen as a partner in national and state-level education reform efforts, the locality has in many ways become the front-line decision-maker and policy implementer, shaping, massaging and adjusting policies to reflect the local context while simultaneously reflecting national agendas, priorities and goals. In essence, this movement has afforded local agencies with freedom to meet central education goals in the way they deem most suitable for the surrounding community.

When considering the reclassification for ELLs, there is evidence of both centralization and local influence. While Federal law has prompted states to identify and annually assess ELLs to monitor their progress toward acquiring English proficiency, NCLB leaves it up to states to figure out how they want to meet these requirements. In Texas, much like a number of other states, there is evidence of both an increase in the centralization of policies regarding the reclassification of ELLs and a prominent role for local education agencies to play. TEA has helped to develop a clear identification, monitoring and reclassification structure. There are clear aspects of this reclassification structure that are standardized across the state, such as the role and composition of the LPAC and the mandatory participation of all ELL students in the TELPAS assessment to monitor ELLs' English proficiency progress annually. However, local control and decision-making is alive and well in the reclassification process. Perhaps the best example of this phenomenon is the way that TEA provides districts with a list of approved English proficiency tests and sets specific cut points on each test, but leaves it up to school districts to determine which of these assessment is best suited for the students. Similarly, TEA allows teacher recommendations to factor into reclassification decisions, but does not provide any guidance as to how districts might use information gleaned from teachers or how much

weight teacher opinions should have. In essence, it is evident that despite centralizing much of the reclassification process, there is much room for local influence to enter the equation.

School context. Local influence may be a reflection of specific school context. Various school characteristics, such as the concentration of ELLs and the concentration of economically disadvantaged students affect the resources that schools have to serve these students. Thus, the reclassification process is likely a reflection of certain characteristics of the school.

ELL concentration. ELLs tend to be a highly segregated and isolated student group. Seventy percent of ELLs attend ten percent of the schools in the United States (Zehler et al., 2003). The concentration of the ELLs in the school is likely going to influence how school staff approach identifying, monitoring and ultimately reclassifying ELLs. Schools with high proportions of ELLs may have adapted in order to accommodate and serve these students. They may have established bilingual or ESL programs that are staffed by teachers who have been trained and certified to work with ELLs. While the services and programs available to ELLs in schools that have a high concentration of students learning English arguably benefit ELLs, they may in fact slow reclassification. Teachers making reclassification decision may be inclined to keep students classified as ELLs for a longer period of time so they can reap the benefits of sophisticated English language development programs. Similarly, teachers in high concentration ELL schools may possess more in-depth knowledge and understanding second language acquisition, recognizing that students who appear to be conversationally fluent do not always possess the academic language skills necessary to exit ELL status.

Hypothesis 3A: The higher the concentration of ELLs at the school, the less likely ELLs will be reclassified.

Economically disadvantaged concentration. ELLs are overrepresented in underperforming schools that are highly racially and socio-economically segregated (Gándara & Rumberger, 2006; Ruiz-de-Velasco & Fix, 2000). Literature on reading suggests that attending a school with a high level of poverty is associated with greater reading difficulties (Snow, Burns & Griffin, 1998). The effects of concentrated poverty may be exacerbated for ELLs because their lack of English proficiency may prevent them from accessing educational resources (e.g., supplemental Title I services) designed to combat the ill effects of poverty (Kieffer, 2008).

Concentrated poverty within a school is arguably going to shift the way that teachers interact with and approach ELL students. There is a substantial literature documenting the tendency for teachers to have lowered expectations for low-income students (e.g., Alexander, Entwisle & Thompson, 1987; Farkas, 1996). In schools with concentrated poverty, this can lead to a culture of low expectations at the school level, which may extend beyond achievement to lowered expectations for acquiring English proficiency and reclassification.

Hypothesis 3B: The higher the concentration of poverty, as indicated by the percentage of students who are economically disadvantaged, the less likely ELLs will be reclassified.

Regional context. While educational policies in Texas are often adopted at the state level, they are ultimately interpreted and disseminated at the regional level through the 20 Education Service Centers located throughout the state, and ultimately they are implemented in schools. As such, the way policies are interpreted is arguably shaped by the region in which the school is located.

Regional diversity. Texas is a large and diverse state. It contains major metropolitan areas such as Dallas and Houston, as well as large swaths of rural ranchlands and agricultural

fields. Texas shares borders with New Mexico, Oklahoma, Arkansas and Louisiana, an exceptionally diverse group of neighbors, as well as sharing 1,254 miles, the longest stretch of the international border with Mexico of any state (Texas Comptroller of Public Accounts, 2001). Consequently, there is tremendous diversity in the student populations, educational needs, and local policy contexts in different areas of this state.

Education in Texas is governed by the state legislature and TEA. In an effort to effectively implement policies throughout the state, the Texas Legislature adopted 20 media centers in 1967. Eventually, the legislature worked to expand the role of these centers, today known as Education Service Centers (ESCs), such that they could better serve teachers and districts throughout the state. The specific goals of the ESCs are to assist school districts in improving student performance, enable school districts to be more efficient and economical, and implement initiatives put forth by the legislature or commissioner of education (TEC §8.002, 1995). As such, they have helped local districts to implement policies regarding ELLs in Texas. Specifically, the ESCs keep the needs of the school districts they serve in mind as they help to train members of the LPAC, work with teachers to become reliable raters for the holistically rated sections of the TELPAS and provide professional development on strategies to improve the educational outcomes of ELLs. The diversity of the ELL student population served across ESCs is evident in Figures 1 and 2.

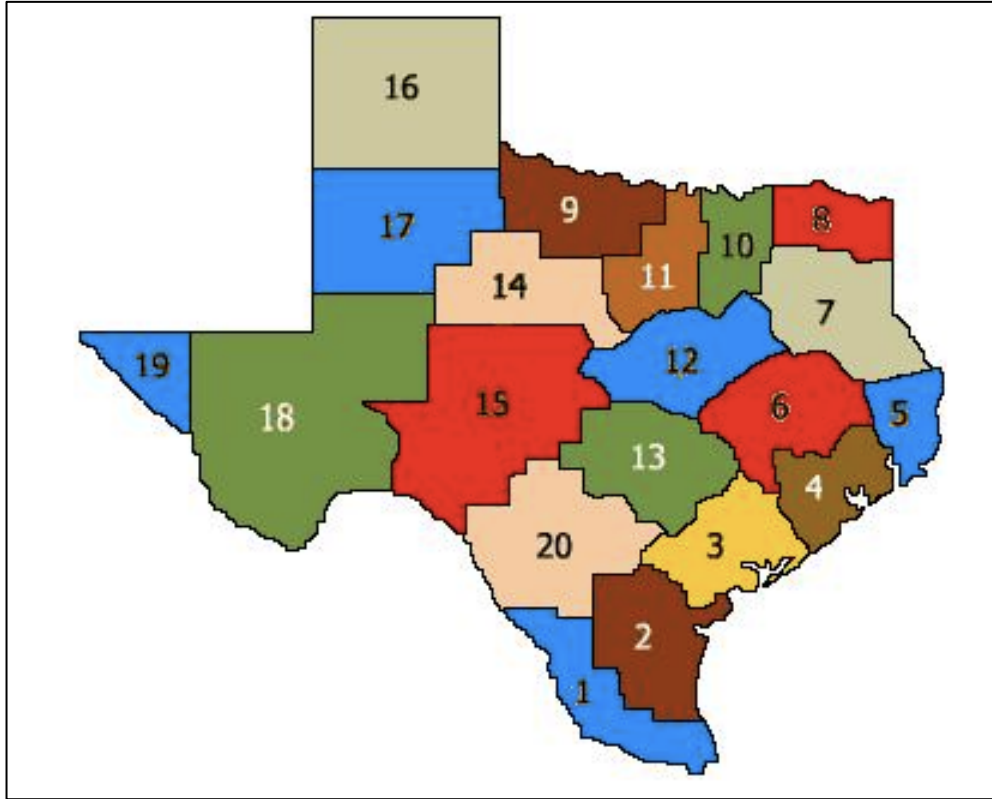


Figure 1. Education Service Center Regions (TEA, 2011a)

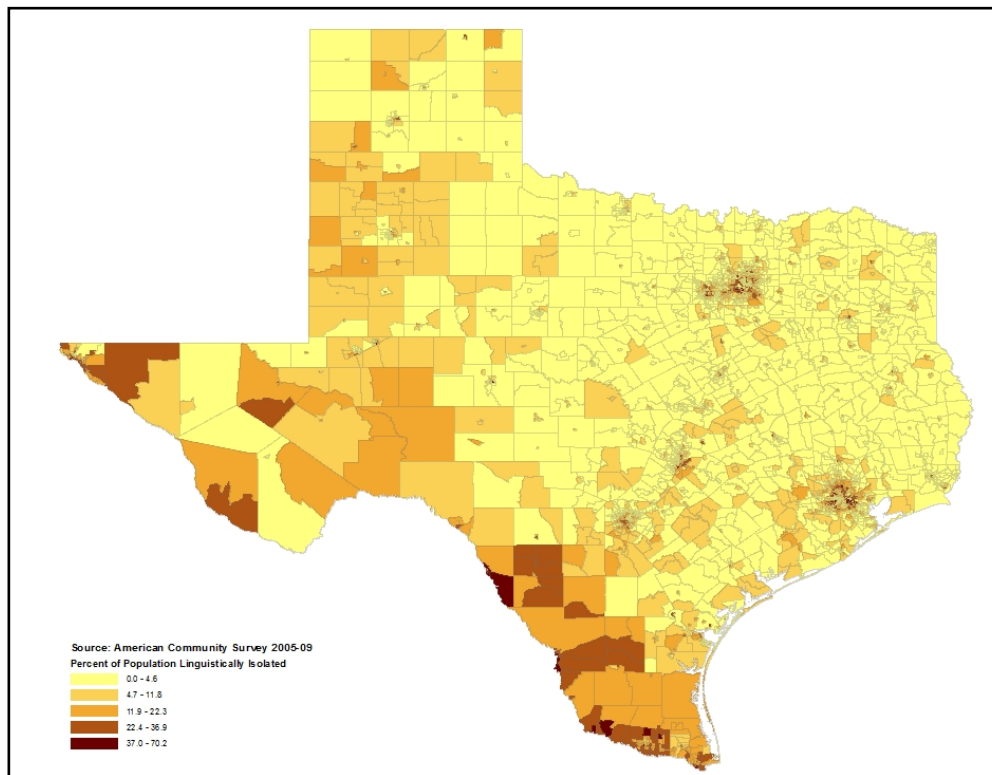


Figure 2. Percent of population linguistically isolated (U.S. Census Bureau Data; Author generated, 2011)

Figure 1 displays the 20 ESCs, while Figure 2 uses U.S. Census Bureau data to display the percentage of the population considered linguistically isolated, which is defined as a household in which no person 14 years old and over speaks only English and no person 14 years old and over speaks a language other than English and speaks English "Very well." This comparison between the two maps illustrates the striking difference between the regional contexts. One can imagine how differently Region 1, in the southernmost part of Texas, might approach policies regarding ELL students in contrast with Region 8, which serves Mount Pleasant along the Louisiana border.

Hypothesis 3C: Holding other things constant, ELLs will have different probabilities of reclassification across different local policy contexts, as captured by ESC region.

CHAPTER IV

RESEARCH METHODOLOGY

The purpose of this study is to determine how state assessments, student characteristics, and local contexts influence the rate at which ELLs are reclassified. This dissertation uses a quantitative method called event history analysis to examine the underlying mechanisms that speed up and slow down the reclassification process for ELL students in order to gain a deeper understanding of the occurrence and timing of reclassification for ELLs across the state of Texas, the specific context of this study. The research findings from this study will fill a gap in the literature regarding the education of ELLs since there is a dearth of empirical literature on reclassification despite the increasing need for information that can improve educational outcomes for the rapidly growing ELL population.

This chapter delineates the methodological approach for this study. It begins by providing an overview about the datasets used for the analysis and a description of the specific sample. Next, this chapter defines the dependent, independent and control variables and explains why these variables are included in the analyses. Then, it explains the analytical approach of event history analysis and previews the models that will be estimated during the analysis. This chapter concludes with a discussion of the limitations to this study

Data

This dissertation will employ student-level administrative educational data from the state of Texas as well as school-level data from the National Center for Education Statistics (NCES).

Combining these sources builds a more comprehensive picture of the educational landscape and allows for a comprehensive level of analysis. State administrative databases are under-utilized in educational research, but they have the potential to inform the aforementioned critical research questions. They provide the most up-to-date data available, and consequently allow for timely, policy-relevant research.

Texas Schools Microdata Panel (TSMP)

The state of Texas was selected as the site for this study for multiple reasons that are both contextual and technical. Texas is a traditional immigrant destination, particularly for immigrants from Mexico and Central America and has had a nontrivial and long-standing ELL population for many years. As of the 2010-2011 academic year, approximately 832,000 ELL students were served by public schools in Texas (Ayala, Alvarado-Bolek, Galicia & Vázquez , 2011), making Texas second only to California in terms of the number and proportion of ELLs educated in the state. Likewise, the ELL population in Texas continues to grow; the number of ELL students increased by 262,000 between 2000 and 2010 (Ayala, Alvarado-Bolek, Galicia & Vázquez , 2011).

Texas is one of the few states that has collected student-level data and assigned each student with a unique student identifier for many years. Since 1990, Texas has been collecting student-level data through the Public Education Information Management System (PEIMS), which has resulted in the TSMP, a confidential database containing data for more than 11 million K-12 students and more than 400,000 public school teachers and administrators from 1990-2010. This data includes detailed information on student demographics and school composition, in addition to information on students' educational profile, and performance on assessments. The

TSMP contains encrypted student identifiers, which enables researchers to link data files from year to year in order to construct a panel dataset. This makes it possible to track individual students as they work their way through school, thereby permitting longitudinal student-level analyses. This is absolutely essential to answer the research questions of interest; this dissertation examines factors that predict the rate with which a child exits ELL status, and implicit in studying rate is the idea of following students over time.

This dataset is particularly advantageous considering the analysis undertaken in this dissertation. Unlike other commonly employed longitudinal datasets that only include a subsample of students who must agree to participate in data collection (the National Educational Study, the Early Childhood Longitudinal Study, etc.), the TSPM includes the universe of students enrolled in public schools in the state of Texas. This helps reduce sample attrition that could otherwise introduce selection bias if certain types of students are more inclined to withdraw from the study. Another advantage is that the ELL population in Texas is substantial enough to constitute an ample sample size that will result in a well-powered study. It is often the case that longitudinal datasets include a very small number of ELL students even when ELLs are intentionally oversampled. As a result, these datasets may not contain a large enough sample to conduct a quantitative analysis.

In addition, because Texas has served a substantial ELL population for many years, TEA has well-established mechanisms for identifying, serving and reclassifying ELLs. Consequently, the TSMP dataset contains in-depth information on the ELL educational experience, including the type of English language development program student received each year, whether or not students' parents opted out of any language development program, and, perhaps most important for this study, the year a child was identified as an ELL and ultimately reclassified. The

combination of rich longitudinal data, well-established ELL identification and assessment systems and a sufficient sample of ELLs makes Texas an ideal laboratory in which to conduct this study.

The TSMP data are held by three Educational Research Centers (ERCs) located in Dallas, Austin and College Station. The Texas Legislature established these ERCs in 2006 in order to facilitate research projects that have been approved by the Texas Joint Advisory Board, a body created by the Commissioner of Education to review, approve and exercise oversight of research conducted that use data contained in the ERC data warehouse. Approval to access the data is only granted by the Joint Advisory Board through a proposal submission and review process, which occurs at quarterly meetings. A proposal to conduct the research contained in this dissertation was submitted to the Joint Advisory Board on October 1, 2010. Approval of data access at the University of Dallas Education Research Center (UTD-ERC) was granted for two years at the quarterly Joint Advisory Board meeting in Austin on December 9, 2010.

Common Core of Data (CCD)

The CCD is a publicly available dataset collected annually by the National Center for Educational Statistics (NCES) that includes data about the universe of public schools, school districts and state education agencies in the United States. Officials from each state education agencies submit this data annually through the U.S. Department of Education's Education Data Exchange Network (Chen, 2010). The CCD provides a list of all open schools that provide free public elementary and second education. This list includes geographic location information such as school mailing addresses and longitude and latitude coordinates, as well as basic descriptive statistical information about students and staff including demographic and fiscal data. This

dissertation specifically makes use of the geographic information, in particular the level of urbanicity for each school. CCD data was easily linked to TSMP data through the state school identifier, which was present in both datasets.

Sample

The panel dataset constructed for this analysis includes the first grade cohort in Texas public schools during the 2002-2003 academic year.²⁴ It is particularly important to study ELLs through a cohort analysis that begins when students enter school because of the instability in the ELL subgroup (Abedi, 2004). Unlike other traditionally underperforming subgroups (e.g., economically disadvantaged, racial minorities, students with special needs), there is systematic fluctuation in this group; students who are identified as ELLs in a given year may no longer be members of that subgroup in subsequent years because they have been reclassified. Therefore, cross-sectional comparisons are particularly ill-suited for studying ELLs.

The panel dataset constructed contains a minimum of two and up to seven records per student, one for each year of data available (2002-2003 through 2008-2009).^{25,26} The number of records per student is determined by the number of years a student attended a public school in

²⁴ First grade was chosen over kindergarten for two reasons: 1) Students are not eligible for reclassification in kindergarten, and 2) The first year of compulsory education in Texas is first grade.

²⁵ Students had to be present in at least 2002-03 *and* 2003-04 to be included in the initial dataset because whether or not an ELL is reclassified is determined by ELL status the subsequent year. Therefore, it was impossible to determine whether or not students who were only present in first grade had in fact exited ELL status that year.

²⁶ Similarly, while the most current year of data available was for the 2009-2010 year, this year was only used to determine whether or not ELL students had been reclassified in the previous year (2008-2009), so it does not appear as an additional year of data in the panel dataset.

Texas. Students with eight records are generally followed from first to seventh grade.²⁷

Students who were not present in the TSMP in a given year (meaning they did not attend schools within the state of Texas that year) were not permitted to reenter the sample because there is no way to determine whether or not they were reclassified while they were being educated elsewhere, nor is it possible to establish the schooling conditions students were exposed to when they were in school outside of Texas.

The initial panel dataset includes a total of 297,626 students, 25.5% (75,884) of whom are ELLs. This dataset was used to prepare descriptive statistics that compare non-ELL to ELL students in terms of performance on assessments, student characteristics and local context. It was also used to examine and describe the similarities and differences between ELLs who are reclassified at different points during their educational career (e.g. how do ELLs who are reclassified in first grade compare to their peers who are reclassified six years later?).

The 2002-2003 school year was chosen as the first year of panel data as a result of working backwards from the 2004-2005 school year, the year during which most students in the panel are in third grade, which corresponds to the first year of achievement testing in Texas. The 2004-2005 year was specifically chosen as a year to build the panel around for several reasons. First, the TELPAS was implemented in full throughout the state during the 2004-2005 academic year. Second, the state implemented new accountability assessment systems for academic content areas (TAKS) during the 2003-2004 academic year. Whenever an assessment system is overhauled, there is often a dip in student test scores. This is frequently described as a “saw tooth effect” because of the jagged pattern that emerges when there is a sudden drop in test

²⁷ A small proportion of students were retained during each academic year, and an even smaller proportion of students skipped grades. Therefore, not all students will follow the typical first, second, third, fourth, fifth, sixth, seventh grade sequence.

scores the first year the new assessment is implemented and improvement during subsequent administrations (Linn, 2000; Linn, Baker, Betebenner, 2002). In order to mitigate the effect of this dip, the analysis began one year later. Because the role that English proficiency and achievement testing play in the rate of reclassification is a critical part of this analysis, the panel dataset was specifically constructed with 2004-2005 in mind to maximize the number of years the panel data contained that included both achievement and English proficiency data.

For the event history analysis (discussed in depth below), the original panel dataset was narrowed in several ways. Because the goal of this study is to examine the exit behavior of ELL students, the only students included in this analysis are those who were identified as ELLs in first grade. Therefore, students who were not identified as ELLs in first grade were eliminated from the sample. This reduced the dataset to 75,884 ELL students.

The dataset was also restricted to only include the last five years of data (2004-2005 onward) because as discussed above, these are the only years with both TELPAS and TAKS data. By starting the panel dataset in 2004-2005, the 3,961 students who exited ELL status in 2002-2003 and the 6,606 students who exited ELL status in 2003-2004 were not included in the analysis. In addition, 7,048 students who were only present in Texas schools during 2002-2003, 2003-2004 and 2004-2005 and were not reclassified during that time were also eliminated from the sample. This reduced the sample size to 58,269 students.

Why start with the first grade cohort of 2002-2003 instead of the third grade cohort of 2004-2005 since the analysis begins when students are in third grade? The primary reason is because this study is interested in examining how the reclassification process works for ELLs in Texas who *have been attending Texas public schools since the beginning of elementary school*. The reason this is important is twofold. First, without beginning in first grade it is impossible to

account for prior experiences students have had while they were attending school outside the state of Texas. For example, a student who attended school in Mexico for two years and then moved to Texas in third grade would in all likelihood be very different from a third grade student who had been in Texas since first grade. Including such different students in the analysis might inadvertently obscure the progress that ELLs are making toward reclassification and muddle the influence of specific variables on the rate of reclassification (Clotfelter, Ladd & Vigdor, 2009; Flores & Park, 2012).

Second, a common misperception about students who remain classified as ELLs into middle and high school is that they are recent immigrants to the United States. At times this misperception allows school personnel to be dismissive of these students' lack of progress toward achieving English proficiency and often times poor academic achievement; it is arguably much easier to pin students' poor performance on schools across the border than it is to acknowledge that American schools are failing to provide all students with a high quality education. While it is certainly important to study the progress of recent immigrant students who enter American schools well into their educational careers, this study opts to focus on students who have attended schools in Texas since the beginning of elementary school in an effort to put forth results that policy makers consider to be both valid and relevant.

In addition to eliminating students who were reclassified or moved out of Texas before third grade, a small number of students were removed because of missing assessment data. A total of 978 students were deleted because of missing TAKS data and 1,528 were eliminated because of missing TELPAS performance data. These students were missing testing data in all years they were present in the panel. Removing these students further reduced the sample size to 55,763 students, the final sample included in the event history analysis. Table 1 includes a

summary of the sample construction

Table 1
Summary of Sample Construction

Sample	Number of ELL Students
Starting Sample	75,884
Reason for Deletion	
Exited ELL in 2002-03	-3,961
Exited ELL in 2003-04	-6,606
Left Texas prior to 2005	-7,048
Missing TAKS data all years	-978
Missing TELPAS data all years	-1,528
Final Analytic Sample	55,736

In an effort to minimize sample bias, students who were missing test scores in a given year (but not all years) were included in the analysis for the years that they had complete testing information. Allowing for periods of nonobservance (e.g., when temporarily removed from the data, in this case due to missing data) is a distinct advantage of employing event history analysis. Table 2 illustrates the number of students with missing test scores in each year of the analysis.

Table 2
Students with Missing Test Scores by Year

Assessment	Academic Year				
	2004-05	2005-06	2006-07	2007-08	2008-09
Students in Sample	55,763	38,638	27,198	20,425	15,374
Missing TELPAS	461	1,081	720	571	402
Missing TAKS	6,234	6,604	2,754	328	1,921
Missing TELPAS & TAKS	193	349	150	47	130
Students Omitted	6,888	8,034	3,624	946	2,453
Students included in Analysis	48,875	30,604	23,574	19,479	12,921
Proportion students included	0.88	0.79	0.87	0.95	0.84

While multiple imputation (Little & Rubin, 2002) was considered as a method to replace this missing data, the decision was ultimately made to use simple casewise deletion. Listwise or casewise deletion is generally an accepted practice, especially when missing data is not pervasive

(Allison, 2002). In this particular case of missing test data, it was inappropriate to impute scores because according to state policy, students who are missing these scores are technically ineligible for reclassification in that year. Therefore, imputing scores for missing students could bias estimates. For example, if a student's imputed English proficiency test scores were high, but this student was not reclassified (likely because the test scores were missing in the first place), this would downwardly bias the estimate of the coefficient on the test scores assuming there was a positive relationship between English proficiency scores and timing of reclassification.

Variables

Dependent Variable

The dependent variable in this analysis is expressed as a conditional failure rate or hazard rate, which is a latent variable of the underlying risk process for reclassification. The hazard rate is conditional because it gives the rate at which students are reclassified (failed to survive) by time t given that the student had not been reclassified (survived) until t . The data utilized to estimate the hazard rate is a dichotomous variable for whether each student was reclassified in the spring of a particular academic year. Each student has a value of 0 for each year that the student remains classified as an ELL and a value of 1 for the year that the student is reclassified. This dichotomous variable did not exist in the dataset but was derived based on a student's ELL classification in the subsequent school year. For example, a student who was classified as an ELL from 2002-2007 and was then classified either not as an ELL or in the first year of academic monitoring in 2008 would be said to be reclassified in 2007.²⁸

²⁸ Prior to the 2008-2009 school year, the coding for the LEP indicator in the PEIMS data system only included two options: non-LEP or LEP. Beginning in the 2008-2009 school year, the coding of LEP students was expanded to not only include the previous coding options, but also

Table 3 displays a list of the number of students in the cohort under study that were reclassified each year of the analysis. After attending schools in Texas for seven years, there were 9,127 students in the first grade cohort of 2002 who had not yet been reclassified. This means that 18.17 percent of the cohort remained classified as ELLs upon entering their 8th year in Texas public schools.

Table 3
Students Reclassified Each Year

Year Reclassified	Total	Included in Analysis	Percent Included
2002-03	3,961	0	0
2003-04	6,606	0	0
2004-05	15,923	15,923	100.00
2005-06	10,368	9,321	89.90
2006-07	6,008	5,458	90.84
2007-08	4,860	4,515	92.90
2008-09	4,158	3,794	91.25
Not Reclassified by 2009	11,216	9,127	81.37

Note: The total for column 3 is 48,138, which is less than the total sample size included in the analysis because there are 7,598 students who are included in the analysis who attend Texas schools for less than seven years, and are not reclassified during the time they are under observation.

Independent Variables

The independent variables included in this analysis can be divided into three clusters: 1) state assessments, 2) student characteristics, and 3) local context. Unless otherwise specified, these variables have time-varying values in order to account for changes in performance on assessments, certain adjustable student characteristics and varying attributes of the local context from 2005-2009. The variables that comprise each of these areas are detailed below.

two additional categories indicating whether the student exited from LEP status and is in the first or second year of academic monitoring. This means that the “student has met criteria for bilingual/ESL program exit, is no longer classified as LEP in PEIMS, and is in his or her first year of monitoring as required by 19 TAC §89.1220(l) and is not eligible for funding due to the fact that they are not LEP” (TEA, 2011b).

State assessments. The first cluster of variables is state assessments. Students' performance on assessments helps to inform teachers as they make reclassification decisions for ELLs. By law, those charged with reclassifying students are required to consider performance on both achievement and English proficiency tests. The assessment variables included in the analysis align with state performance expectations for reclassification.

Achievement assessments. In grades three through ten, students in Texas participate in the TAKS testing system. This assessment system resulted from legislation passed by the 76th Texas Legislature to mandate implementation of new statewide testing program (TEA Student Assessment Division, 2010). The TAKS test is “designed to measure the extent to which a student has learned and is able to apply the defined knowledge and skills at each tested grade level” (TEA Student Assessment Division, 2011). It was implemented during the 2002-2003 school year and remained in place in full through the spring of 2011, at which point the state began transitioning to a new assessment system. The TAKS evolved over the years to include not only the regular TAKS, but also linguistically accommodated testing (LAT) for eligible recent immigrants, an alternative TAKS (TAKS-Alt) designed for students with significant cognitive disabilities, and a modified TAKS (TAKS-M) designed for students receiving special education services who meet TAKS participation requirements.

The TAKS tests specific subject areas at each grade level. Of interest for this particular study is students' performance in reading and writing, the subject areas that the LPAC is required to consider when making reclassification decisions. TEA guidelines indicate that in order to be reclassified, ELLs must meet minimum proficiency standards on the English version of the reading TAKS in grades three through nine as well as the writing TAKS in grades four and seven, the two grades during which the TAKS assesses students in writing.

Met minimum TAKS proficiency standards is a time-varying dummy variable (yes=1; no=0) indicating whether the student met TAKS proficiency standards in reading (and writing, if applicable for the grade level) on the first TAKS administration in a given year.²⁹ While students' scale scores on the TAKS assessment are available in the data, this variable was constructed as a dummy because the reclassification readiness criteria specified by the state is based explicitly on whether or not students demonstrate satisfactory performance not the actual level of their performance.

Took the TAKS test in English is a time-varying dummy variable (yes=1; no=0) indicating whether the student took the TAKS test in English. The TAKS is also offered in Spanish in grades three through six, and many ELLs, particularly those in bilingual programs, take this assessment in Spanish.³⁰ However, TEA guidelines not only indicate that students must demonstrate proficiency on the TAKS test in order to be reclassified, but that they demonstrate proficiency on the *English version* of the test. The LPAC, the same committee charged with making reclassification decisions, is also responsible for making determinations about whether an ELL student should take the TAKS test in Spanish or English.

*Met minimum TAKS proficiency standards * Took TAKS in English* is time-varying interaction between the two variables discussed above where students are assigned a value of one if they have both met TAKS proficiency standards and taken the test in English, and a value of zero if they have not met proficiency standards or took the test in English or both. Including an interaction allows for the hypothesis that the relationship between passing the TAKS test on the

²⁹ Students are given multiple opportunities to pass the TAKS test each year, however only the first administration of the test is relevant when considering reclassification because these are the only scores available at the time teachers have to meet to make reclassification decisions at the end of the school year.

³⁰ Effective the 2009-2010 school year, the TAKS test was no longer administered in Spanish in sixth grade.

rate of reclassification is different for students who demonstrate proficiency on the English and Spanish versions of the test.

English proficiency assessments. In addition to achievement assessments, English proficiency assessments also factor into the reclassification decision-making process as stipulated by the TEA. Districts are permitted to select their own English proficiency assessments from a list of state-approved assessments to gauge students' listening, speaking, reading and writing proficiency. Unfortunately these assessments are not standardized across districts, nor are they included in the PEIMS data. However, all districts are required to assess their ELL students using the TELPAS for federal accountability purposes to monitor progress on acquiring English proficiency since the 2004-2005 school year. Therefore, the TELPAS provides a standardized assessment of English proficiency across all districts and is available in the PEIMS data.

In accordance with Title III of NCLB, ELLs are assessed on an annual basis in the four language domains of listening, speaking, reading and writing. These domains are holistically rated by teachers who have had the student in class with the exception of the reading assessments for students in grades 2-12, which instead consists of a standardized multiple-choice test. The ratings in each of these domains range from 1 to 4, where 1, 2, 3 and 4 are defined by the TEA as representing beginning, intermediate, advanced and advanced-high ratings, respectively. A level of advanced-high:

is not intended to equal the English proficiency of an individual whose first language is English. Over time, advanced-high ELLs understand the finer nuances of English meaning, use more natural phrasing, and learn low-frequency words, idioms, sayings, etc., that are typically familiar to individuals whose first language is English. (TEA

Student Assessment Division, 2011, p. 31)

Because of this, an advanced-high rating has come to represent reclassification readiness.

To improve reliability and validity of the TELPAS assessment process, the holistic rating is completed by teachers who have been trained and certified to evaluate students' writing, classroom observations and daily interactions.³¹ Once raters complete the training, they are required to demonstrate their ability to independently rate student writing collections reliably. They do so by completing an online assessment. If they fail to qualify to rate students, a qualified rater must assist during ELL assessment. In addition, since the 2004-2005 school year, TEA has conducted periodic audits of the TELPAS process in which they evaluate the rater training, the administration of the reading assessment and the scoring process. During the audit, expert raters provide second ratings of samples of students to measure inter-rater reliability, and raters are surveyed about the administration procedures. The multiple-choice reading assessment for students in grades 2 through 12 is also evaluated for internal consistency using the Kuder-Richardson Formula 20 (KR20). Acceptable reliability coefficients generally range from 0.70 to 0.79. TELPAS reading tests during the spring of 2009 had KR20 coefficients ranging of 0.93 and 0.96, depending on whether the exam was administered in online or paper format (TEA Student Assessment Division, 2011).

TEA also evaluates the validity of the TELPAS. The TELPAS exhibits content validity because the relationship between tested content (listening, speaking, reading and writing domains) are aligned with the construct the test is intended to measure (English language proficiency standards). Items on the reading assessment have been evaluated through field

³¹ TELPAS raters participate in an annual online training that is conducted by TEA. This training course includes information on the second language acquisition theory as well as opportunities to practice rating using sample writing collections and video segments in which ELLs demonstrate their speaking and listening skills.

testing and statistical information such as item difficulty for students at each proficiency level, item point-biserial correlations and differential item functioning has been evaluated.³²

For the purposes of this analysis, the TELPAS provides a consistent measure of students' English language proficiency in four domains across the entire state. The following TELPAS variables are included:

TELPAS Listening Advanced-High is a time-varying dummy variable (1=yes; 0=no) indicating whether the student received an advanced-high holistic rating when his/her classroom teacher evaluated the student's English proficiency in listening comprehension during the spring of the academic year.

TELPAS Speaking Advanced-High is a time-varying dummy variable (1=yes; 0=no) indicating whether the student received an advanced-high holistic rating when his/her classroom teacher evaluated the student's English proficiency in listening comprehension during the spring of the academic year.

TELPAS Writing Advanced-High is a time-varying dummy variable (1=yes; 0=no) indicating whether the student received an advanced-high holistic rating when his/her classroom teacher evaluated the student's English proficiency in listening comprehension during the spring of the academic year.

TELPAS Reading Advanced-High is a time-varying dummy variable (1=yes; 0=no) indicating whether the student received a score equivalent with an advanced-high rating on the standardized multiple choice TELPAS reading comprehension assessment that is administered during the spring of the academic year. This is the only language domain that is not holistically rated by classroom teachers.

³² For more information on reliability and validity of the TELPAS, refer to the 2008-2009 Technical Digest (TEA Student Assessment Division, 2010).

Student characteristics. The second cluster of variables included in the analysis are student characteristics. As discussed in the previous chapter, students' demographic characteristics and educational profile may influence teachers' reclassification decisions apart from students' performance on achievement assessments and English proficiency scores.

Demographic characteristics. Students arrive at school with a number of characteristics that arguably shape much of their schooling experience. Using a social reproduction lens, this dissertation posits that the following demographic characteristics may prompt schools to favor and disfavor students with certain observable characteristics for reclassification; students who possess characteristics that reflect those of the dominant student group of native English speakers may be more likely to be reclassified than their peers who possess characteristics that are not parallel to the dominant group.

Native language is a time-constant categorical variable that includes the following categories: *Spanish*, *English* and *Other*. Each category is incorporated in the analysis as a separate dummy variable (1=yes; 0=no), with *Spanish* serving as the reference group since majority of ELLs in Texas come from Spanish-speaking families. The *Other* category includes students who have a reported native language that is one other than Spanish or English. Therefore, this includes all native speakers of Asian, Middle Eastern, Eastern European, African and Native American languages, among others. After Spanish, the most common native languages of ELL students include Vietnamese (due to the large Southeast Asian community in the Houston metropolitan area). All of these languages as well as nearly 100 other languages are included in the *Other* category. While these different languages reflect a tremendous number of backgrounds, the proportions of students are arguably too small to include as separate categories in a quantitative analysis. In addition, the TEA has traditionally focused on Spanish speaking

students; for example TAKS tests are only provided in English and Spanish, not other languages.

The *English* category is somewhat curious; upon first glance it does not appear that any ELL students should have a native language of English. However, there are a few possible explanations for this. First, parents, particularly those who are undocumented, may be hesitant to report that their child's native language is one other than English on the home language survey because they see it as a potential way that schools may identify undocumented immigrant students. Second, parents may list English as students' native language in an effort to prevent their children from being classified as an ELL. Some parents believe that ELLs are not as well served by schools as non-ELLs. This perception is often linked to ELLs being placed in bilingual programs, which parents sometimes see as a means of slowing students' English acquisition. Third, there is a portion of ELLs who are in fact native English speakers who have been misclassified. These may be students who have some of the typical attributes of ELLs (racial minorities, economically disadvantaged, those with Spanish or Asian surnames, etc.) and either have developmental delays in their language skills or are timid enough to prompt the English proficiency evaluator to conclude that the student's English proficiency is limited.³³

Economically disadvantaged is a time-varying dummy variable (1=yes; 0=no) indicating whether the student is eligible for free or reduced-price lunch or other public assistance. Eligibility for free or reduced-price lunch or other public assistance is reported by a parent or guardian at the time of each student's enrollment and is then used as a proxy for economic disadvantaged status.

Migrant is a time-varying dummy variable (1=yes; 0=no) indicating whether the student's parent or guardian is a migratory agricultural or seasonal farmworker who has in the

³³ Race/ethnicity is excluded from this analysis because of the high correlation between race and native language.

preceding 36 months obtained temporary employment in agriculture or fishing and has moved from one school district to another, or resides in a school district of more than 15,000 square miles and migrates 20 miles or more to a temporary residence to engage in a fishing activity. This definition is specified in Section 1308 of Title I of NCLB.

Female is a time-constant dummy variable (1=yes; 0=no) indicating the student's gender. This data is reported at the time of the student's enrollment.

Educational profile. In addition to demographic characteristics, students possess characteristics that comprise their educational profile. These characteristics consist of educational attributes that can easily be observed by classroom teachers such as participation in a gifted and talented or special education program. Unlike the demographic characteristics discussed above, these variables speak to individual programmatic and experiential differences for ELLs because of decisions made within schools. These educational characteristics could influence teachers' reclassification decisions because teachers may equate them with students' preparedness to exit ELL status and enter mainstream English classrooms without language supports.

Special Education is a time-varying dummy variable that indicates whether the student has an individualized education plan (IEP) because of a cognitive, physical or emotional disability and consequently receives special education services. It should be noted that many of the students who were eliminated due to missing TAKS and TELPAS scores were students with acute special needs who were exempt from testing.

Gifted is a time-varying dummy variable that indicates whether the student has been identified as one who performs or shows the potential to perform at an exceptionally high level when compared to his/her peers. According to TEA, these are students who "exhibit high

performance capability in intellectual, creative, or artistic areas; possess an unusual capacity for leadership; or excel in a specific academic field” (Texas Education Agency, 2011c).

English Language Development Program is a time-varying categorical variable with the following categories: *Bilingual*, *ESL* (English as a second language), *Parent Denial*, and *No Language Support* (1=yes; 0 = no). Bilingual programs include some degree of instruction in students’ native language (this varies depending on the specific bilingual model), whereas ESL programs only include instruction in English. Students who are parent denials are those whose parents signed a waiver to opt out of any English language development services. Finally, students with no language instruction are those who are classified as ELLs but have no record of participating in an English language development program. Bilingual serves as the reference group because bilingual education is the most popular alternative for ELLs in the beginning of the analysis.

Disciplinary Infractions is a time-varying continuous variable indicating the number of disciplinary infractions the student had during a given academic year. These disciplinary infractions are generally severe and have been noted in students’ permanent records. This variable ranges from zero to 25 during the first year of the analysis and zero to 38 during the final year of the analysis.

Retained is a time-varying dummy variable (1=yes; 0=no) indicating whether the student was retained during the previous academic year. This variable is included in the analysis as a control.

Local Context. In order to capture the effects of the school context and local policy influences, this analysis includes schooling environment and regional context variables.

Schooling environment. The characteristics of a schooling context often shape the

programs available to students, social interactions and educational opportunities. The variables included in this analysis are meant to capture key aspect of the schooling environment that have the potential to influence the way school staff approach reclassification decisions.

Percent ELL is a time-varying continuous variable indicating the percentage of students who are ELLs at each student's school. This variable ranges from just above zero to 96.00 percent in 2005 and just above zero to 90.00 percent in 2009.

Percent Economically Disadvantaged is a time-varying continuous variable indicating the percentage of students who are economically disadvantaged at each student's school. This variable ranges from zero to 100 percent in 2005 and one to 100 percent in 2009.

Enrollment is a time-varying continuous variable indicating the total number of students enrolled at the school each student attended. This variable ranges from approximately 50 to 1,522 students in 2005 and 31 to 1,799 students in 2009. This variable is included in the analysis to control for the potential effects of school size.

Average Teacher Tenure is a time-varying continuous variable indicating the mean number of years of teaching experience at the school. This variable ranges from zero to 22 years in 2005 and 0 to 17 years in 2009. This variable is included in the analysis as a control variable.

Charter is a time-varying dummy variable (1=yes; 0=no) indicating whether the student attended a charter school during a given year. This variable serves as a control.

Urbanicity is a time-varying categorical variables that includes the following categories: *Rural*, *Town*, *Suburban* and *Urban*. *Urban* serves as the reference group and constitutes territory inside an urbanized area and inside a principal city. *Suburban* includes territory outside a principal city and inside an urbanized area. *Town* constitutes constitutes territory inside an urban

cluster. *Rural* includes Census-defined rural territory (National Center for Education Statistics, 2012). These variables are included in the analysis as a control.

Regional context. In an effort to capture local policy context, regional indicators are included in the analysis. *ESC Region* is a categorical variable that indicates the Education Service Center region in which each student's school is located. This variable contains 20 categories, one for each region. Each region is incorporated in the analysis as a separate dummy variable (1=yes; 0=no), with *Region 1* serving as the reference group since this region serves a greater proportion of ELLs than any other region in Texas.

Methods

Research Question 1

In order to lay the foundation for subsequent analyses, this dissertation will initially examine descriptive statistics that compare the values of the variables in the analysis across non-ELLs, ELLs and ELLs reclassified at different points in time. Specifically, the first research question asks: How do non-ELLs, ELLs who are reclassified quickly and ELLs who take longer to be reclassified compare to one another in terms of performance on assessments, student characteristics and local context? To answer this question, descriptive statistics are presented across the different groups. First, ELL students are compared to their non-ELL counterparts based on 2003 data, when these students were in first grade. Second, The ELL group is divided by number of years in ELL status, and comparisons are made across the groups. The purpose of this initial descriptive analysis is to establish whether or not there are patterns that emerge based on time spent classified as an ELL. This description sets the stage for the subsequent multivariate analysis.

Research Question 2

The primary goal of this study is to explore whether or not there are key predictors of students' *probability of reclassification*. Specifically, this study asks: How do state assessments, student characteristics, and local contexts influence the *rate* at which ELLs are reclassified as English proficient? The analytic approach will center on event history analysis (EHA) to examine which factors influence whether an ELL student is reclassified. This method models the relationship between multiple covariates and the probability that an ELL is reclassified as proficient in English at a particular point in time. EHA focuses on modeling the processes that may lengthen or shorten the amount of time that passes before a crucial event occurs (Yamaguchi, 1991). Otherwise known as survival analysis, EHA was initially developed and used in biostatistics to analyze survival rates of patients. The method was then borrowed by social scientists. For example, political scientists Berry & Berry (1990, 1992) borrowed the method to study diffusion of policy innovations across states. Their groundbreaking research examined the probability of whether or not states would adopt a lottery or a new tax in a given year. EHA has exploded as a method for analyzing policy diffusion. It has been employed to study a wide array of policies including anti-smoking mandates (Shipan & Volden, 2006), hate-crime laws (Soule & Earl, 2001) and same-sex marriage bans (Haider-Markel, 2001).

More recently, researchers have also utilized EHA to study K-12 and higher education politics. Their goal is to gain a deeper understanding of the forces that promote policy adoption within their respective areas. In higher education, the research has focused on a wide array of policies such as the adoption of no-loan programs (Flores, McLendon, Park & Mavrogordato, 2010), dual enrollment (Mokher & McLendon, 2009) and merit aid (Doyle, 2006). EHA has also been employed to analyze certain K-12 reforms, particularly those surrounding charter

schools and school choice initiatives (e.g., Wong & Shen, 2002).

Despite the rise in the prevalence of EHA in politics and policy studies, this analysis method is seldom applied to dynamic learning processes that occur at the student level. There are a few exceptions, but for the most part, EHA is an under-utilized research tool for studying key events that relate to student outcomes and achievement. DesJardins and colleagues (1999) made use of EHA to model student departure (dropout) from high school. This technique will allow for the examination of how specific explanatory variables affect the chances of an ELL student being reclassified at a specific point in time.

Event history analysis offers a number of advantages over traditional logistic regression techniques (Bennett, 1999; Box, Steffensmeier & Jones, 2004). First, in contrast to logistic regression, which only predicts whether or not an event occurred, EHA allows for the examination of both the occurrence and the timing of events (Mokher, 2008). This is particularly useful for examining the research question of interest because it permits the examination not only of whether or not students exit ELL status, but *when* reclassification occurs during ELLs' educational careers. Second, logistic regression commonly omits cases that do not experience the event by the end of the observation period, which may result in sample bias (Mokher, 2008). In event history analysis, students who have not experienced the event of interest by the end of the observation period are known as censored observations. One of the distinct advantages of this method is that it is able to use information from both censored and non-censored cases to predict the risk of an event occurring at a specific point in time thereby generating unbiased parameter estimates (Singer & Willett, 2003). Finally, event history analysis allows for periods of non-observance, which means that students are permitted to enter the analysis even if they are not included in the data for all years. In this case, this allows for the inclusion of students who

were present in Texas public schools for several years but not the complete eight years of observation. It also facilitates the inclusion of students who have missing data for a period of time (e.g. a missing TELPAS score) to be included in years when the data is complete. This prevents eliminating entire students from the sample simply because they are only under observation for a few years or are missing data in one year.

The particular event focused on in this analysis is reclassification. Any ELL who has not been reclassified at a given time period is considered to be *at-risk* of experiencing the event. The students become at-risk at the *time of origin*. In this case, the time of origin is set to be the spring of 2005, the year that the TELPAS was implemented throughout the state to measure ELLs' English proficiency and the year that most of the students in the first grade cohort of 2003-2003 enter third grade, the grade level at which students begin to take the TAKS test.³⁴ The *event time* is the duration between the time of origin and when a student is reclassified. For example, a student who is reclassified in the spring of 2007 would have an event time of two years since two years had passed since 2005, the time of origin. In this study time is measured in discrete units as the number of years since 2005 (*t*) until an ELL student (*i*) is reclassified. While students are not all reclassified on the exact same day, they are only eligible for reclassification when the LPAC meets at the end of each academic year (TAC Section 89.1220(g)). Therefore, students only have the opportunity to exit ELL status at discrete time intervals, rather than continuously throughout the whole school year. Students who have not been reclassified by the

³⁴ Technically, students become at-risk for reclassification during the spring of 2003, when they are in first grade, and a number of students are reclassified at this time as well as in the spring of 2004. However, one of the key aims of this study is to determine the role that achievement and English proficiency assessments play in the reclassification process, and the TAKS test does not commence until students are in third grade, which would be 2005 for most of the students in the first grade cohort of 2002-2003, with the exception of those students who were either retained or skipped a grade.

end of the observation period in spring 2009 are considered to be *right-censored* observations. It is unclear whether these ELLs will be reclassified at a later point in their educational trajectory or not because it is beyond the scope of the data available to study; in fact, this cohort is still attending school and will graduate from high school during the spring of 2014 assuming on-time graduation.

The data is structured as a person-period dataset with one record per student for each year. Time-constant variables such as native language are the same for all years whereas time-varying covariates are assigned to the corresponding values for each student during each time period. The dependent variable is assigned a value of zero for every year that the event has not yet occurred and a value of one in the year that the event occurs. After the student experiences reclassification, he is no longer at-risk for experiencing the event, so the remainder of the periods are coded as missing and removed from the dataset.

Event history analysis centers on two key distributional functions, the survival function and the hazard function. The survivor function, $S(t)$, is a non-increasing function that estimates the probability that individual i will *survive* (or fail to experience the event of interest) longer than time t (Box-Steffensmeier & Jones, 2004). It can also be thought of as the proportion of individuals who survive beyond t . In this study, the survival function is the probability that an ELL student will remain classified as ELL beyond a given academic year. In the subsequent chapter, graphs of the Kaplan-Meier survival function are provided to display the rate of change of the survivor function over time.

The second important distributional function generated in event history analysis is the hazard function, which estimates the instantaneous rate of change in the probability of experiencing the event of interest during time t , conditional upon remaining in the risk set of

those who are eligible to have an event at that point in time (Box-Steffensmeier & Jones, 2004). For the purposes of this analysis, the hazard function can be interpreted as an indicator of how the risk of being reclassified shifts over time for those students who have not been reclassified. The multivariate model determines how the explanatory variables influence the hazard rate.

The hazard rate is the ratio of the probability of failing to survive (experiencing reclassification) to the probability of surviving (remaining classified as an ELL). It can be expressed as:

$$h(t) = \frac{f(t)}{S(t)}$$

Where $f(t)$ denotes the probability of an event occurring at time t_i , and $S(t)$ denotes the proportion of students remaining classified as ELLs beyond time t_i . The hazard rate can be thought of as the conditional probability of being reclassified given that the student has not been reclassified up to that point. It can also be expressed as:

$$h(t) = \Pr(T = t_i | T \geq t_i)$$

where T is a discrete random variable denoting the time of reclassification occurrence, and t_i are discretely defined time points at which reclassification occurs.

Because the probability that a student will be reclassified may shift over time as students progress through school, the risk of experiencing the event should be permitted to vary across time periods. In the past, many EHA studies have employed discrete time logit models, which include a parameter known as the baseline hazard function to account for time dependence (Berry & Berry, 1990; Mintrom, 1997; Mooney & Lee, 1995). However, discrete time logit models can be problematic because the hazard function may be estimated incorrectly if the parameter specified for time is incorrect (Bergström & Edin, 1992; Box-Steffensmeier & Jones, 2004).

Instead of a highly parameterized model, this dissertation uses an unrestricted approach to time in which the hazard rate is permitted to vary by year. This approach is the discrete-time analog to the Cox proportional hazards model, which of late has become more conventional in social science research (Box-Steffensmeier & Jones, 2004; Park, 2012). The particular specification of the hazard function in this analysis is a discrete-time proportional hazard model, in which time is divided into discrete units rather than being continuous. In this analysis, the discrete time unit is academic years because ELLs will either be reclassified as English proficient or not during the spring of each school year. Time is measured in discrete units as the number of academic years since 2004-2005 (t) until an ELL student (i) is reclassified as English proficient.

The discrete-time proportional hazards model makes use of a complimentary log-log link function to determine the effect of covariates on the hazard rate. The basic specification of the discrete-time proportional hazards model is:

$$\ln[-\ln(1 - \lambda_{it})] = \alpha_t + \beta'x_{it}$$

Where λ_{it} is the hazard rate of reclassification of individual i at time t , α_t is a time-varying constant term that signifies the baseline hazard function each year t , x_{it} is a vector of covariates for the i th subject at the t th year, and β is a vector of the log hazard-ratio for the covariates. The proportional hazards assumption of this function signifies that the ratio of hazards between two individuals is constant over time.

The discrete-time proportional hazards model estimated for the reclassification of ELLs is:

$$\begin{aligned}
\ln[-\ln(1 - \lambda_{it})] = & \alpha_t \\
& + \beta_{1A}(\textit{Achievement Assessment Proficiency})_{it} \\
& + \beta_{1B}(\textit{English Proficiency Ratings})_{it} \\
& + \beta_{2A}(\textit{Student Demographics})_{it} \\
& + \beta_{2B}(\textit{Student Educational Profile})_{it} \\
& + \beta_{3A}(\textit{School Environment})_{it} \\
& + \beta_{3B}(\textit{Regional Context})_{it}
\end{aligned}$$

Where λ_{it} is the hazard rate of reclassification of individual i in year t , α_t is a vector of year dummy variables that signifies the baseline hazard function each year t , x_{it} is a vector of covariates for the i th student at the t th year, and β_{1A} to β_{3B} is the log hazard-ratio for each respective vector of covariates.

A one-unit change in a covariate corresponds with an estimated change in the hazard rate by $\exp(\text{coefficient})$; the idea is that the coefficient has a multiplicative effect on the hazard rate. Exponentiating the coefficients facilitates interpretation; with this transformation, a coefficient less than one indicates the explanatory variable is associated with a decrease in the likelihood of reclassification, while a coefficient greater than one is associated with an increase in the likelihood.

Limitations

While this study makes is the first to examine how state assessments, student characteristics and local context contribute to the probability of reclassification across an entire state there are several limitations worth noting.

Data Tradeoffs

This dissertation employs state administrative data from Texas. This dataset is extensive, containing a tremendous amount of information on all of the students who have attended public schools in Texas since 1990. This data is particularly advantageous for the analysis conducted because it is longitudinal and it provides a large enough sample of ELLs to conduct a well-powered analysis. Unlike using data from one district, employing data from across the state allows for comparison between regions within the state that capture variation in probability of reclassification. That said, there are drawbacks to using this type of data. Particularly relevant in this case is the lack of ability to incorporate students' English proficiency scores from district-selected assessments. In Texas, it is up to districts to determine the English proficiency instruments they will use to measure listening, speaking and writing from a list of state-approved assessments (Reading is measured by the TAKS test, which is predetermined by the state). Students' scores on these instruments are maintained by districts and are not reported to the state. Therefore, this study is not able to precisely model the exact English proficiency scores that are used to inform reclassification decisions. Instead, this study substitutes English proficiency scores on the TELPAS, which assesses English proficiency across the state for accountability purposes. The TELPAS is arguably a close proxy for English proficiency scores in listening, speaking, reading and writing on the other assessments, but are obviously not exactly the same.

Another tradeoff to using the Texas administrative data is that while the TSMP allows researchers to nest students within schools, it does not allow for students to be matched with specific teachers or classrooms as may be the case if employing district-level data. This analysis only includes measures of school environment. For example, each school has one value to reflect the percentage of ELLs. Arguably, this ignores a key source of variation, because it is

likely also important to factor in the percentage of ELL students in the classroom that a student is in. The inability to match students to classrooms or specific teachers is a limitation of the TSMP in its present form. However, in response to value-added teacher initiatives in Texas, the TSMP is moving toward making it possible to connect students with teachers. Therefore, a replication of this study in the future may allow for the incorporation of teacher and classroom variables that better reflect classroom schooling experiences in addition to school-level aggregates.

Truncated Analysis

In Texas, students are eligible to be reclassified starting in first grade. However, standardized achievement testing does not begin in Texas until third grade. Because a key goal of this study is to establish the role that achievement assessments play in the reclassification process, the event history analysis commences when students are in third grade. Unfortunately, this means that students reclassified during first and second grade are not incorporated into the analysis.

In addition, the panel dataset created for the event history analysis includes five years of data ranging from 2005 through 2009, which captures the years that the TELPAS has been used and follows students through the end of seventh grade (assuming on-time promotion). It would be ideal to be able to follow students all the way through high school, but unfortunately the most up-to-date data available through the TSMP is for the 2009-2010 school year, which really means that the last year of observations for this analysis is 2008-2009 since data from the subsequent year is used to determine whether or not students exited ELL. As additional years of data become available, this analysis could be rerun to gauge reclassification probabilities for students who remain classified as ELLs into high school.

Limited External Validity

The results of this dissertation make use of data from the state of Texas and will therefore reflect the Texas context. While all states serve ELLs, they each set their own English proficiency standards and determine how ELLs will be identified, monitored, assessed and reclassified. Because of these differences, findings from this study will not be directly generalizable to other states. However, this study could be replicated using longitudinal administrative data from another state. Such a study would provide an interesting comparison between states and would also serve as a means of checking the robustness of the results from Texas.

Attrition

Attrition is a concern with any longitudinal study. This study attempts to mitigate selection bias caused by attrition by including students in the analysis who only remain in Texas public schools for part of the analysis as well as by allowing students who move between schools within the state of Texas. This prevents the elimination of more mobile students, who also tend to come from more disadvantaged backgrounds. Despite this, there are students who attrite before the beginning of the event history analysis because they leave Texas schools before third grade, and these students are not included in the analysis. The results of this study, therefore, are generalizable only to students who remain in Texas public schools for at least the first several years of primary school.

CHAPTER V

RESULTS

The results of this dissertation are divided into two main categories: descriptive statistics and event history analyses. The first section analyzes the first research question by examining descriptive statistics of ELLs who were reclassified at different points in their educational careers. The second section provides descriptive statistics and intercorrelations between each of the independent variables included in the event history analysis and delves into the results of this analysis, first presenting an analysis of the specification of the baseline hazard function, then displaying survival and hazard functions and a description of reclassification trends over time, and lastly providing the empirical result from the multivariate event history analysis. Finally, this chapter concludes with an interpretation of the results and a discussion of the findings.

Results: Descriptive Statistics

Descriptive Statistics for ELLs and Non-ELLs

The first research question asks, how do non-ELLs, ELLs who are reclassified quickly and ELLs who take longer to be reclassified compare to one another in terms of performance on assessments, student characteristics and school local context? To answer this question, basic descriptive statistics were examined at two time points: 2003 and 2005. The 2003 data provides student characteristic and local context information on the cohort under study. Neither the TAKS nor the TELPAS had been implemented at that point in time, so state assessment comparisons between non-ELLs and ELLs as well as between ELLs reclassified at different

points in time were made using 2005 data. Table 4 displays means and standard deviations for all state assessment and student characteristic variables, as well as school environment variables (regional dummies are not included) for ELLs as compared to non-ELLs. Non-ELL students are those who were not classified as ELLs in first grade, whereas ELLs consist of students who were classified as ELLs in first grade.

Table 4
Means for Variables in Analysis, by ELL Status in 2003

	Non-ELL	Overall ELL		Non-ELL	Overall ELL
<u>State Assessments (2005)</u>			<u>Student Characteristics Continued</u>		
<i>Achievement Assessments</i>			<i>Educational Profile</i>		
Proficient on TAKS	0.85 (0.36)	0.73 (0.44)	Bilingual Program		0.67 (0.47)
Took TAKS in English		0.64 (0.48)	English as a Second Lang		0.25 (0.43)
Proficient TAKS * TAKS English		0.47 (0.50)	Parent Denial		0.07 (0.25)
			No Language Support		0.01 (0.09)
<i>English Proficiency Assessments</i>			Special Education	0.09 (0.29)	0.06 (0.23)
TELPAS Writing Adv-High		0.07 (0.25)	Gifted and Talented	0.04 (0.20)	0.03 (0.16)
TELPAS Reading Adv-High		0.42 (0.49)	Disciplinary Infractions	0.06 (0.45)	0.02 (0.25)
TELPAS Speaking Adv-High		0.13 (0.34)	School Switches	0.07 (0.28)	0.04 (0.20)
TELPAS Listening Adv-High		0.17 (0.38)	Retained Previous Year	0.00 (0.00)	0.00 (0.00)
<u>Student Characteristics (2003)</u>			<u>Local Context (2003)</u>		
<i>Demographic Characteristics</i>			<i>School Environment</i>		
Economically Disadv	0.47 (0.50)	0.88 (0.32)	Pct Students ELL	15.08 (16.37)	43.40 (22.60)
Migrant	0.01 (0.10)	0.06 (0.23)	Pct Students Econ Disadv	52.22 (28.69)	76.91 (22.02)
Spanish Language	0.03 (0.17)	0.90 (0.29)	Student Enrollment	596.68 (209.36)	689.21 (217.36)
Other Language	0.01 (0.10)	0.07 (0.25)	Avg Yrs Teacher Tenure	7.88 (3.11)	7.84 (3.10)
English Language	0.96 (0.20)	0.03 (0.16)	Charter School	0.01 (0.11)	0.00 (0.06)
Female	0.49 (0.50)	0.48 (0.50)			
Observations	221,742	75,884	Observations	221,742	75,884

Note: Standard deviations in parentheses. For the state assessment variables, 2005 data is used because scores for the TAKS and TELPAS were not available en masse prior to that year. There are 210,504 non-ELLs students and 55,763 ELL students represented in the state assessment descriptives.

The first part of this discussion focuses on state assessments. In 2005, 73 percent of ELL students are proficient on the TAKS test regardless of the assessment language, as compared to 85 percent of non-ELL students. While 90 percent of ELLs are native Spanish speakers, only 64 percent of them took the TAKS test in Spanish. This may be explained by the English language development program students are assigned to; 64 percent of students participate in bilingual education programs, and bilingual students would be more likely to test in Spanish since this aligns with the language used during academic instruction for students in Spanish bilingual programs. The interaction between TAKS proficiency and taking the TAKS in English reflects that many of the students who passed the TAKS test did so in Spanish; only 47 percent of ELLs both passed the TAKS test *and* took the test in English.

The means presented suggest that it is least difficult for students to score at an advanced high level on the standardized multiple-choice reading TELPAS, but most difficult for them to score at this level on the writing TELPAS, which consists of holistically rated writing samples. A substantial percentage of ELLs, 42 percent, demonstrate advanced-high reading comprehension, while only 7 percent receive an advanced-high score in writing.

When considering the student characteristic variables, it is immediately apparent that ELLs are economically disadvantaged at nearly twice the rate of non-ELL students (88 percent versus 47 percent). While the overall proportion of students who are migrants is relatively small, ELLs are about six times more likely to be migrants than their non-ELL peers. As would be expected, the vast majority (96 percent) of non-ELLs have parents who report that the language spoken at home is English. There is a small group of students who are non-ELLs whose parents report speaking Spanish or another language. These students were likely initially flagged for English proficiency testing because their parents reported a language other than English was

spoken at home, but scores on English proficiency assessments were high enough that they were not classified as an ELL. The ELLs in this analysis are overwhelmingly Spanish-speakers (90 percent), but seven percent of them are from households that speak other languages and three percent have parents who report English is spoken at home. As mentioned in the previous chapter, this group is somewhat of an anomaly because these are students who are ELLs whose parents chose to report them as English speakers for a number of different reasons, or these students were simply misclassified.

Turning to the educational profile variables, a number of interesting findings emerge. First, ELLs are less likely to be classified as having special educational needs than their non-ELL counterparts. This is somewhat surprising seeing as previous literature (e.g., Artiles et al., 2005) have found ELLs to be *overrepresented* in special education. While a slightly greater proportion of non-ELLs are classified as gifted and talented, the differences between the groups in first grade are not substantial (four percent versus three percent). On average, ELLs incur fewer disciplinary infractions than their non-ELL peers.

The comparison between non-ELLs and ELLs in the first grade cohort of 2003 suggests that while ELLs are much more likely to be economically disadvantaged, the averages between these two groups are actually rather comparable for educational profile variables. A very different story emerges when partitioning ELLs by the number of years until they are reclassified.

Descriptive Statistics for ELLs Reclassified at Different Times

ELLs who are reclassified at different points during their educational career are strikingly different. The data presents a clear trend: ELLs who are reclassified more rapidly perform at a

higher level on state assessments, are less likely to possess social demographic and educational attributes that put them at-risk, and are more likely to attend schools with more advantaged student populations.

Table 5 displays means and standard deviations for state assessment variables in 2005 disaggregated by years spent classified as an ELL. The right-most column indicates that 11,216 students in the first grade cohort of 2003 had not been reclassified at the conclusion of this analysis. This means that 18.24 percent of the 62,575 students³⁵ who remained in Texas schools for the duration of the analysis were still classified as ELLs as they entered their eighth year in Texas schools.

Considering performance on state assessments, 91 percent of students who were reclassified by their third year meet TAKS proficiency standards overall, with 89 percent of them passing the TAKS test in English. This indicates that a greater percentage of ELLs who were reclassified in their third year met proficiency standards on the TAKS than non-ELL students (89 percent versus 85 percent). However, the proportion of students proficient declined markedly by the number of years students spend classified as an ELL. Only 39 percent of the students who were not reclassified by the end of the analysis (right-most column) passed the TAKS in 2005, and a mere nine percent of these students passed the English TAKS. The vast majority (98 percent) of students who exit ELL status after three years were tested in English in 2005. This aligns with reclassification policies, which require that students demonstrate proficiency on the English version of the TAKS test. For each additional year students spend classified as an ELL, smaller proportions of students were tested in English in 2005.

³⁵ Of the original 75,884 ELL students in the first grade cohort of 2002-2003, 13,237 students left before the end of the analysis.

Table 5

Descriptive Statistics for State Assessment Variables in 2005, By Years Classified as ELL

	Years Classified as ELL Before Reclassification						
	Overall- ELL	3	4	5	6	7	8+
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
<u>Achievement Assessments</u>							
Proficient on TAKS	0.73 (0.44)	0.91 (0.29)	0.85 (0.35)	0.78 (0.41)	0.67 (0.47)	0.63 (0.48)	0.39 (0.49)
Took TAKS in English	0.64 (0.48)	0.98 (0.14)	0.60 (0.49)	0.49 (0.50)	0.44 (0.50)	0.41 (0.49)	0.40 (0.49)
Proficient TAKS * TAKS English	0.47 (0.50)	0.89 (0.31)	0.49 (0.50)	0.35 (0.48)	0.23 (0.42)	0.19 (0.39)	0.09 (0.28)
<u>English Proficiency Assessments</u>							
TELPAS Writing Adv-High	0.07 (0.25)	0.16 (0.37)	0.06 (0.24)	0.03 (0.18)	0.01 (0.11)	0.01 (0.10)	0.00 (0.07)
TELPAS Reading Adv-High	0.42 (0.49)	0.72 (0.45)	0.57 (0.50)	0.43 (0.50)	0.27 (0.45)	0.21 (0.41)	0.07 (0.25)
TELPAS Speaking Adv High	0.13 (0.34)	0.28 (0.45)	0.14 (0.35)	0.10 (0.30)	0.06 (0.24)	0.04 (0.19)	0.02 (0.15)
TELPAS Listening Adv-High	0.17 (0.38)	0.35 (0.48)	0.19 (0.39)	0.14 (0.35)	0.08 (0.27)	0.06 (0.24)	0.04 (0.19)
Observations	55,763	15,923	10,368	6,008	4,860	4,158	11,216

In many ways, these descriptive results for performance on state assessments are not surprising; students who were reclassified earlier displayed a higher level of reclassification readiness as determined by their achievement and English proficiency scores. However, this analysis calls attention to the fact that there are clear performance differences early in students' educational careers between students who will be reclassified more rapidly and those who will remain classified as ELLs well into middle school.

Clear patterns also emerge when considering student characteristic variables. Table 6 displays means and standard deviations for both demographic and educational profile variables in 2003. The proportion of students who are economically disadvantaged is greater for each additional year spent classified as an ELL. Approximately 78 percent of students reclassified in first grade were economically disadvantaged in 2003, as compared to 95 percent who were not reclassified by the end of the analysis. It is worth noting, however, that even the ELLs

reclassified during Year 1 or Year 2 are much more likely to be economically disadvantaged than their non-ELL peers.

Table 6
Descriptive Statistics for Student Characteristic Variables in Analysis in 2003, by Years Classified as ELL

	Years Classified as ELL Before Reclassification								
	Overall ELL	1	2	3	4	5	6	7	8+
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
<u>Demographic Characteristics</u>									
Economically Disadv	0.88 (0.32)	0.78 (0.41)	0.75 (0.44)	0.85 (0.35)	0.90 (0.30)	0.92 (0.28)	0.93 (0.26)	0.94 (0.24)	0.95 (0.23)
Migrant	0.06 (0.23)	0.05 (0.21)	0.04 (0.19)	0.05 (0.22)	0.05 (0.23)	0.05 (0.21)	0.05 (0.22)	0.04 (0.21)	0.06 (0.24)
Spanish Language	0.90 (0.29)	0.76 (0.42)	0.77 (0.42)	0.88 (0.33)	0.92 (0.27)	0.94 (0.23)	0.96 (0.19)	0.96 (0.18)	0.97 (0.18)
Other Language	0.07 (0.25)	0.19 (0.39)	0.20 (0.40)	0.09 (0.29)	0.05 (0.22)	0.03 (0.17)	0.02 (0.15)	0.02 (0.14)	0.02 (0.12)
English Language	0.03 (0.16)	0.05 (0.22)	0.04 (0.19)	0.03 (0.17)	0.03 (0.16)	0.02 (0.15)	0.01 (0.12)	0.01 (0.12)	0.02 (0.13)
Female	0.48 (0.50)	0.51 (0.50)	0.53 (0.50)	0.50 (0.50)	0.49 (0.50)	0.49 (0.50)	0.50 (0.50)	0.46 (0.50)	0.43 (0.49)
<u>Educational Profile</u>									
Bilingual Program	0.67 (0.47)	0.32 (0.47)	0.41 (0.49)	0.57 (0.49)	0.71 (0.45)	0.77 (0.42)	0.80 (0.40)	0.81 (0.39)	0.82 (0.38)
English as a Second Lang	0.25 (0.43)	0.47 (0.50)	0.46 (0.50)	0.33 (0.47)	0.22 (0.42)	0.19 (0.39)	0.16 (0.37)	0.16 (0.36)	0.14 (0.35)
Parent Denial	0.07 (0.25)	0.19 (0.39)	0.11 (0.32)	0.09 (0.29)	0.06 (0.23)	0.04 (0.19)	0.03 (0.18)	0.03 (0.17)	0.03 (0.16)
No Language Support	0.01 (0.09)	0.02 (0.14)	0.01 (0.10)	0.01 (0.08)	0.01 (0.09)	0.01 (0.08)	0.01 (0.07)	0.01 (0.08)	0.01 (0.10)
Special Education	0.06 (0.23)	0.04 (0.21)	0.03 (0.17)	0.03 (0.18)	0.04 (0.19)	0.05 (0.21)	0.08 (0.27)	0.09 (0.29)	0.10 (0.30)
Gifted and Talented	0.03 (0.16)	0.06 (0.25)	0.07 (0.25)	0.03 (0.17)	0.02 (0.15)	0.03 (0.16)	0.01 (0.12)	0.01 (0.09)	0.00 (0.06)
Disciplinary Infractions	0.02 (0.25)	0.01 (0.15)	0.01 (0.15)	0.02 (0.19)	0.02 (0.16)	0.02 (0.27)	0.02 (0.24)	0.02 (0.23)	0.04 (0.28)
School Switches	0.04 (0.20)	0.12 (0.34)	0.03 (0.17)	0.03 (0.17)	0.03 (0.17)	0.03 (0.17)	0.03 (0.18)	0.03 (0.16)	0.03 (0.18)
Observations	75,884	3,961	6,606	17,133	10,624	6,129	4,979	4,238	11,416

Note: Retained previous year variable is not included because retention prior to first grade is difficult to capture since Kindergarten is not mandatory in the state of Texas.

It is interesting to examine how the proportions break down over time in terms of native language. Spanish-speaking students comprise 90 percent of the ELL population overall, but it is evident that Spanish speakers exit at slower rates than their peers. In Years 1, 2, and 3, the proportion of students who are Spanish speakers who exit ELL status is less than 90 percent, and

in Years 4 and beyond it is greater than 90 percent. The opposite trend is evident for ELLs who speak *other* languages. While this group represents seven percent of the overall ELL population, 19 percent and 20 percent of the ELLs reclassified in Years 1 and 2 respectively are speakers of *other* languages. This contrasts with two percent of other language speakers in Years 6 and 7. This suggests that these students are overrepresented in early reclassification years and underrepresented in later reclassification years.

Students reclassified earlier are more likely to participate in ESL programs than bilingual programs in first grade (47 percent versus 32 percent). Students whose parents chose to deny English language development services are overrepresented among students who are reclassified early on and underrepresented in later years. While these students only comprise seven percent of the ELL population in 2003, they make up 19 percent of the ELLs reclassified in Year 1, but only three percent of the ELLs who were not reclassified during the course of this analysis. The proportion of ELLs who receive special education services is greater for each year spent classified as an ELL going from four percent in Year 1 to nine percent in Year 7. An opposite pattern is evident among gifted ELLs, who comprise six percent of ELLs reclassified Year 1 and one percent of ELLs reclassified in Year 7. While the average number of disciplinary infractions is one or two per 100 students for Years 1 through 7, the average is greater at four infractions per 100 students for those who remain classified as ELLs eight years and beyond.

Table 7 shows means for local context variables. Students who are reclassified more rapidly tend to attend schools with a greater proportion of non-ELLs as well as more advantaged student populations. Students reclassified in Year 1 or 2 attend schools with less than 36 percent of the population classified as ELLs whereas students reclassified after entering middle school attend elementary schools with more than 46 percent of the population consisting of ELLs.

Similarly, the proportion of economically disadvantaged students at the school attended in 2003 is greater for each year students spend classified as an ELL, ranging from approximately 67 percent for ELLs reclassified in Year 1 to 82 percent for ELLs not reclassified by the end of the analysis. There are no clear patterns that emerge in terms of student enrollment, average years of teacher tenure and whether or not the student attends a charter school.

Table 7
Descriptive Statistics for Local Context Variables in Analysis, by Years Classified as ELL

	Years Classified as ELL Before Reclassification								
	Overall ELL	1	2	3	4	5	6	7	8+
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
<u>School Environment</u>									
Pct Students ELL	43.40 (22.60)	31.40 (21.06)	35.38 (22.11)	41.74 (22.69)	43.81 (21.65)	43.61 (21.43)	46.01 (22.55)	46.74 (22.60)	48.38 (21.81)
Pct Students Econ Disadv	76.91 (22.02)	68.66 (26.41)	66.13 (27.74)	74.57 (22.79)	78.43 (20.42)	78.70 (19.97)	79.33 (19.76)	79.85 (19.33)	81.97 (17.54)
Student Enrollment	689.21 (217.36)	649.71 (212.64)	700.11 (228.91)	682.38 (216.97)	693.04 (225.85)	688.85 (216.67)	686.50 (210.77)	694.87 (209.04)	695.72 (210.46)
Avg Yrs Teacher Tenure	7.84 (3.10)	8.36 (3.09)	7.77 (3.16)	7.66 (3.01)	7.84 (3.03)	7.79 (3.07)	8.05 (3.12)	7.89 (3.17)	7.86 (3.18)
Charter School	0.00 (0.06)	0.01 (0.09)	0.00 (0.07)	0.00 (0.06)	0.00 (0.06)	0.01 (0.08)	0.00 (0.06)	0.01 (0.09)	0.00 (0.06)
Observations	75,884	3,961	6,606	17,133	10,624	6,129	4,979	4,238	11,416

Thus far, descriptive statistics that compare non-ELLs to ELLs overall have been presented to examine how the ELL cohort under study compares to their non-ELL peers. A second set of descriptive statistics was presented as well to examine difference within the ELL group based on the timing of students' reclassification. This descriptive analysis highlights the diversity represented within the ELL subgroup when students arrive at school; students who are reclassified in the first few years of elementary school are more advantaged and attend more advantaged schools upon initially entering school than their peers who are reclassified later during their educational career. However, this analysis does not shed light on whether or not these differences in student characteristics and school environment explain the variation in the probability of reclassification, or if this variation is simply due to differences performance on

English proficiency and achievement assessments. This study now turns to event history analysis to determine the role that each of these factors play in influencing the probability of reclassification.

Results: Event History Analysis

The second research question asks, how do state assessments, student characteristics, and local contexts influence the *rate* at which ELLs are reclassified as English proficient? Event history analysis is used to answer this question. First, descriptive statistics are presented for the students who are present in the sample for each year of the analysis. Then, correlation matrices between covariates are presented and interpreted. Next, the event history analysis is run and results for the multivariate model are presented.

Descriptive Statistics for Event History Analysis

The descriptive statistics for the event history analysis are presented in three tables, one for each of the three clusters of variables: state assessments, student characteristics, and local context. All of these tables provide descriptives by year for the students who are included in the event history analysis in each year. All of the tables reflect the same number of observations each year. The number of observations begins at 48,875, which reflects the number of students included in 2005, the first year of the event history analysis. This number is less than the total sample of 55,763 because there are a number of students who were missing TAKS or TELPAS scores in 2005. This is in part due to retention in 2003 and 2004. Students who had been retained in 2003 or 2004 had not yet reached third grade, the first grade during which the TAKS test is given.

Table 8 provides means and standard deviations for students' performance on state academic achievement and English proficiency assessments. The last row of the table illustrates the number of students included in each year of the analysis. The number of students included in the analysis declines steadily over time as students are reclassified and exit the sample. In terms of achievement assessment variables, the average proportion of students who met TAKS proficiency requirements fluctuates over time beginning at 74 percent in 2005 and ending at 60 percent in 2009. This decline over time is unsurprising since meeting reading (and in some years, writing) TAKS proficiency standards is a prerequisite for reclassification according to state guidelines. Students who are able to pass the TAKS test earlier are reclassified more rapidly, thereby leaving a greater proportion of students in the ELL sample who struggle academically. The proportion of students who met proficiency standards dipped between 2006 and 2007, dropping from 69 percent to 52 percent and rising again to 65 percent in 2008. This sudden drop in the proportion of students meeting TAKS standards can likely be attributed to the sudden increase in the percentage of ELLs transitioning from taking the TAKS in Spanish to taking the English version. The proportion of students who take the English TAKS test increases over time from 64 percent to 100 percent, which implies that the proportion of students who take the Spanish TAKS declines. There is a marked increase in the number of English TAKS test takers in 2007 and 2008 as the first grade cohort prepares to enter and actually enters middle school. At the time this cohort was entering middle school, sixth grade was the last grade that the TAKS test was offered in Spanish, which explains why 100 percent of the students have transitioned to taking the TAKS test in English by 2009, when this cohort entered seventh grade.

Table 8
Descriptive Statistics for State Assessment Variables in EHA Analysis, 2005-2009

Variable	2005 Mean (SD)	2006 Mean (SD)	2007 Mean (SD)	2008 Mean (SD)	2009 Mean (SD)
<u>Achievement Assessments</u>					
Met TAKS Proficiency Requirements	0.74 (0.44)	0.69 (0.46)	0.52 (0.50)	0.65 (0.48)	0.60 (0.49)
English TAKS	0.64 (0.48)	0.66 (0.47)	0.82 (0.39)	0.97 (0.17)	1.00 (0.01)
Met TAKS Proficiency * TAKS English	0.48 (0.50)	0.44 (0.50)	0.38 (0.49)	0.64 (0.48)	0.60 (0.49)
<u>English Proficiency Assessments</u>					
TELPAS Writing-Advanced High	0.07 (0.26)	0.18 (0.38)	0.21 (0.41)	0.24 (0.42)	0.32 (0.47)
TELPAS Reading-Advanced High	0.47 (0.50)	0.41 (0.49)	0.57 (0.49)	0.56 (0.50)	0.62 (0.49)
TELPAS Speaking-Advanced High	0.14 (0.35)	0.26 (0.44)	0.32 (0.47)	0.38 (0.49)	0.46 (0.50)
TELPAS Listening-Advanced High	0.19 (0.39)	0.32 (0.47)	0.40 (0.49)	0.44 (0.50)	0.52 (0.50)
Observations	48,875	30,604	23,574	19,479	12,921

Unlike performance on achievement assessments, students' English proficiency performance improves over time in all four language domains. The greatest proportion of students perform at the advanced high level on the reading TELPAS across all five years, while the writing TELPAS appears to be the most difficult for students, with only seven percent of students scoring advanced high in 2005 and 32 percent in 2009.

Table 9 provides descriptive statistics for student characteristics, including both students' demographic characteristics and educational profile. The proportion of the sample composed of female students declines from 49 percent to 45 percent over the five-year period. Similarly, the proportion of students who are migrants decreases from 4 percent to 2 percent. It is interesting to note with the native language variables, the proportion of students included in the sample who are Spanish-speakers increases from 93 percent to 97 percent as time passes, while the proportion of ELLs who speak any other native language (with the exception of English) decreases from 5 percent to 2 percent. This suggests that the ELL population in Texas is increasingly dominated by Spanish speakers by the time students enter middle school.

In terms of students' educational profile, there are a number of descriptive statistics that warrant discussion. First, the proportion of students in a bilingual program hovers between 67 and 68 percent in years 2005 through 2007, when most students are still in elementary school. The proportion of students suddenly drops to 32 percent in 2008 and finally drops precipitously again to seven percent in 2009. The pattern is the reverse for English as a second language programs, in which increases from 26 percent of students initially participating in 2005 to 85 percent in 2009. This shift in the proportion of students participating in bilingual and ESL programs can be explained in large part by TEA regulations; the state requires that districts offer bilingual programs through the end of elementary school in districts that have more than 20 ELLs of the same language group in a given grade level, and most of the students in the sample are in their last year of elementary school in 2007 or 2008 (depending on whether elementary school ends in fifth or sixth grade, which is not uniform across the state). There was very little change in the average values for ELLs whose parents denied language services and those who did not receive language support over the five-year timeframe of this analysis.

The proportion of students who receive special education services increases markedly over time from eight percent in 2005 to 23 percent in 2009. Conversely, the proportion of ELLs who are gifted decreases over time from six percent to two percent. A possible explanation for this is that students with special educational needs have a more difficult time being reclassified, perhaps because they struggle to meet academic achievement standards for reclassification, whereas their gifted peers more easily meet reclassification requirements.

The proportion of students retained is zero percent in 2005, an artifact of the construction of the dataset. Students who were retained in 2004 were not included in the first year of the event history analysis because these students had not yet reached third grade, the first year of

TAKS testing. The number of school switches remains at 0.01 switches per student across the five years with a range of zero to one switches in 2005 and a range of zero to three switches in 2009. The average number of disciplinary infractions per student increases as students progress through school going from 0.07 infractions per student with a range of 0 to 25 in 2005 to 1.07 infractions with a range of 0 to 38 in 2009.

Table 9
Descriptive Statistics for Student Characteristic Variables in EHA Analysis, 2005-2009

Variable	2005 Mean (SD)	2006 Mean (SD)	2007 Mean (SD)	2008 Mean (SD)	2009 Mean (SD)
<u>Demographic Characteristics</u>					
Native Language Spanish	0.93 (0.26)	0.95 (0.21)	0.96 (0.19)	0.97 (0.18)	0.97 (0.18)
Native Language Other	0.05 (0.22)	0.03 (0.17)	0.02 (0.14)	0.02 (0.13)	0.02 (0.13)
Native Language English	0.02 (0.15)	0.02 (0.14)	0.02 (0.13)	0.02 (0.12)	0.02 (0.13)
Economically Disadvantaged	0.91 (0.29)	0.93 (0.26)	0.93 (0.26)	0.92 (0.26)	0.92 (0.26)
Migrant	0.04 (0.20)	0.03 (0.17)	0.02 (0.14)	0.02 (0.14)	0.02 (0.15)
Female	0.49 (0.50)	0.49 (0.50)	0.47 (0.50)	0.45 (0.50)	0.45 (0.50)
<u>Educational Profile</u>					
Bilingual Program	0.67 (0.47)	0.70 (0.46)	0.68 (0.47)	0.32 (0.47)	0.07 (0.25)
English as a Second Language	0.26 (0.44)	0.24 (0.43)	0.26 (0.44)	0.61 (0.49)	0.85 (0.36)
Parent Denied Bilingual and ESL	0.07 (0.25)	0.06 (0.23)	0.05 (0.23)	0.07 (0.25)	0.08 (0.27)
No Language Support	0.00 (0.04)	0.00 (0.05)	0.00 (0.05)	0.01 (0.08)	0.00 (0.07)
Special Education	0.08 (0.27)	0.06 (0.24)	0.15 (0.36)	0.23 (0.42)	0.23 (0.42)
Gifted and Talented	0.06 (0.23)	0.05 (0.22)	0.04 (0.19)	0.02 (0.14)	0.02 (0.13)
Number of School Switches	0.01 (0.11)	0.01 (0.12)	0.01 (0.10)	0.01 (0.09)	0.01 (0.10)
Retained Previous Year	0.00 (0.01)	0.08 (0.28)	0.03 (0.17)	0.05 (0.22)	0.01 (0.09)
Number of Disciplinary Infractions	0.07 (0.45)	0.08 (0.44)	0.18 (0.84)	0.61 (1.92)	1.07 (2.76)
Observations	48,875	30,604	23,574	19,479	12,921

Table 10 presents descriptive statistics for local context variables, including variables that capture both the school environment as well as the regional context. There is quite a range in the percentage of students who are ELLs at the school level, ranging from nearly zero percent to 96

percent in 2005 and nearly zero percent to 90 percent in 2009. As time passes, the average percentage of students who are ELLs at the school level declines from 44.30 percent to 23.56 percent, likely due to students exiting ELL status. The biggest drop comes between 2007 and 2008, which parallels most students' transition from elementary school. The percentage of students who are economically disadvantaged at the school level is much more stable ranging from a high of 81.19 percent in 2006 to 77.30 percent in 2009. Like the percentage of ELLs, there is a large range in the percentage of students who are economically disadvantaged at each school. Some schools report less than one percent economically disadvantaged while others indicate up to 100 percent disadvantaged.

The 20 Education Service Center regions serve strikingly different numbers of ELL students. Region 4, which consists of Houston and surrounding areas, is home to the largest number of ELLs in the sample, representing 25 percent of ELLs in 2005. Region 1, which consists of Edinburg and other cities located along the Texas-Mexico border in the Rio Grande Valley serves 20 percent of the ELLs in the 2005 sample, the second largest proportion of ELLs. Region 10, responsible for serving students in Richardson and throughout the Dallas metropolitan area, is home to 17 percent of the ELLs in 2005. While more than half of the ELLs in Texas are served by these three regions alone, many regions serve much smaller ELLs represented in the sample; Regions 3, 5, 9, 14 and 15 (Victoria, Beaumont, Wichita Falls, Abilene, and San Angelo, respectively) each serve less than one percent of ELLs in the cohort.

Table 10
Descriptive Statistics for Local Context Variables in EHA Analysis, 2005-2009

Variable	2005 Mean (SD)	2006 Mean (SD)	2007 Mean (SD)	2008 Mean (SD)	2009 Mean (SD)
<u>School Environment</u>					
Pct Students ELL	44.30 (21.81)	45.68 (21.57)	43.99 (22.22)	31.47 (20.82)	23.56 (15.48)
Pct Students Econ Disadvantaged	79.10 (20.17)	81.19 (18.33)	80.80 (18.21)	77.82 (19.84)	77.30 (19.84)
Student Enrollment	680.56 (209.01)	689.86 (209.82)	689.45 (211.79)	815.31 (298.68)	896.22 (303.34)
Avg Years Teacher Tenure	7.57 (2.89)	7.77 (2.92)	7.50 (2.91)	7.35 (2.75)	7.16 (2.40)
Charter School	0.00 (0.07)	0.00 (0.07)	0.01 (0.09)	0.01 (0.10)	0.01 (0.12)
Rural	0.07 (0.26)	0.07 (0.26)	0.09 (0.29)	0.10 (0.30)	0.14 (0.35)
Town	0.06 (0.24)	0.05 (0.23)	0.08 (0.28)	0.09 (0.28)	0.07 (0.25)
Suburban	0.28 (0.45)	0.30 (0.46)	0.26 (0.44)	0.26 (0.44)	0.24 (0.43)
Urban	0.59 (0.49)	0.58 (0.49)	0.57 (0.50)	0.55 (0.50)	0.55 (0.50)
<u>Regional Context</u>					
Region 1: Edinburg	0.20 (0.40)	0.19 (0.39)	0.19 (0.39)	0.21 (0.41)	0.20 (0.40)
Region 2: Corpus Christi	0.01 (0.11)	0.01 (0.09)	0.01 (0.07)	0.01 (0.07)	0.00 (0.07)
Region 3: Victoria	0.00 (0.06)	0.00 (0.06)	0.00 (0.05)	0.00 (0.05)	0.00 (0.04)
Region 4: Houston	0.25 (0.43)	0.30 (0.46)	0.29 (0.46)	0.29 (0.45)	0.29 (0.45)
Region 5: Beaumont	0.00 (0.07)	0.00 (0.07)	0.00 (0.07)	0.00 (0.06)	0.00 (0.05)
Region 6: Huntsville	0.02 (0.13)	0.02 (0.14)	0.02 (0.15)	0.02 (0.15)	0.03 (0.16)
Region 7: Kilgore	0.02 (0.14)	0.02 (0.14)	0.02 (0.14)	0.02 (0.14)	0.02 (0.14)
Region 8: Mt. Pleasant	0.01 (0.08)	0.01 (0.08)	0.01 (0.09)	0.01 (0.09)	0.01 (0.09)
Region 9: Wichita Falls	0.00 (0.04)	0.00 (0.03)	0.00 (0.04)	0.00 (0.04)	0.00 (0.03)
Region 10: Richardson	0.17 (0.37)	0.15 (0.36)	0.16 (0.36)	0.15 (0.36)	0.17 (0.37)
Region 11: Fort Worth	0.09 (0.28)	0.07 (0.25)	0.06 (0.24)	0.07 (0.25)	0.07 (0.25)
Region 12: Waco	0.01 (0.11)	0.01 (0.10)	0.01 (0.11)	0.01 (0.10)	0.01 (0.10)
Region 13: Austin	0.05 (0.21)	0.04 (0.19)	0.05 (0.22)	0.05 (0.22)	0.05 (0.22)
Region 14: Abilene	0.00 (0.04)	0.00 (0.04)	0.00 (0.03)	0.00 (0.04)	0.00 (0.04)
Region 15: San Angelo	0.00 (0.07)	0.01 (0.07)	0.00 (0.07)	0.01 (0.07)	0.01 (0.08)
Region 16: Amarillo	0.01 (0.10)	0.01 (0.09)	0.01 (0.09)	0.01 (0.09)	0.01 (0.08)
Region 17: Lubbock	0.01 (0.07)	0.00 (0.06)	0.00 (0.07)	0.00 (0.07)	0.00 (0.06)
Region 18: Midland	0.01 (0.12)	0.01 (0.11)	0.01 (0.11)	0.01 (0.11)	0.01 (0.10)
Region 19: El Paso	0.08 (0.27)	0.08 (0.27)	0.08 (0.27)	0.08 (0.27)	0.07 (0.25)
Region 20: San Antonio	0.05 (0.23)	0.06 (0.24)	0.06 (0.24)	0.06 (0.23)	0.05 (0.23)
Observations	48,875	30,604	23,574	19,479	12,921

Intercorrelations

This analysis examines correlations between independent variables in an effort to check for multicollinearity. A strong linear relationship between explanatory variables can result in inflated standard errors (Wooldridge, 2009). In situations with high levels of multicollinearity, confidence intervals around estimated coefficients have a tendency to be wider and t-statistics smaller, thereby increasing the probability of Type II errors. Tables 11, 12 and 13 display the correlations between the independent variables in this analysis.

Since correlations between variables tend to be relatively low, multicollinearity is not a concern in this analysis. However, there are a handful of variables that are above +0.70. One example is the correlation between scoring advanced high on the listening and speaking domains of the TELPAS, which is 0.78. This correlation is in many ways expected; listening and speaking are complementary language domains; listening comprehension is often evaluated by how children respond orally. In addition, the same teacher provides both the listening and speaking TELPAS ratings, which are based on a holistic evaluation of the child. The correlation between participation in a bilingual program and an ESL program is -0.87 since these are the two types of English language development programs offered. They are not perfectly collinear, however, since some students have parents who deny services altogether or a few students that are not placed in an English language development program despite being ELLs. These instances of highly correlated variables should not pose a problem in this study because of the large sample size, which generally helps to decrease standard errors.

Table 11

Correlations between State Assessment Variables

	Met TAKS Proficiency	English TAKS	Met TAKS * English TAKS	TELPAS AH Writing	TELPAS AH Reading	TELPAS AH Speaking	TELPAS AH Listening
Met TAKS Proficiency Requirements	1						
English TAKS	-0.0763	1					
Met TAKS Proficiency * TAKS English	0.695	0.550	1				
TELPAS Writing-Advanced High	0.153	0.204	0.262	1			
TELPAS Reading-Advanced High	0.376	0.232	0.437	0.280	1		
TELPAS Speaking-Advanced High	0.141	0.251	0.279	0.544	0.279	1	
TELPAS Listening-Advanced High	0.156	0.247	0.285	0.510	0.302	0.778	1

Table 12

Correlations between Student Characteristic Variables

	Female	Econ Disadv	Migrant	English Lang	Other Lang	Spanish Lang	Special Ed	Gifted	Parent Denial	ESL	No Lang Support	Biling	School Switch	Retain	Disc Infract
Female	1														
Economically Disadvantaged	0.018	1													
Migrant	0.004	0.042	1												
Native Language English	-0.008	-0.031	-0.010	1											
Native Language Other	-0.023	-0.245	-0.029	-0.025	1										
Native Language Spanish	0.023	0.216	0.029	-0.598	-0.786	1									
Special Education	-0.107	-0.018	-0.001	0.026	0.006	-0.020	1								
Gifted	0.023	-0.003	-0.016	0.009	-0.008	0.000	-0.071	1							
Parent Denial	-0.010	-0.080	-0.001	0.048	0.041	-0.063	0.070	0.013	1						
English as a Second Language	-0.027	-0.084	-0.054	0.061	0.187	-0.188	0.096	-0.047	-0.198	1					
No Language Support	-0.009	-0.007	-0.003	0.004	-0.001	-0.002	0.053	0.003	-0.015	-0.042	1				
Bilingual Program	0.032	0.123	0.053	-0.084	-0.202	0.214	-0.134	0.039	-0.301	-0.868	-0.064	1			
Number School Switches	-0.001	-0.007	0.006	0.003	-0.005	0.002	-0.008	-0.011	-0.006	0.000	0.011	0.001	1		
Retained Previous Year	-0.006	0.019	-0.001	0.001	-0.019	0.015	-0.039	-0.035	-0.006	-0.027	0.006	0.029	0.007	1	
Number Disciplinary Infract.	-0.108	0.011	0.009	-0.003	-0.020	0.018	0.0856	-0.0337	0.004	0.130	0.014	-0.130	0.011	0.000	1

Table 13

Correlations between School Environment Variables

	Charter	Percent ELL	Percent Econ Disadv	Student Enrollment	Avg Years Teacher Tenure
Charter School	1				
Percent ELL	0.023	1			
Percent Economically Disadv.	0.031	0.634	1		
Student Enrollment	-0.088	0.036	-0.001	1	
Avg Years Teacher Tenure	-0.174	0.062	0.173	-0.082	1

Baseline Hazard Specification

This analysis makes use of a proportional hazards model, which yields a complementary log log hazard. This can be defined as the log of the negative log of event occurrence. The proportional hazards model is an asymmetrical function, whereas the more traditional discrete-time proportional odds model that relies on a logit cumulative distribution function. In practice, the logit and complementary log log distributional functions produce very similar results when the probability is less than 0.25 in time intervals (Ezell, 2010).

A key aspect of event history analysis is modeling duration dependence, or how the risk of failure depends on how long an observation has survived. The risk of being reclassified is dependent on how long a student has been in ELL. Because of this duration dependence, there is a need to parameterize the time dependence (α_t). Several common specifications of the baseline hazard function were tested including the constant, unrestricted, Weibull, Gompertz, quadratic, and cubic hazard models. Because these models are not nested, standard model comparison techniques such as likelihood ratios and Wald tests are inappropriate. Instead, this study uses a Bayesian information criterion (BIC) statistic to compare models. Table 14 displays the different specifications tested and their respective BIC statistics.

Table 14
Comparison of Baseline Hazard Specifications

Specification Name	Model	Degrees of Freedom	BIC Statistic
Constant (Time Invariant)	$\alpha_t = \alpha$	1	162,651.5
Unrestricted (Dummy Variable Approach)	$\alpha_t = \alpha_1, \alpha_2, \dots, \alpha_k$ where $\alpha_1 = I(t=1), \alpha_2 = I(t=2) \dots$	5	161,627.7
Weibull	$\alpha_t = \ln(t)$	2	162,012.6
Gompertz	$\alpha_t = t$	2	162,125.4
Quadratic	$\alpha_t = t, \alpha_t = \alpha_t^2 = t^2$	3	161,840.9
Cubic	$\alpha_t = t, \alpha_t = \alpha_t^3 = t^3$	4	161,646.4

The model with the smallest BIC statistic is considered preferable. Therefore, the most appropriate model to use to model duration dependence in this analysis is the unrestricted model, which has a BIC statistic of 161,627.7. For the purposes of this analysis, models will be run using an unrestricted baseline hazard specification that includes a dummy variable for each of the five time periods. This particular baseline hazard has several advantages, perhaps the most important of which is that it makes no assumption about the nature of the hazard across time. It is also appropriate to use in this study because of the limited number of time intervals and large sample size; in event history analysis studies that follow observations over many time intervals, using an unrestricted baseline hazard model results in many parameters, which can quickly consume degrees of freedom.

Figure 3 provides a smoothed graph of the various parameterizations. This visual further illustrates the duration dependence in the risk of being reclassified. The line for the unrestricted model deviates the most from the constant baseline hazard as it dips during the third and fourth year.

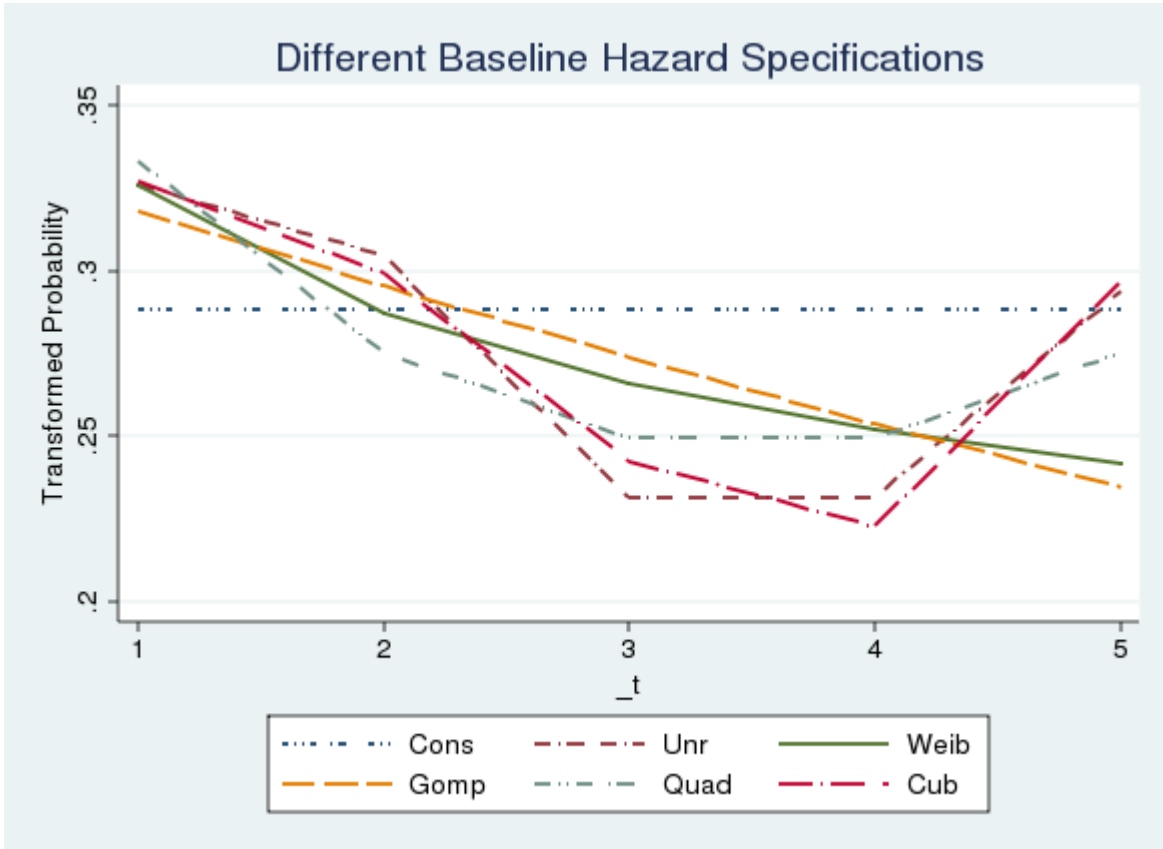


Figure 3. Comparison of baseline hazard specifications

Survival and Hazard Functions

Table 15 displays the survival and hazard functions for each year of the analysis. The survival function is the cumulative probability that a student will remain classified as an ELL by a given academic year. The survival rate for 2009, the final year of this study, is 0.20, which indicates that 20 percent of the students in the sample (or 9,127 students) had not been reclassified by 2009. The graph displayed in Figure 4 provides a visual representation of how the survival function for reclassification decreases over time, declining the most from 2005 to 2006 (Year 0 to Year 1).

Table 15

Survivor and Hazard Functions for Students Experiencing Reclassification by Year

Year	Risk Set	Number of Students Reclassified	Number of Students Censored	Cumulative Reclassifications	Survival Function	Hazard Function
2005	48,875	15,923	2,348	15,923	0.67	0.39
2006	30,604	9,321	-2,291	25,244	0.47	0.36
2007	23,574	5,458	-1363	30,702	0.36	0.26
2008	19,479	4,515	2,043	35,217	0.28	0.26
2009	12,921	3,794	9,127	39,011	0.20	0.35

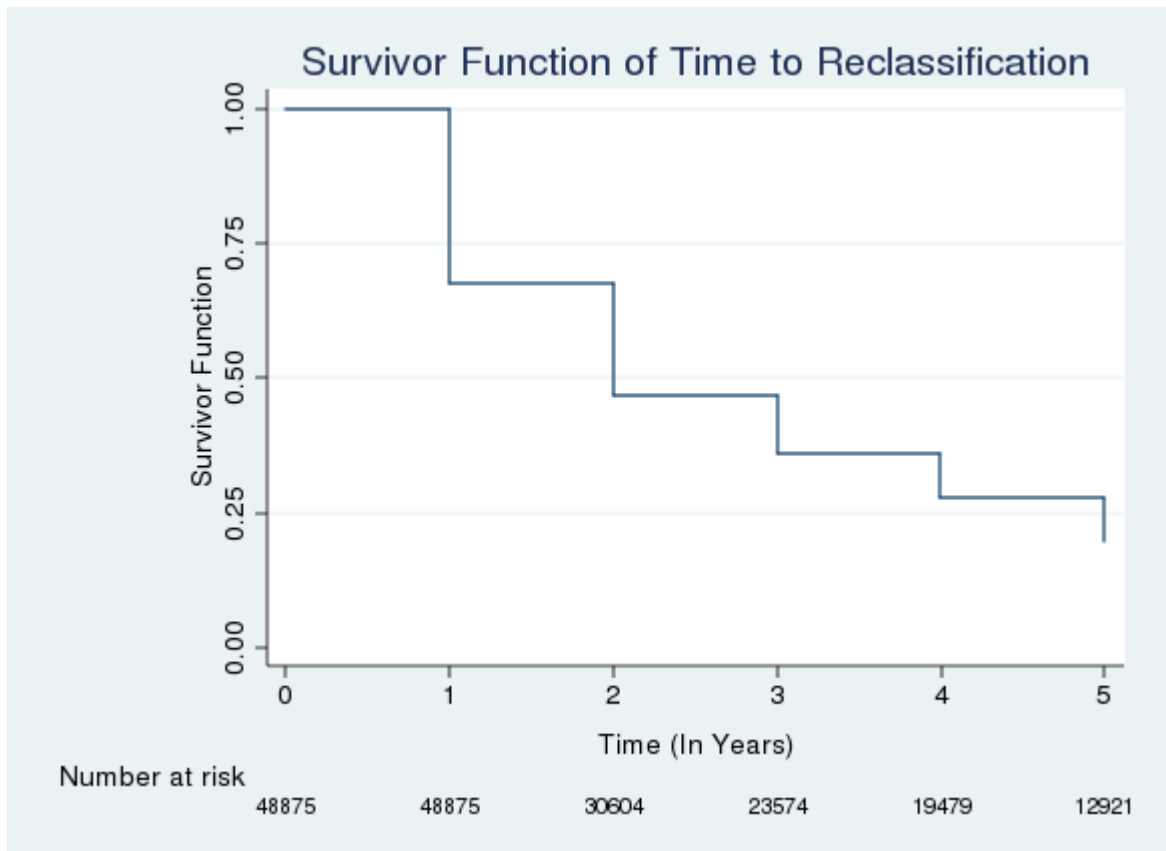


Figure 4. Survivor function of time to reclassification

The hazard function presented in the right-most column of Table 15 provides an estimate of the instantaneous rate of change in the probability of being reclassified in a specific year conditioned upon having not yet been reclassified. The hazard rate for reclassification began at

39 percent in 2005, the highest point throughout the analysis. This indicates that the probability of reclassification is highest for students in 2005, when most students are in third grade. The hazard function remained relatively constant at 36 percent in 2006, but dipped to 26 percent in 2007 indicating a decline in the probability of reclassification as most students in the sample entered middle school. In the final year of the analysis, the hazard function increased to 35 percent, suggesting that the probability of reclassification increases once again.

Multivariate Event History Analysis Results

Results from the discrete-time proportional hazards model are presented in two formats, the first with the raw coefficients and standard errors, and the second with the exponentiated coefficient to ease interpretation. The model clusters at the student level to account for intraclass correlation between students' yearly records. Without clustering, standard errors of the estimates would likely be underestimated, which has the potential to result in invalid significance tests (Wooldridge, 2006).

Results, which are presented in Table 16, demonstrate that there are statistically significant results across all three areas, particularly state assessments. Both performance on achievement tests and English proficiency tests are important predictors of the likelihood of experiencing reclassification. Whether or not students met proficiency on the TAKS test, whether they took the TAKS in English or Spanish and the interaction effect between the two all have a statistically significant positive effect on the likelihood of reclassification. Likewise, all TELPAS advanced high indicators are significant predictors of the probability of reclassification.

Table 16

Event History Analysis Results: Time to Reclassification Final Model

	Coefficient	SE(Coeff)	Exp(Coeff)
<u>Time Dummies</u>			
Time 1	-4.42 ^{***}	(0.12)	0.01 ^{***}
Time 2	-4.59 ^{***}	(0.12)	0.01 ^{***}
Time 3	-5.10 ^{***}	(0.12)	0.01 ^{***}
Time 4	-5.57 ^{***}	(0.12)	0.00 ^{***}
Time 5	-5.29 ^{***}	(0.12)	0.01 ^{***}
<u>State Assessments</u>			
<i>Achievement Assessments</i>			
Met TAKS Proficiency Requirements	0.65 ^{***}	(0.11)	1.91 ^{***}
English TAKS	2.53 ^{***}	(0.11)	12.50 ^{***}
Met TAKS Proficiency * English TAKS	0.96 ^{***}	(0.11)	2.62 ^{***}
<i>English Proficiency Assessments</i>			
TELPAS Listening-Advanced High	0.14 ^{***}	(0.02)	1.15 ^{***}
TELPAS Speaking-Advanced High	0.11 ^{***}	(0.02)	1.12 ^{***}
TELPAS Reading-Advanced High	0.33 ^{***}	(0.01)	1.39 ^{***}
TELPAS Writing-Advanced High	0.74 ^{***}	(0.01)	2.09 ^{***}
<u>Student Characteristics</u>			
<i>Demographic Characteristics</i>			
English Language	0.07	(0.04)	1.07
Other Language	0.05 [*]	(0.03)	1.05 [*]
Economically Disadvantaged	-0.06 ^{***}	(0.02)	0.94 ^{***}
Migrant	-0.04	(0.03)	0.96
Female	-0.03 [*]	(0.01)	0.98 [*]
<i>Educational Profile</i>			
English as a Second Language	0.01	(0.01)	1.01
Parent Denied Bilingual and ESL	-0.03	(0.02)	0.97
No Language Support	0.23 [*]	(0.10)	1.26 [*]
Special Education	-0.18 ^{***}	(0.02)	0.83 ^{***}
Gifted and Talented	0.05 [*]	(0.02)	1.05 [*]
Number of School Switches	0.05	(0.05)	1.05
Retained Previous Year	-0.03	(0.03)	0.97
Number of Disciplinary Infractions	-0.02 ^{***}	(0.01)	0.98 ^{***}
<u>Local Context</u>			
<i>School Environment</i>			
Pct Students ELL	-0.00 ^{***}	(0.00)	1.00 ^{***}
Pct Students Econ Disadvantaged	0.00 ^{***}	(0.00)	1.00 ^{***}
Student Enrollment	0.00	(0.00)	1.00
Avg Years Teacher Tenure	-0.01 ^{***}	(0.00)	0.99 ^{***}
Charter School	-0.20 ^{**}	(0.07)	0.82 ^{**}
Rural	-0.17 ^{***}	(0.02)	0.84 ^{***}
Town	0.09 ^{***}	(0.03)	1.10 ^{***}
Suburban	-0.16 ^{***}	(0.01)	0.85 ^{***}
<i>Regional Context</i>			
Region 2: Corpus Christi	-0.01	(0.05)	0.99
Region 3: Victoria	0.20 ^{**}	(0.08)	1.22 ^{**}
Region 4: Houston	0.10 ^{***}	(0.02)	1.11 ^{***}
Region 5: Beaumont	-0.49 ^{***}	(0.08)	0.62 ^{***}

Table 16 (Continued)

	Coefficient	SE(Coeff)	Exp(Coeff)
Region 6: Huntsville	-0.18 ^{***}	(0.04)	0.84 ^{***}
Region 7: Kilgore	-0.21 ^{***}	(0.04)	0.81 ^{***}
Region 8: Mt. Pleasant	-0.47 ^{***}	(0.07)	0.63 ^{***}
Region 9: Wichita Falls	0.18	(0.12)	1.19
Region 10: Richardson	-0.26 ^{***}	(0.02)	0.77 ^{***}
Region 11: Fort Worth	0.04	(0.03)	1.04
Region 12: Waco	-0.36 ^{***}	(0.05)	0.70 ^{***}
Region 13: Austin	-0.14 ^{***}	(0.03)	0.87 ^{***}
Region 14: Abilene	-0.04	(0.14)	0.96
Region 15: San Angelo	0.21 ^{**}	(0.08)	1.23 ^{**}
Region 16: Amarillo	0.03	(0.06)	1.03
Region 17: Lubbock	0.13	(0.08)	1.14
Region 18: Midland	-0.10 [*]	(0.05)	0.91 [*]
Region 19: El Paso	0.65 ^{***}	(0.02)	1.92 ^{***}
Region 20: San Antonio	-0.14 ^{***}	(0.03)	0.87 ^{***}
Observations	135,453		135,453
Clustered Observations	55,763		55,763

Note: Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

With respect to student characteristics, three of the demographic attribute variables are significant predictors of students' likelihood of reclassification. Being female or economically disadvantaged had a statistically significant negative influence on the rate of reclassification, while speaking a native language other than Spanish or English positively influence on reclassification when compared to the Spanish-speaking reference group. There is no evidence that migrant status or speaking a native language of English were related to reclassification. In terms of educational profile, special education status and the number of disciplinary infractions have a statistically significant negative effect on the probability of reclassification. Participation in a gifted and talented program has a statistically significant positive relationship with reclassification, as does receiving no language support when compared to the reference group of participating in a bilingual program. Neither being retained the previous year nor the number of school switches a student made in a given academic year were significantly related to reclassification. Similarly, students who participated in an ESL English language development

program and those whose parents denied English language development services were not reclassified at a rate that was significantly different than those who were in bilingual programs.

In terms of local context, there were a number of schooling environment covariates that were statistically significant with regard to predicting the probability of reclassification.

Attending a charter school is negatively related to reclassification. As the percentage of students in the school who are ELLs increases and the average years of teacher tenure increases, the probability of reclassification declines. On the other hand, the percentage of students in the school who are economically disadvantaged has a statistically significant positive effect on reclassification. School enrollment is not significantly related to the outcome. In addition, attending a school in a rural or suburban area is significantly related to a lower probability of reclassification than urban areas, while attending a school in a small town is significantly related to a higher probability of reclassification.

Regional covariates are all compared to Region 1, which consists of the Rio Grande Valley and is based in Edinburg, Texas. Interestingly, a number of regions have statistically significant differences in rates of reclassification than Region 1. Regions 3, 4, 15, and 19 (Victoria, Houston, San Angelo and El Paso, respectively) have a positive and statistically significant influence on the rate of reclassification, indicating that students in these regions exited ELL status more rapidly than students in Region 1. On the other hand, Regions 5, 6, 7, 8, 10, 12, 13, 18 and 20 (Beaumont, Huntsville, Kilgore, Mt. Pleasant, Richardson, Waco, Austin, Midland and San Antonio) were negatively related to the probability of reclassification, suggesting that ELL students in these regions are slower to be reclassified than students in Region 1.

Proportional hazards assumption diagnostic tests. A key aspect of event history analysis is the proportional hazards assumption, which assumes that different groups have hazard functions that are shaped similarly. That is, the proportional hazards assumption provides that two groups have a constant relative risk over time periods. When employing event history analysis to study social science outcomes, it is sometimes the case that the effect of a covariate may be weaker or stronger at different time periods (Box-Steffensmeier, Reiter & Zorn, 2003). As Mokher (2008) indicates, “[t]here may be theoretical explanations for these nonproportional hazards, such as social learning processes and the development of institutional norms” (p. 121).

This analysis takes a graphic approach to testing proportionality of hazards for dummy variables. By plotting the estimated cumulative hazards of two groups, one can examine whether or not the lines between the two groups are parallel. If they are parallel, this indicates that the lines for each group have the same slope and the two lines are separated by a distance captured by the regression coefficient, β , which suggests that the proportional hazards assumption is not violated. In this analysis, proportional hazard plots were constructed to examine whether or not the proportionality assumption was violated. Figures 5 and 6 are examples of these proportional hazards plots.

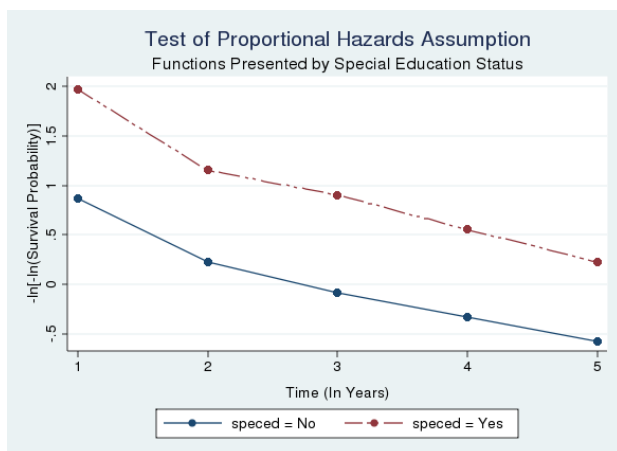


Figure 5. Proportional hazards plot by special education

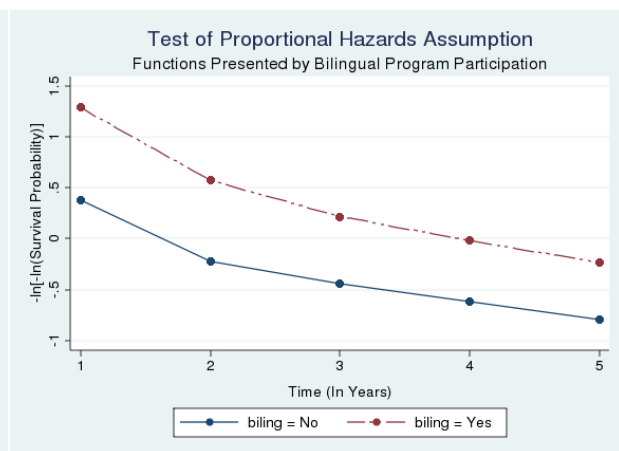


Figure 6. Proportional hazards plot by bilingual program participation

Because the functions were parallel, there was no evidence of a violation of the proportional hazards function, indicating it was not necessary to interact any covariates with time.

Interpretation of event history analysis results. Interpretation of the results will focus on the exponentiated coefficients in the final model (presented in Table 16). Coefficients have been exponentiated for ease of interpretation. With this transformation, a coefficient that is greater than one indicates that a particular covariate is associated with an increase in the probability of reclassification, whereas a coefficient less than one corresponds to a decrease in the probability of reclassification. Specifically, a one-unit increase in X corresponds to a predicted $100 * (\exp(\beta) - 1)$ percent change in the hazard of reclassification. Exponentiated coefficients can also be interpreted as having a multiplicative effect; for a one-unit increase in X, there is an estimated change in the hazard of reclassification by a factor of $\exp(\beta)$.

It is important not only to examine statistical significance, but also magnitude of coefficients, particularly in an analysis like this one that employs such a large sample size, thereby decreasing standard errors and increasing the likelihood of attributing statistical significance to coefficients. Magnitude of statistically significant coefficients will also be considered. One way to convey the magnitude of statistically significant coefficients is to graph the estimated values of the survival function over time for different values of the variable. Values that have a survival function that decreases more rapidly indicate that students with this value are more likely to experience reclassification, whereas values that decrease less rapidly and remain closer to one for the survival function indicate that students with this value are less likely to be reclassified.

State assessments. Of the three clusters of covariates presented in this analysis, state assessments are by far the most powerful predictors of reclassification. All three of the

achievement variables as well as all four of the TELPAS advanced-high indicators are significantly (at the $p < 0.001$ level) and positively related to students' probability of being reclassified. In essence, this shows that students who are higher performers on both achievement and English proficiency assessments are more likely to be reclassified.

Achievement assessments. The first significant finding from this analysis is that meeting proficiency standards on the TAKS test has a positive influence on the probability of reclassification. ELLs who meet proficiency standards on the TAKS test in reading (and writing, during years it is offered) have a predicted proportional hazard of reclassification that is 1.91 times that of their peers who do not meet TAKS proficiency standards. This suggests that students who pass the TAKS test are nearly twice as likely to be reclassified in a given year. Figure 7 illustrates the estimated survival function for reclassification for ELL students who met and TAKS proficiency standards as well as their peers who did not. In 2009, the predicted probability of survival for students who met proficiency standards is 0.08 while for students who have not met TAKS proficiency standards, the survival rate is much higher at 0.67. This indicates that students who meet TAKS proficiency standards are much more likely to be reclassified, which concurs with the original hypothesis that higher achieving students will be more likely to exit ELL status.

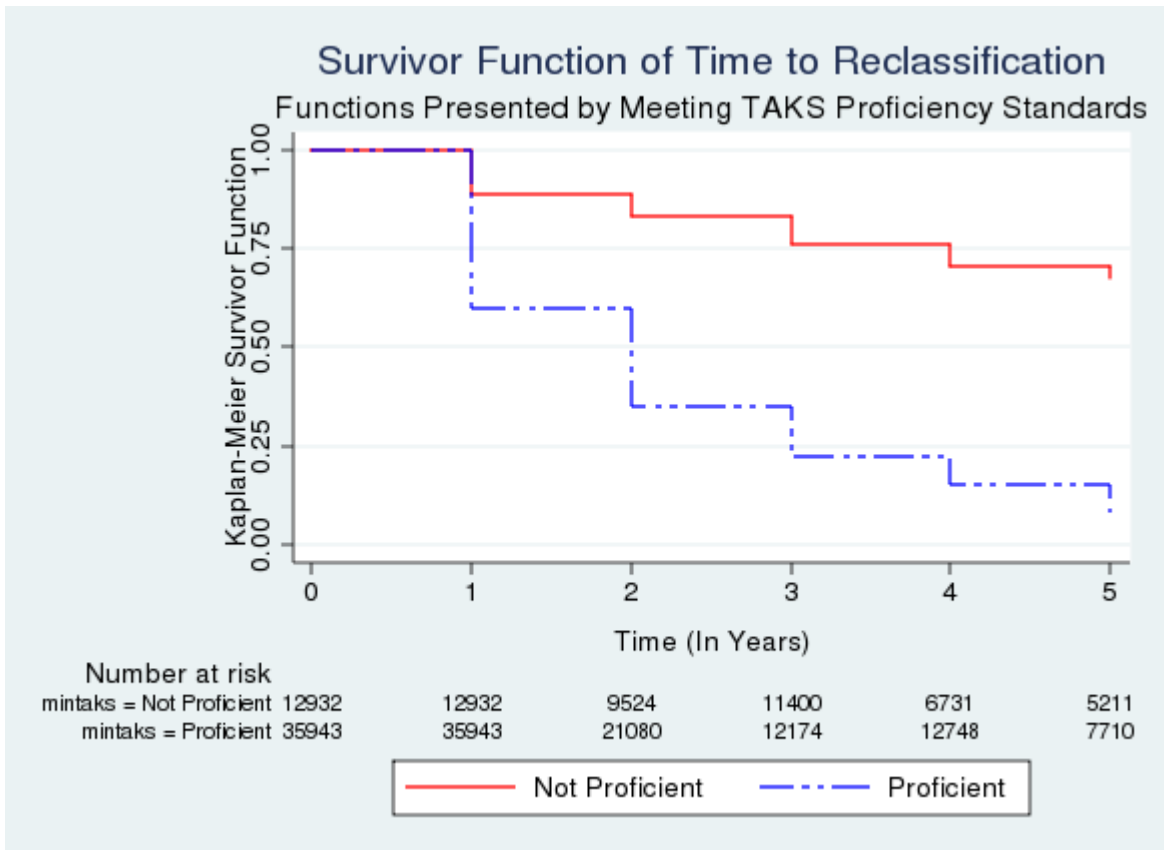


Figure 7. Reclassification survival function by met TAKS proficiency standards

The effect of meeting TAKS proficiency standards is small in comparison to the effect of taking the TAKS test in English. Students who take the TAKS in English are approximately 12.50 times more likely to be reclassified than their peers who take the TAKS in Spanish. Figure 8 shows that the predicted survival probability in 2008 (the last year any students in the sample took the TAKS test in Spanish) is 0.92 for those students who took the test in Spanish versus 0.15 for students who were tested in English. This finding supports the hypothesis that students who are tested in Spanish will be less likely to be reclassified than their peers who are tested in English.

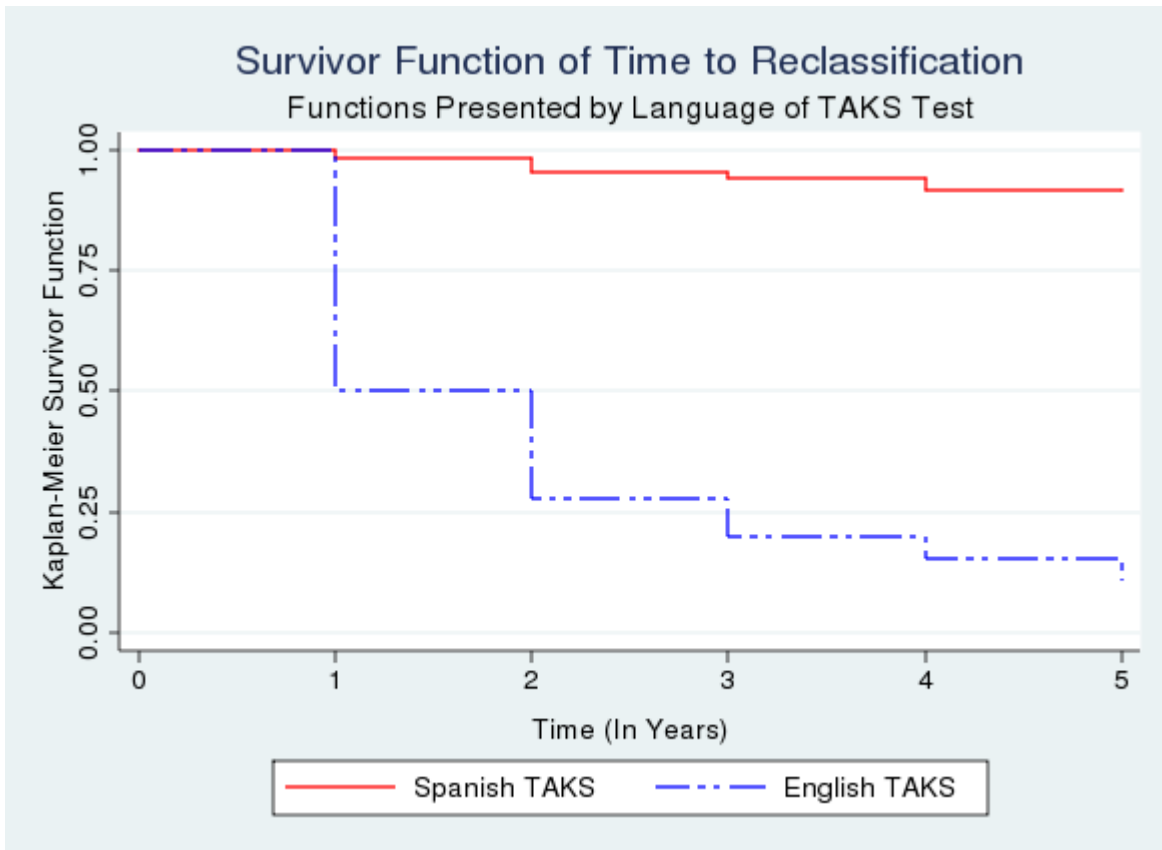


Figure 8. Reclassification survival function by language of TAKS test

Not only is there an independent effect of both passing the TAKS test and taking the TAKS test in English, but there is a multiplicative effect of both together. The probability of reclassification for ELL students who meet TAKS proficiency standards on the English version of the TAKS test was 2.62 times than for students who had either not passed the TAKS or taken the TAKS in Spanish or both. Figure 9 provides an illustration of the predicted reclassification survival function for students who have met TAKS proficiency on the English TAKS test and their peers who have not. In 2009, the predicted probability of survival for students who have passed the English TAKS is very low at 0.03, whereas for students who had not passed the English TAKS the predicted survival rate is much higher at 0.73. These results indicate that the

effect of passing the TAKS test depends on another explanatory variable, taking the TAKS in English. This finding concurs with the original hypothesis that meeting both reclassification requirements set by the state (passing the TAKS test and taking the TAKS test in English) has an additional effect on the rate of reclassification above and beyond meeting either of these requirements independently.

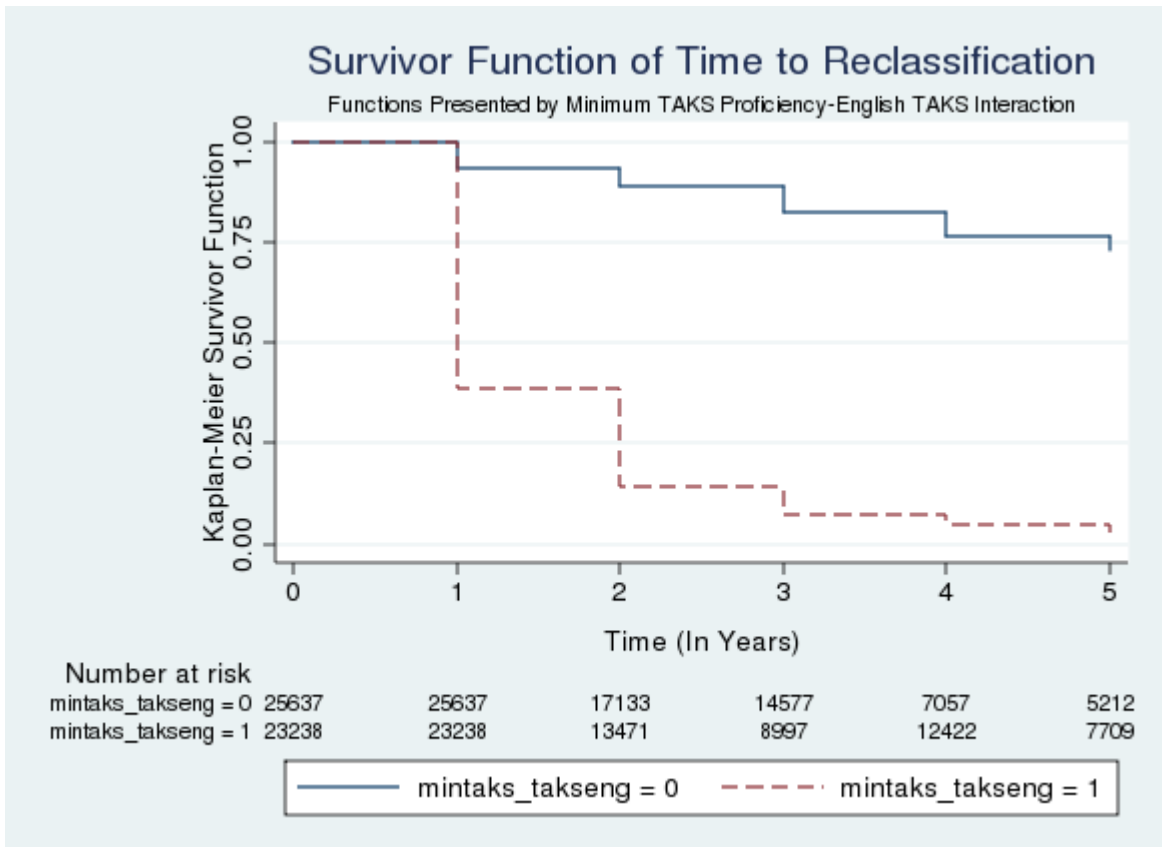


Figure 9. Reclassification survival function by proficient on English TAKS interaction

English proficiency assessments. Much like performance on achievement assessments, performance on the TELPAS English proficiency test across all language domains is positively and statistically significantly related to the probability of reclassification. Scoring at an advanced high level on the TELPAS is associated with increased likelihood of reclassification by a factor

of 2.09, 1.38, 1.15 and 1.11 for writing, reading, listening and speaking, respectively. This indicates, for example, that a student who scores at the advanced high level in writing is a little more than two times as likely to be reclassified than their peers who scored at a lower level.

Figure 10 displays graphs of the predicted survival functions by the different language domains.

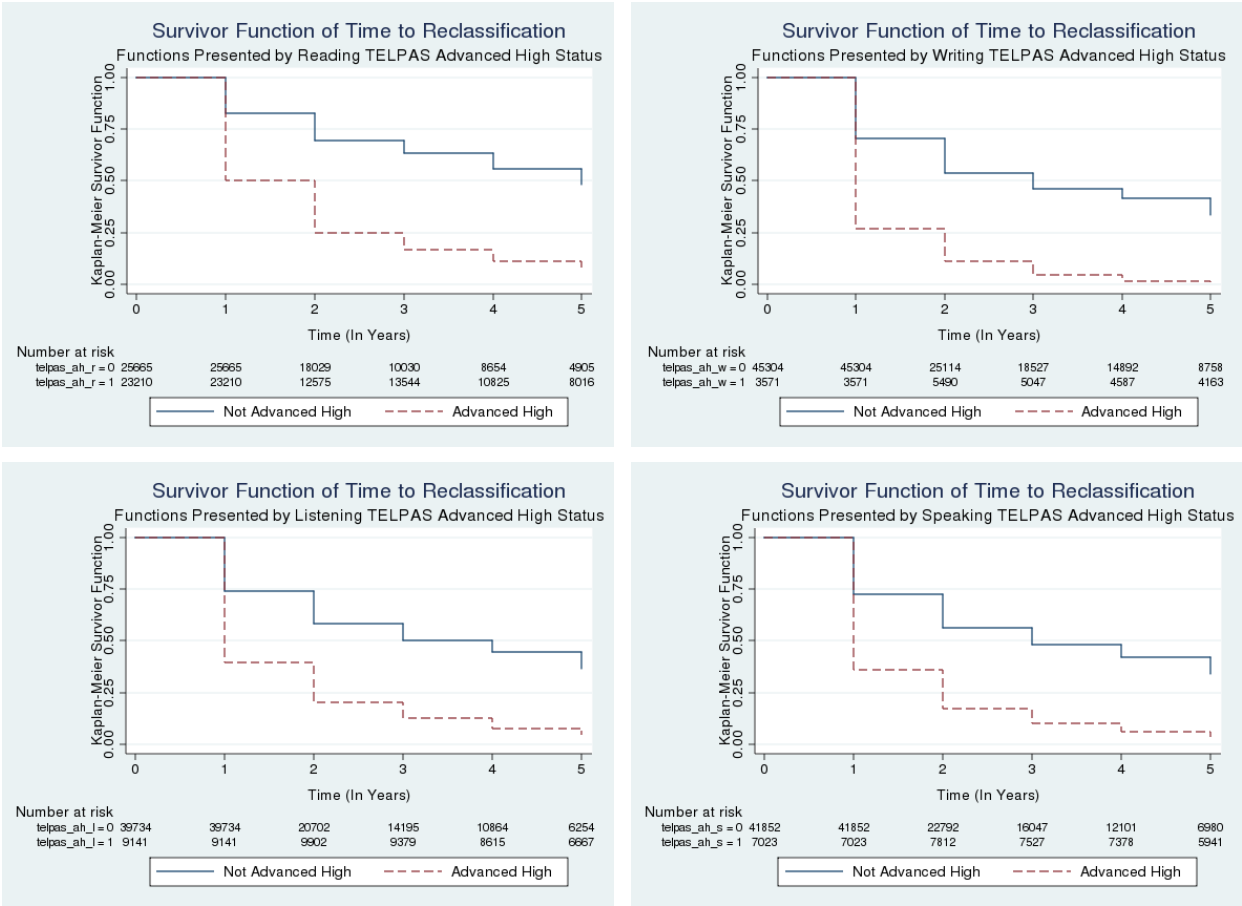


Figure 10. Reclassification survival function by advanced-high TELPAS rating

Predicted survival probabilities for advanced-high and non-advanced-high values for each of the four language domains are presented in Table 17. In 2009 (Year 5), students who received an advanced-high rating in writing have a predicted probability of survival of only 0.01 whereas their peers who scored below advanced-high have a predicted probability of survival of 0.34. A

similar pattern emerges among the rest of the TELPAS ratings. These results provide support for the hypothesis that those students who demonstrate a high level of English proficiency are more likely to be reclassified.

Table 17
Predicted Survival Probabilities for Reclassification in 2009 for TELPAS Covariates

Language Domain	Predicted Survival Probability
	Advanced-High Rating
Writing	0.01
Reading	0.07
Listening	0.05
Speaking	0.03

Student Characteristics. Several student characteristics emerge as statistically significant predictors of the proportional hazard for reclassification. There are aspects of both students' social demographics as well as their educational profile that are significantly related to the hazard of reclassification, although the magnitude of the coefficients tends to be much smaller than the coefficients on state assessment covariates.

Social demographics. Three social demographic characteristics have a statistically significant relationship with the hazard of reclassification. First, students who are female are slightly less likely to be reclassified than their male counterparts by a factor of 0.98 ($p < 0.05$). Figure 11 displays the predicted survival function of reclassification for females and males. In actuality, the survival functions are rather close, but this figure illustrates that females are reclassified slightly faster than males. However, once controlling for other factors in this multivariate analysis, the influence that being female has on the probability of reclassification, while small in magnitude, is actually negative. Despite the small magnitude, this finding

contradicts the original hypothesis that girls would be more likely to be reclassified because of more rapid social-emotional and linguistic development.

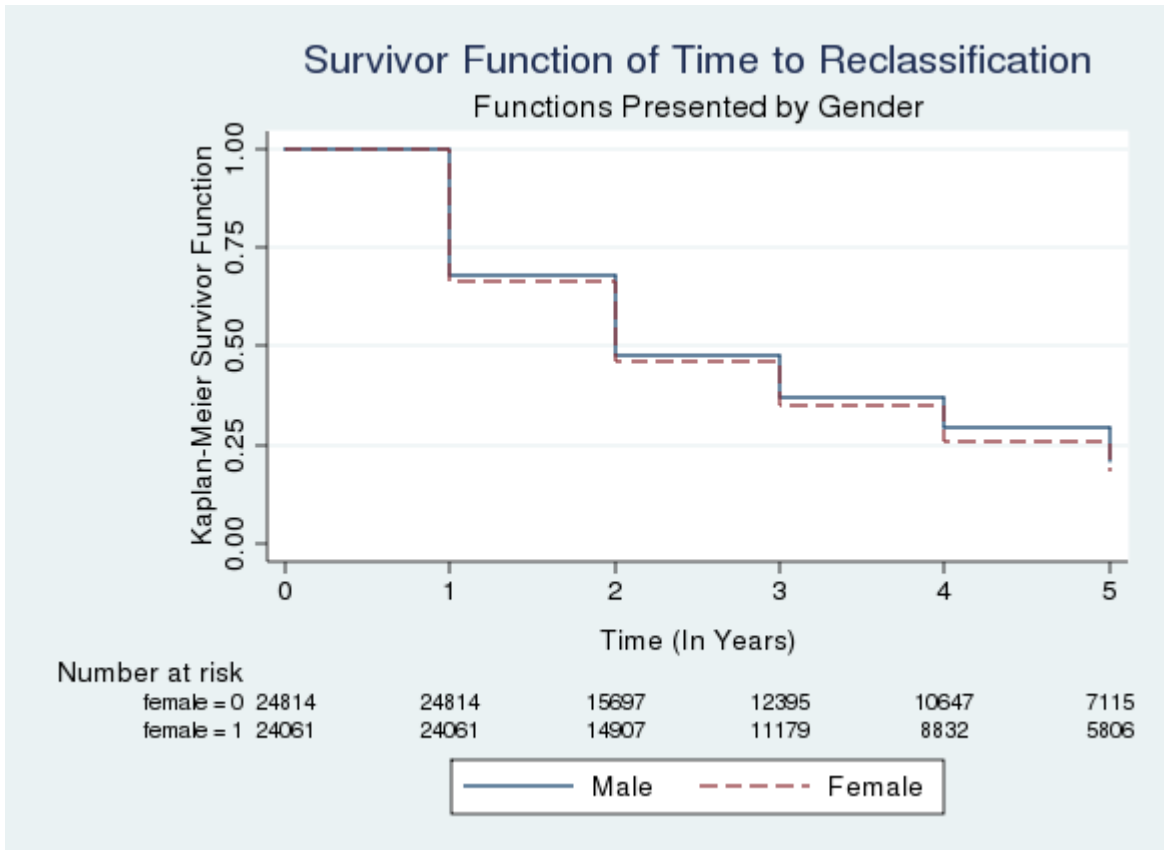


Figure 11. Reclassification survival function by gender

A second significant finding that is a social demographic characteristic is being economically disadvantaged. Coming from an economically disadvantaged households is associated with an estimated hazard of reclassification that is 0.94 times less than students whose families are more advantaged ($p < .001$). As illustrated in Figure 12, the predicted survival probability in 2009 is approximately 0.24 for economically disadvantaged students and 0.11 for more advantaged students. As initially hypothesized, students from economic disadvantaged families may be slower to experience reclassification.

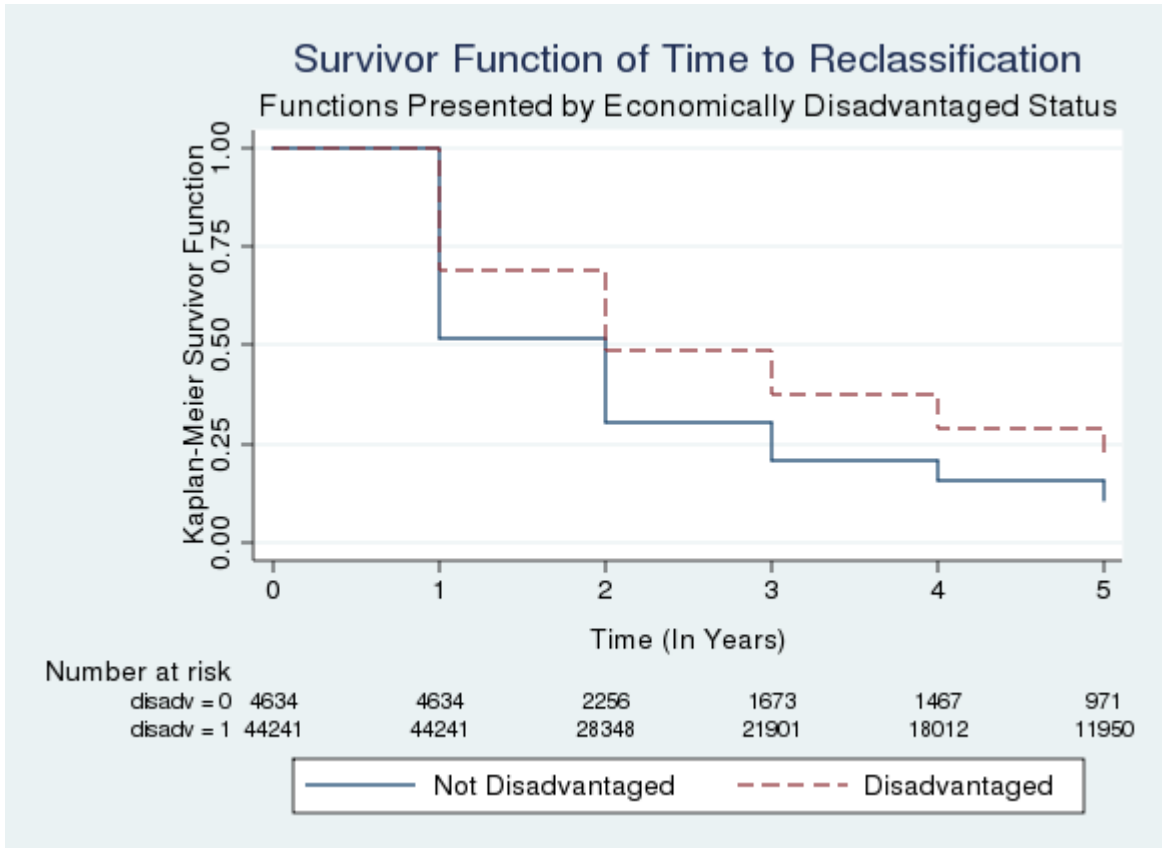


Figure 12. Reclassification survival function by economic disadvantaged status

Third, students who speak a native language other than Spanish or English (e.g., Vietnamese, Chinese, Hindi, etc.) have a significantly different probability of reclassification when compared to their fellow ELLs who are native Spanish-speakers. These students are 1.05 times more likely to be reclassified than native Spanish-speaking students ($p < 0.05$). Figure 13 displays the survival functions for reclassification for different native language groups. The greatest gap between groups is clearly between Spanish-speakers and other language-speakers, while Native English speakers falls between (and at times overlaps with) these two groups. In 2009, the predicted survival probability is 0.07 for other language-speakers and at 0.15 is double for Spanish-speakers. These results indicate that Spanish-speakers are more likely to remain

classified as ELLs than their peers who come from the other-language group. This is in line with the hypothesis that ELLs who are native Spanish-speakers are less likely to be reclassified than their peers who speak other native languages.

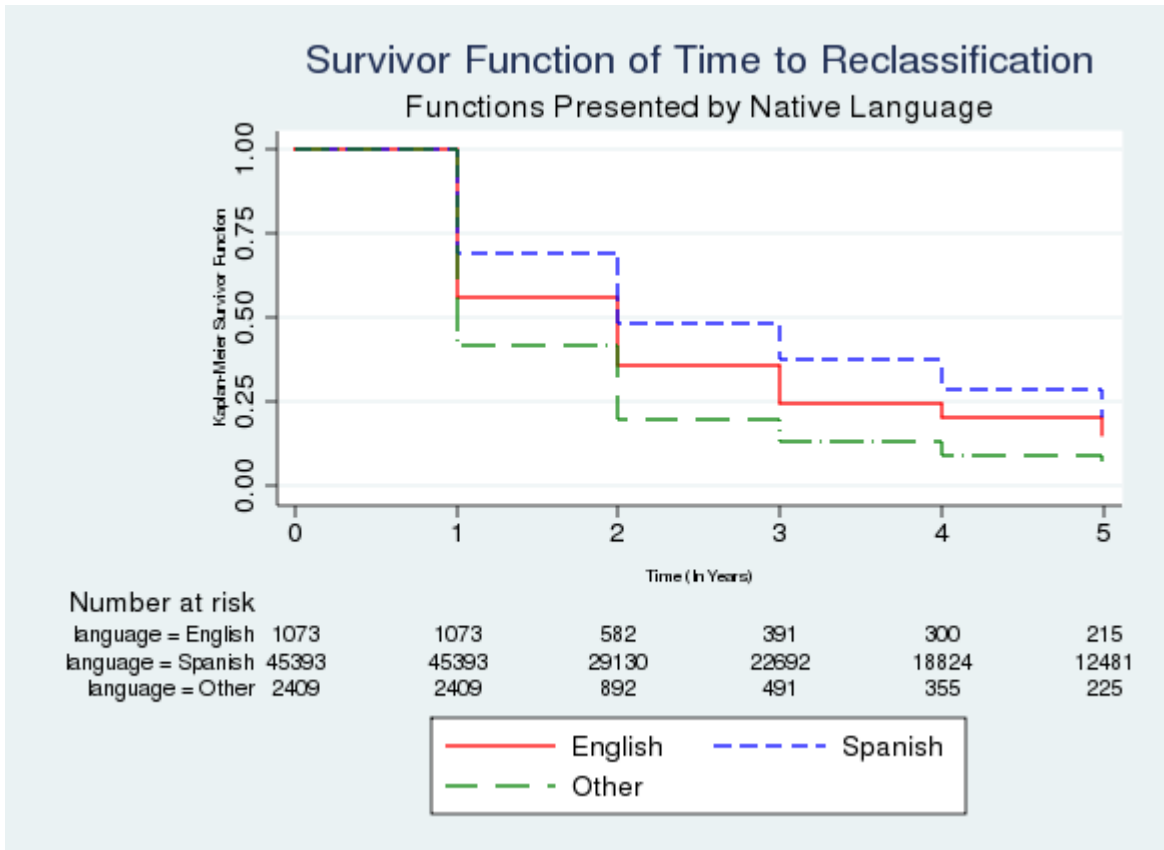


Figure 13. Reclassification survival function by native language

While there are several social demographic characteristics that are significantly related to the likelihood of reclassification, there are two that are not. Migrant students are not significantly different than non-migrant students in terms of their estimated hazard of reclassification. Similarly, those ELLs whose parents report that they are English-speakers are no more or less likely to be reclassified than their peers who are Spanish-speakers. These null findings are contrary to the hypotheses enumerated earlier. It was posited that migrant students

would have a lower probability for reclassification. Conversely, it was hypothesized that native English-speakers would be reclassified more rapidly.

Educational profile. Some aspects of students' individual educational experiences are significant predictors of the rate of reclassification while others are not. Receiving special education services and having disciplinary infractions both have a negative effect on the likelihood of reclassification whereas being identified as gifted and not receiving any English language proficiency support both correspond to a positive effect on the likelihood of exiting ELL status.

Students who have special educational needs are significantly less likely to experience reclassification by a factor of 0.83 ($p < 0.001$). The differences in the survivor functions for students in special education and their peers not receiving special education services are illustrated in Figure 14. The predicted survival probability in 2009 for special education students is 0.45, while it is 0.17 for students without special needs. This concurs with the original hypothesis that ELLs receiving special education services may be less likely to be reclassified than their peers.

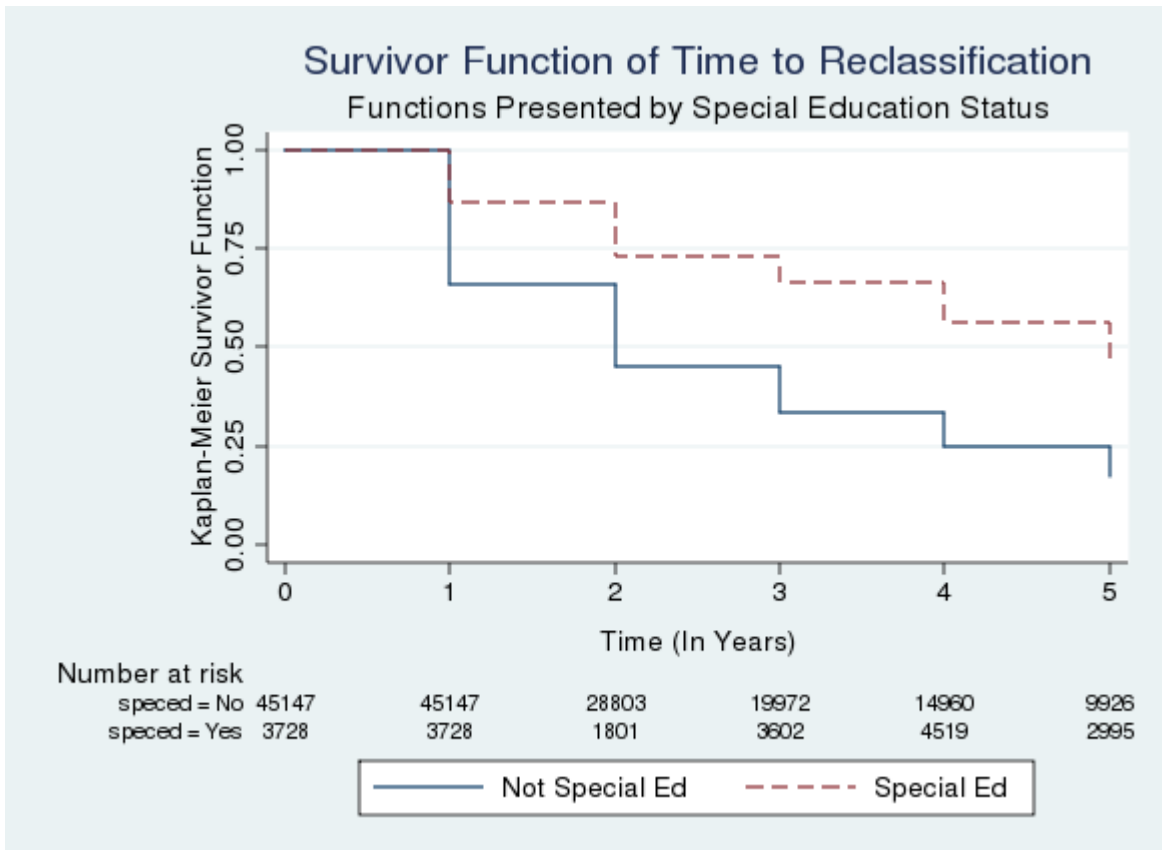


Figure 14. Reclassification survival function by special education status

The relationship between gifted status and probability of reclassification is positive and statistically significant. Being classified as gifted is predicted to increase the proportional hazard of being reclassified by five percent ($p < 0.05$). As shown in Figure 15, the predicted survival probability in 2009 for a gifted student is approximately 0.05, while it is just under 0.25 for students not participating in gifted programs. This supports the hypothesis the gifted students are more likely to be reclassified.

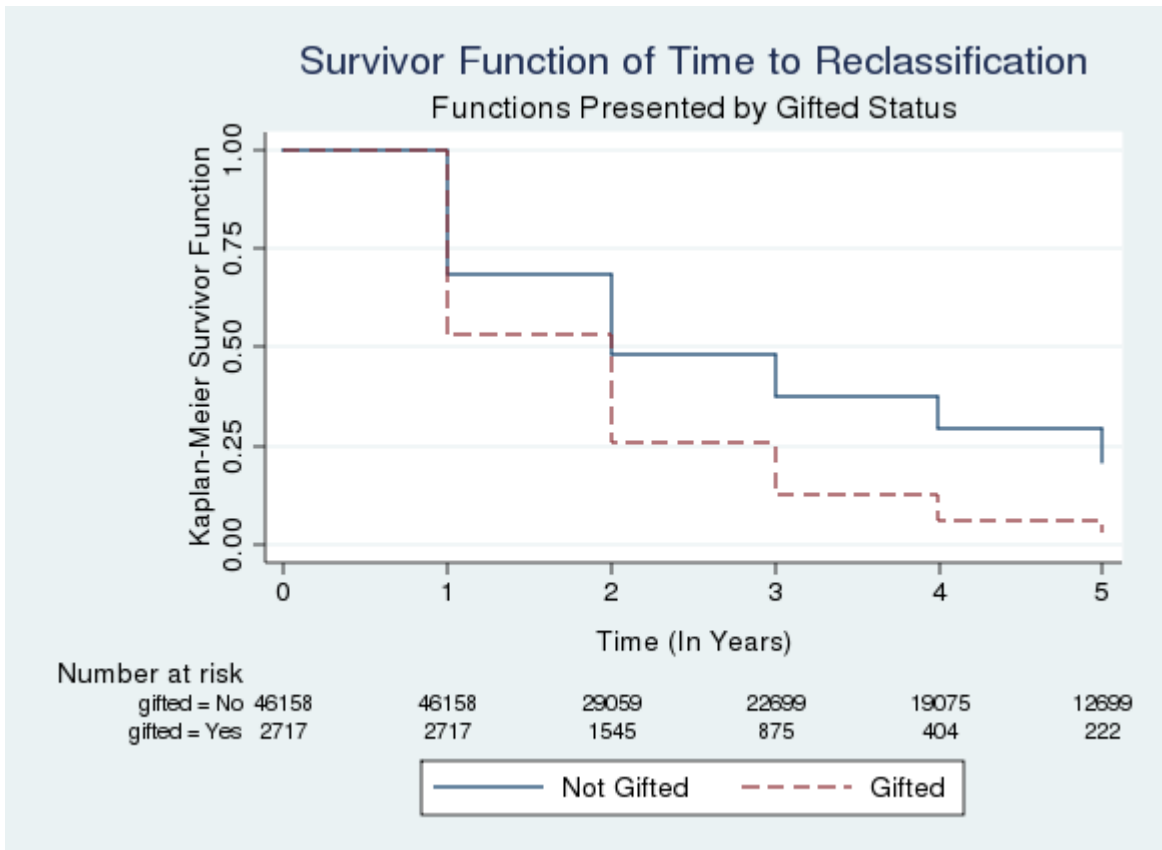


Figure 15. Reclassification survival function by gifted status

In terms of English language development program, neither students who are in ESL programs nor those whose parents have denied services have significantly different estimated probabilities of reclassification as compared to the bilingual program reference group, suggesting that there is not evidence to support the hypotheses that students in ESL programs and those who are parent denials will have a higher likelihood of being reclassified as compared to their counterparts in bilingual programs once controlling for other variables. However, students who fall into the “no language support” category are 1.26 times more likely to be reclassified as their peers in bilingual education. The function presented in Figure 16 illustrates the predicted probabilities of survival for each of the four language development groups. Interestingly,

students who receive no language support (no program) have estimated predicted survival probabilities that are closest to their peers in bilingual programs, but the results from the multivariate event history analysis suggests that once controlling for other the influence of other variables, students receiving no language support have the highest probability of reclassification. This result, however, should be interpreted with caution. The no language support group is small, consisting of no more than 114 students in a given year, and this group is likely a data anomaly. In all likelihood this group of students is misclassified as ELLs in the dataset, that is, they should not be receiving any language support services to begin with because they are not actually ELLs.

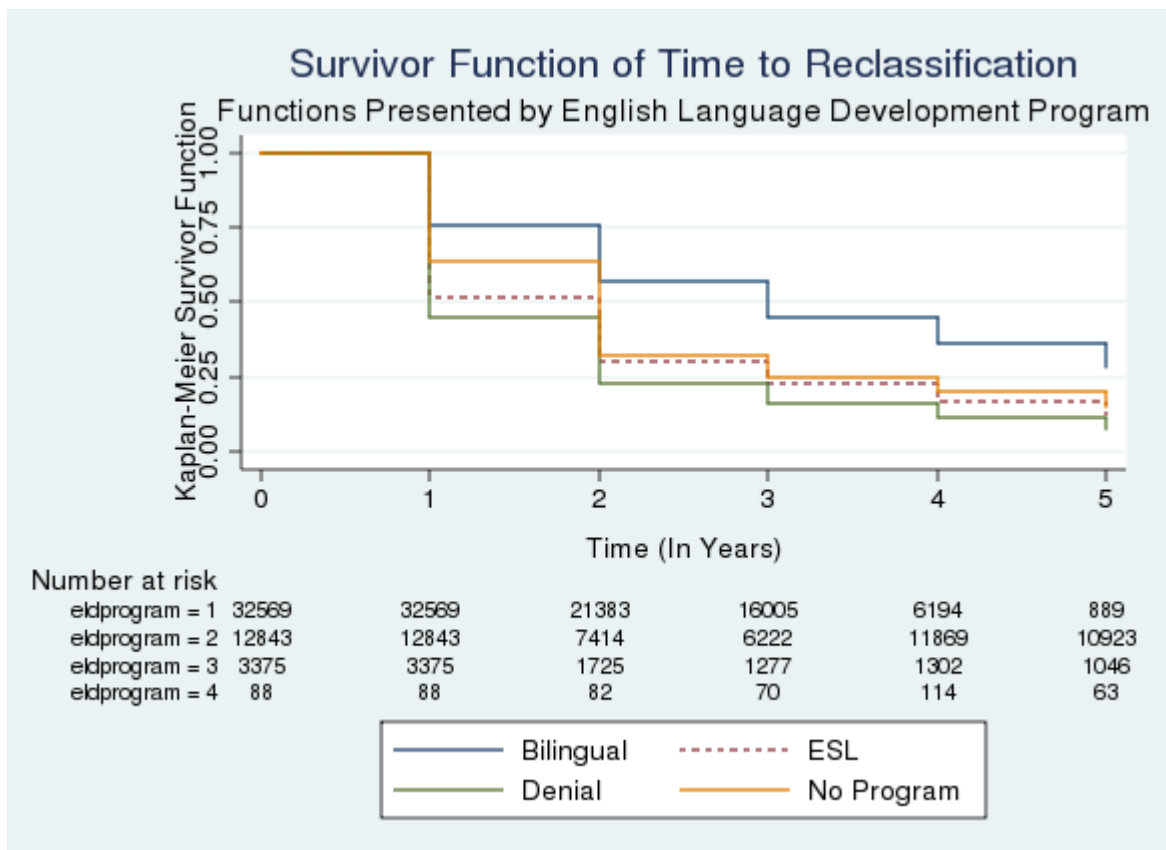


Figure 16. Reclassification survival function by English language development program

The number of disciplinary infractions incurred is a significant predictor of the likelihood of reclassification. Each disciplinary infraction is predicted to decrease the proportional hazard of reclassification by about two percent ($p < 0.001$). That is, a students with three disciplinary infractions would have a predicted probability of reclassification that is 0.94 times that of their peers who had no disciplinary infractions, holding all else constant. This provides support for the hypothesis that students with behavior challenges are less likely to be reclassified.

The number of school switches is not significantly related to the predicted probability of reclassification. Thus, no evidence is found to support the hypothesis that students who are highly mobile are less likely to be reclassified. Similarly, retention, which is included as a control variable, is not a statistically significant predictor of reclassification.

The analysis of student characteristics indicates that several demographic characteristics and aspects of students' educational profile are indeed systematically related to the probability of reclassification, even when netting out the influence of student performance on achievement and English proficiency assessments. This provides support for the underlying conceptual framework that posits that ELLs who possess characteristics more aligned with those of the dominant group (native English speakers) may be targeted for more rapid reclassification.

Local context. Local context includes both school environment covariates as well as Education Service Center region.

School environment. The concentration of ELL students at the school has a negative effect on the likelihood of reclassification. A one percent increase in the percentage of students who are ELLs corresponds to a 0.5 percent decrease in the proportional hazard of being

reclassified ($p < 0.001$). That said, the magnitude of the coefficient is quite small and really warrants little discussion.

The concentration of economically disadvantaged students is positively related to the probability of reclassification. A one percent increase in the percent of students economically disadvantaged is predicted to increase the proportional hazard of reclassification by 0.003 percent. Again, the magnitude of this coefficient is relatively small.

Two control variables, the charter school indicator and urbanicity dummies, have a surprisingly substantial influence on the probability of reclassification. Students attending a charter school are 0.82 times less likely to experience reclassification. However, only a small number of ELL students in the sample (a maximum of 213 in a given year) are charter school students, so this result should be interpreted with caution.

Students who attend schools in suburban areas are both approximately 15 percent less likely to be reclassified than their peers in urban schools, whereas students who attend schools in towns are 10 percent more likely to be reclassified. An initial investigation of the survivor function presented by each of the four urbanicity categories (Figure 17) reveals little difference between them. The influence of urbanicity is evident only after controlling for other covariates.

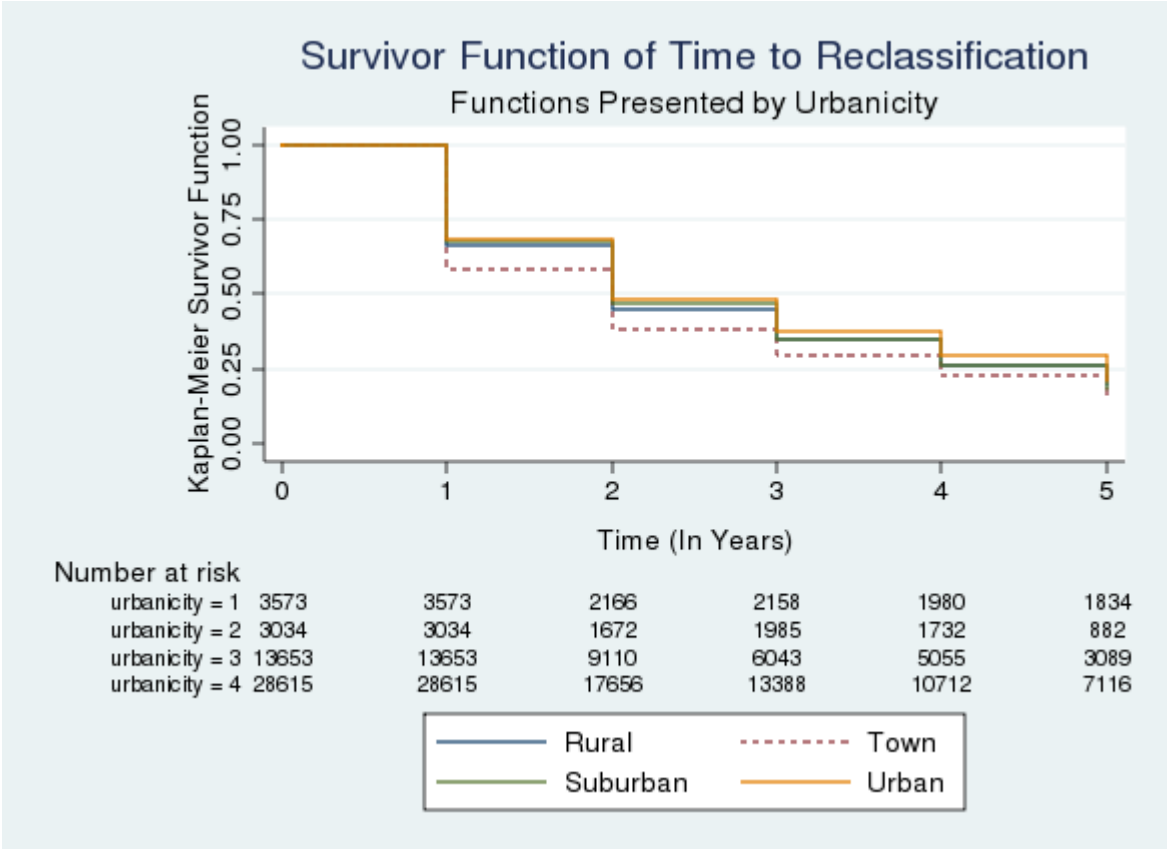


Figure 17. Reclassification survival function by urbanicity

Regional context. A number of Education Service Center regions have significantly different probabilities of reclassification as compared to Region 1. The region coefficients are presented in Table 18. They range from a predicted reduction in the likelihood of reclassification by a factor of 0.62 for ELLs attending schools in Region 5 (Beaumont), to an increase in the probability of reclassification by a factor of 1.91 for ELLs in Region 19 (El Paso). This finding concurs with the hypothesis that there will be a local influence factored into the reclassification process. This demonstrates the systematic variation between regions and suggests that different parts of Texas approach reclassification in different ways.

Table 18

Probability of Reclassification by Education Service Center Region

Region	Direction of Influence	Coefficient	P-value
1: Edinburg	Reference Group	Reference	N/A
5: Beaumont	Negative	0.62	0.00
8: Mt. Pleasant	Negative	0.63	0.00
12: Waco	Negative	0.70	0.00
10: Richardson	Negative	0.77	0.00
7: Kilgore	Negative	0.81	0.00
6: Huntsville	Negative	0.84	0.00
13: Austin	Negative	0.87	0.00
20: San Antonio	Negative	0.87	0.00
18: Midland	Negative	0.91	0.04
2: Corpus Christi	Null	0.98	0.79
9: Wichita Falls	Null	1.19	0.15
11: Fort Worth	Null	1.04	0.10
14: Abilene	Null	0.96	0.79
16: Amarillo	Null	1.03	0.64
17: Lubbock	Null	1.14	0.10
4: Houston	Positive	1.11	0.00
3: Victoria	Positive	1.22	0.01
15: San Angelo	Positive	1.23	0.01
19: El Paso	Positive	1.92	0.00

Discussion of Findings

This dissertation set out to examine why some ELLs are reclassified rapidly while others remain classified as ELLs for an extended period of time. The descriptive statistics show that 11,416 or 18.24 percent of the 62,575 students³⁶ who remained in Texas schools for the duration of the analysis were not reclassified by the end of their seventh year in Texas schools. This suggests that nearly one fifth of ELLs in the first grade cohort of 2003 go into their last year of middle school still classified as ELLs. While this proportion may seem large, it is actually less than what researchers have found in districts in California (e.g., Thompson, 2012; Parrish, 2006). While on first glance these results may seem alarming, this is not necessarily the case. It is

³⁶ Of the original 75,884 ELL students in the first grade cohort of 2002-2003, 7,741+1,655+1,806+1,534+537 left before the end of the analysis.

unclear whether remaining classified as an ELL for an extended period of time is beneficial or detrimental for students. It may be the case that students who remain classified as ELLs well into middle school are *best served* by continuing to receive language support services. This analysis cannot decipher whether students are better off being reclassified or remaining classified as ELLs. Future research will have to examine this question.

Descriptive statistics reveal clear differences between ELLs who are reclassified at different points during their educational career shows that certain patterns emerge between students are reclassified earlier in school as compared to those who remain classified as ELLs into middle school. Students who remain classified as ELLs for an extended period of time are more likely to come from economically disadvantaged families, have special educational needs, have more disciplinary infractions, and attend schools with higher percentages of ELL and economically disadvantaged students. This reveals that ELLs who are reclassified early on during elementary school are considerably more advantaged than their peers who remain classified as ELLs for an extended period of time. However, this descriptive analysis does not explain whether or not these student or school attributes are driving how quickly students are reclassified; it may simply be the case that students who are more advantaged are afforded more opportunities to learn English, which allows them to acquire English proficiency more rapidly and be reclassified earlier. In order to disentangle the influence of these different variables on the rate of reclassification, this study turned to the multivariate approach of event history analysis.

The results from the event history analysis provide empirical evidence that supports several of the hypotheses that emerged out of the theoretical framework. First, there is a significant positive effect of *all* state assessment covariates on the likelihood of reclassification.

This indicates that performance on both English proficiency and achievement assessments inform reclassification decisions; students who perform at higher levels on English proficiency and achievement assessments are more likely to be reclassified. In many ways, this finding is unsurprising because it follows the policy set forth by the state, which clearly indicates that ELL students must demonstrate proficiency on both English proficiency and achievement measures in order to be reclassified.

While each of the English proficiency language domains is positively and significantly related to the probability of reclassification, receiving an advanced-high rating in writing in particular appears to make the greatest difference in the likelihood of reclassification. Students who score advanced-high in writing are more than two times as likely to be reclassified than their peers who receive less than an advanced-high rating. This may in part be due to the fact that the TELPAS writing rating is specified in state policy as an acceptable assessment to use to evaluate English proficiency in writing for reclassification purposes whereas the listening, speaking and reading exams are not approved assessments for reclassification purposes, but are used to inform teachers' subjective evaluations of ELLs' English proficiency.

It is interesting to note the prominent role that achievement tests play in reclassification decisions when these assessments have not been designed for the purposes of evaluating English proficiency. This study illustrates that ELLs who are higher achieving tend to exit ELL status more rapidly. This has broader implications for the evaluation of the ELL subgroup as a whole. Using achievement tests for reclassification purposes can exaggerate the underperformance of the ELL subgroup since those who can pass achievement tests are often reclassified while those who cannot remain ELLs. If students are required to meet achievement criteria in order to exit ELL status, the only students who remain classified as ELLs are those who are underachieving,

which makes it appear that the ELL group as a whole is particularly low-performing.

The language of the achievement test appears to be a critical predictor of the probability of reclassification. ELLs who are tested in English are approximately 12 times more likely to be reclassified than their peers who are tested in Spanish net of other variables including performance on English proficiency assessments. A mere 1.73 to 2.79 percent of Spanish test-takers are reclassified each year as compared to 24.66 to 50.13 percent of English test-takers. Again, this follows state policy, which indicates that students must demonstrate reading (and writing in fourth and seventh grade) on the *English version* of the TAKS test. However, these results call into question whether or not this policy may be unintentionally excluding a large portion of the Spanish-speaking ELLs from even being considered for reclassification during elementary years (when the TAKS is offered in Spanish) simply because the members of the LPAC made the decision for them to take the TAKS test in Spanish instead of English.

Among the student characteristic covariates there are statistically significant relationships between both social demographic and educational profile characteristics and the likelihood of reclassification. The fact that there are student characteristics that are significant predictors is a particularly important finding because this is one of the first studies to empirically examine the effect of key observable characteristics on the probability of reclassification net of student performance on English proficiency and achievement assessments. In essence, this indicates that students who demonstrate similar performance on English proficiency and achievement assessments but differ in terms of key characteristics are predicted to exit ELL status at different rates.

Students who come from economically disadvantaged families, receive special education services and incur disciplinary infractions are slower to be reclassified as demonstrated by their

lower probability of exiting ELL status. This analysis also finds that ELLs who speak ‘other’ languages (as compared to Spanish-speakers), those who are gifted and talented and those who do not receive any language support tend to be more rapidly reclassified, as displayed by their significantly higher probability of reclassification. These findings suggest that these particular characteristics may signal lower and higher levels of reclassification readiness to LPAC members making reclassification decisions as well as classroom teachers making recommendations regarding reclassification to this committee.

These findings concur with the hypotheses that emerged out of the conceptual framework, which posited that schools may draw upon *student characteristics* of ELLs in an uneven fashion, systematically valuing students with characteristics that parallel those of the dominant group and devaluing those of marginalized groups. Results suggest that members of the LPAC and classroom teachers making subjective evaluations of their students may be swayed by these easily observable characteristics when making decisions to reclassify students. This may occur for several reasons. Teachers may believe that ELLs who are poor, have special educational needs or struggle to meet behavioral standards are *best served* by remaining classified as ELLs. Gándara (2012) posited that when teachers weigh the options for their ELL students and compare the alternatives of reclassifying students and withdrawing all extra language support services to keeping students classified as ELLs so that they can continue to receive these services, teachers may view remaining in ELL status as the lesser of two evils. On the other hand, students who have qualified for entrance into gifted programs may be thought to possess additional skills and problem-solving capabilities that will allow them to overcome barriers posed by limited English proficiency. Thus teachers may believe that gifted ELLs may be held back in bilingual or ESL settings and would be better served in mainstream classrooms

These scenarios suggests that teachers may be making a *conscious, purposeful and rational decision* to keep the students they view as the most disadvantaged classified as ELLs for an extended period of time, while more rapidly reclassifying ELLs who they see as most academically advantaged because they are considering the individual skills and needs of the students and have selected what they believe to be the best option for each of these students.

Another possible explanation for this finding is that the LPAC may make the decision to keep economically disadvantaged, special needs and behaviorally challenging students classified as ELLs because they do not associate these attributes with reclassification readiness. They may view these characteristics as incongruous with those students who have previously exited ELL status. Conversely, teachers may be surprised to have ELLs who qualify for gifted and talented programs, and they may think that such ELLs do not belong in an English language development program. Thus, teachers may make recommendations to reclassify students based in part on how much ELLs being considered for reclassification resemble students who have already exited or those who remain in ELL status.

It may be the case that speaking a native language that falls into the *Other* category, which includes all languages other than Spanish and English, results in more rapid reclassification than Spanish-speaking students for programmatic and policy reasons. There is a long history of bilingual education for native Spanish-speaking students in Texas. This tradition is reflected in the fact that curricula that align with the Texas state learning standards are available in Spanish and achievement assessments are offered in Spanish. Bilingual programs for other language groups are a newer phenomenon in Texas, are only relevant to a few school districts, and are in many ways still undergoing development. ELLs who are not native Spanish speakers are less likely to have formal bilingual programs available to them, either because their

school district is not required to offer a bilingual program because the student population is not large enough to warrant doing so (less than 20 students in their language group per grade level, according to state law) or because the staff needed to run such a bilingual program are not available. These differences may factor into educators' decisions regarding the reclassification of these students. Because the programs, curricula and systems in place for *Other* language speakers are not as well established or nearly as sophisticated as for Spanish-speaking students, educators may perceive the benefits of being classified as an ELL to be less for native speakers of languages other than Spanish. This may influence reclassification decisions in that teachers may push to reclassify *Other* language students more rapidly because they believe that the language supports afforded to ELL students are of minimum benefit to these students, while they may opt to keep Spanish speakers classified as ELLs for some extra time because the language programming for these students is seen as valuable.

It is also interesting to note that ELLs whose parents indicate that they are native English-speakers on the home language survey do not have a significantly different probability of reclassification as compared to Spanish-speakers. This finding suggests that ELLs who report speaking English are in fact in need of English language support services and that they have not been misclassified as ELLs by school staff. If they were actually fluent in English, one would expect that these students would be more likely to be reclassified. Possible explanations for why these students are reported as speaking English are: 1) data entry error by school staff; 2) parents simply made a mistake in filling out the home language survey; 3) parents are attempting to avoid scrutiny from school staff particularly if they and/or their children are undocumented; 4) parents do not want their children to receive English language development services and are unaware that they can choose to deny these services if their child is classified as an ELL.

Of all of the student characteristics that have a statistically significant negative relationship with probability of reclassification, special education status in particular deserves a more in-depth look because of its relatively large magnitude. Students receiving special educational services have an estimated probability of reclassification that is 0.83 times that of their peers.³⁷ In other words, they are approximately 17 percent less likely to exit ELL status. This is evident in the increasing proportion of special education ELLs throughout the analysis; in 2005, only eight percent of students in the sample were in special education, whereas in 2009, 23 percent of the students were in special education.

There are two possible explanations for this phenomenon. First, ELLs who are initially classified as ELLs upon becoming eligible for reclassification in first grade are more likely not to remain classified as ELLs as they progress through school. Data from the descriptive statistics that examine the 2003 data disaggregated by the number of years spent classified as an ELL provides evidence of this. In 2003, the proportion of all ELLs in special education was 0.06, but it was 0.10 for students who had not been reclassified after seven years in Texas schools. Second, as time passes students who remain classified as ELLs may be more likely to be identified as having special educational needs. However, there is little support for this as the proportions of both non-ELLs and ELLs with special educational needs increases as time passes. For example, in 2003, nine percent of non-ELLs receive special education services and six percent of ELLs receive such services. By 2005, 12 percent of non-ELLs (those never classified as ELLs) are classified as having special educational needs and nine percent of ELLs fall into

³⁷ This study likely underestimates the magnitude of the coefficient on special education; that is, it is likely less than 0.83 because this analysis excludes students who are missing TAKS and TELPAS scores, many of whom are students with severe special needs who are exempted from traditional testing.

this category. The gap between the proportion of special education students for non-ELLs and ELLs remains at three percent in both 2003 and 2005.

Therefore, while it is often argued that ELL students are overrepresented in special education status (e.g. Artiles et al., 2005), this overrepresentation may be explained at least in part by the extended duration of ELL classification for special education students. In fact, in first grade, nine percent of non-ELL students in the 2003 cohort had been identified as having special educational needs while only six percent of ELLs had been similarly identified. However, as students progress through school, the special education rate among ELLs appears to increase in part due to the disproportionate number of ELLs with special needs remaining classified as ELLs. Therefore, because ELL students are reclassified and former ELLs are often left out of counts that examine the progress ELL students are making, it may appear that a disproportionate number of ELLs are in special education simply because they are less likely to be reclassified.

This discussion now turns to local context covariates, which include both schooling environment and regional context variables. While there are a number of schooling environment covariates that have a statistically significant influence on students' probability of reclassification, most of the coefficients are too small in magnitude to warrant discussion. One exception to this is the level of urbanicity where the school is located. Urbanicity was included in the analysis as a control variable, but is surprisingly predictive of probability of reclassification. While the survivor function indicates little difference in the time to reclassification between the different levels of urbanicity, the multivariate event history analysis that controls for the influence of other variables presents a different picture. The majority (58 percent) of ELLs in the analysis attended schools in urban areas when the analysis began in 2005, so the urban group serves as the reference group. Compared to this group, ELLs who

attend schools in rural and suburban areas are significantly less likely to be reclassified by a factor of 0.84 and 0.85 respectively, while their peers who go to schools in small towns are more likely to be reclassified by a factor of 1.10 as compared to students in urban settings. This finding warrants further investigation.

This analysis finds substantial variation between the different Education Service Center (ESC) Regions. Region 1, which is based in Edinburg and serves the Rio Grande Valley, served as the reference group because it had the highest proportion of students who are ELLs during the first year of the event history analysis (55.85 percent). The event history analysis finds that there are nine ESC regions in which ELL students are significantly less likely to be reclassified, four regions in which ELLs are significantly more likely to be reclassified and six regions in which the probability of reclassification does not statistically differ from that of Region 1. Table 19 displays these probabilities in rank order from lowest to highest probability of reclassification. One pattern that emerges is that the three districts with the lowest probability of reclassification as compared to Region 1 all have less than 1,000 ELLs in the sample, and these students comprise less than 10 percent of their student population during the first year of the analysis. That being said, there are also regions with small numbers and percentages of ELL students who have a statistically higher probability of reclassification as well as regions that do not differ statistically from the probability of reclassification in Region 1.

Table 19

Probability of Reclassification by Education Service Center Region with ELL Information

Region	Rank (Lowest to Highest Probability)	Coefficient	P-value	Percent Students who are ELLs in 2005	Number of ELLs in 2005
1: Edinburg	Reference Group	Reference	N/A	55.85	12,668
5: Beaumont	Negative	0.62	0.00	5.27	289
8: Mt. Pleasant	Negative	0.63	0.00	9.71	356
12: Waco	Negative	0.70	0.00	9.27	800
10: Richardson	Negative	0.77	0.00	24.94	10,762
7: Kilgore	Negative	0.81	0.00	12.54	1,332
6: Huntsville	Negative	0.84	0.00	11.31	1,091
13: Austin	Negative	0.87	0.00	14.74	2,833
20: San Antonio	Negative	0.87	0.00	15.28	3,480
18: Midland	Negative	0.91	0.04	18.51	844
2: Corpus Christi	Null	0.98	0.79	10.39	726
9: Wichita Falls	Null	1.19	0.15	4.34	109
11: Fort Worth	Null	1.04	0.10	17.45	5,266
14: Abilene	Null	0.96	0.79	5.16	144
16: Amarillo	Null	1.03	0.64	12.24	609
17: Lubbock	Null	1.14	0.10	7.27	376
4: Houston	Positive	1.11	0.00	26.39	16,334
3: Victoria	Positive	1.22	0.01	8.16	290
15: San Angelo	Positive	1.23	0.01	11.42	352
19: El Paso	Positive	1.92	0.00	47.48	4,967

The important takeaway from the regional analysis is that there appear to systematic differences between regions that affect students' probability of reclassification. There are several possible explanations for these differences. First, it may be the case that there is strong leadership at the regional level that is prompting districts and schools within each region to approach reclassification in a similar way. ESC regions may encourage districts to use the same English proficiency assessments (selected from the list of state-approved tests), attend regionally based professional development on identifying, monitoring and reclassifying ELLs, and adopt particular ESL and/or bilingual programs and curricula. Regions may also provide supplementary materials to teachers and LPAC committee members to help guide the ELL review and exit process. For example, Region 8, which is based in Mount Pleasant, designed an

“ESL Program/Student Placement & PEIMS Coding Form” as well as an “LPAC Review/EXIT: Subjective Teacher Evaluation.” The later document serves as a template for classroom teachers to provide input the progress ELL student have made. These resources are available on the Region 8 website, and while they can be downloaded by anyone, they are not common across regions.³⁸ Another example is Region 4, which consists of the Houston metropolitan area. The Region 4 website offers an online store with a surprising array of Region 4-designed products that can be purchased through their website, including such items as workbooks for TAKS reading preparation for students testing in Spanish, guidebooks for teachers on designing effective literacy centers for Spanish-speakers, and manipulative kits with the Spanish alphabet.³⁹ Thus, districts in the same regions may coalesce around and adopt specific educational products and procedures guiding the instruction and reclassification of ELLs as a result of what is emphasized at their regional Education Service Center. This can be thought of as a top-down explanation since it implies that the Education Service Center regional office is driving the regional influence on reclassification probability.

On the other hand, this systematic regional variation in probability of reclassification may be driven by districts and schools located within the same region. The similarities across schools and students in particular regions may prompt districts to arrive independently at similar conclusions with regard to how to approach reclassification of ELLs. This could be thought of as a bottom-up explanation for the regional effect found in this analysis—districts within a region drive the regional effect.

Finally, a third possibility to explain the regional variation phenomenon is policy diffusion (Walker, 1969). Regions consist of clusters of contiguous districts in one geographic

³⁸ Region 8 resources can be found at <http://www.reg8.net/default.aspx?name=sf.esl>.

³⁹ Region 4’s online store catalog can be viewed at <http://www.region4store.com/Default.aspx>.

area. This theory suggests that organizations such as school districts are limited in their ability to design and take different approaches to solving problems they face due to bounded rationality, and consequently they select the best option available given their constraints on resources, such as money, time and information. Because of this, district and school leaders in a given region may be inclined to turn to neighboring districts and schools to mimic innovations that are seen as effective policy solutions to their problems (Berry & Berry, 2007). This suggests that sharing of policies and practices between districts clustered within the same region may explain the regional effect found in this analysis.

The substantial differences in probability of reclassification among Education Service Center Regions is indeed an interesting finding and can likely be accounted for by a combination of the three explanations enumerated above. The level of regional variation within a state with relatively centralized policies regarding the identification and reclassification of ELLs begs the question, how does the probability of reclassification vary *across* states? The variability in the reclassification probability within Texas and questions surrounding the variation between Texas and other states is an area that merits additional research.

CHAPTER VI

CONCLUSION

The concluding chapter of this dissertation will start by summarizing the purposes and design of this study. Results are then reviewed and considered with regard to broader implications of this research. Next, extensions of this work are presented, followed by a section on the limitations of this study. This chapter closes with a synopsis of the substantive, analytical and theoretical contributions of this research.

Review of the Study

For many years, ELLs were primarily a concern for only a handful of school districts located in traditional immigrant destination states. However, as public schools throughout the United States are increasingly faced with serving a greater number of ELLs and federal laws continue to emphasize the performance of ELLs as a subgroup, school officials across the nation are meeting increased pressure to address the unique educational needs of this group. Despite this trend, there remain significant gaps in the research literature about how to best serve ELLs. This study was motivated by a goal to improve the understanding of the antecedent factors that contribute to reclassification, a meaningful event in the educational trajectory of ELL students. Specifically, this study asks:

1. How do non-ELLs, ELLs who are reclassified quickly and ELLs who take longer to be reclassified compare to one another in terms of performance on assessments, student characteristics and local context?

2. How do state assessments, student characteristics, and local contexts influence the *rate* at which ELLs are reclassified as English proficient?
 - a. What is the role of achievement tests in the reclassification process? How does the role that achievement tests play compare to that of English proficiency tests?
 - b. Do students' social demographic characteristics and educational profile characteristics influence reclassification decisions?
 - c. Are reclassification rates uniform across the state of Texas reflecting a high level of centralization, or is there evidence of local decision-making?

While several studies have described the repercussions and consequences of exiting ELL status (e.g., Callahan et al., 2009; Callahan et al., 2010; Flores, Painter & Pachon, 2009; Flores & Park, 2011; Robinson, 2011), few have examined the precursors of reclassification. Those that have examined factors that lead up to reclassification employ data from only one school district in California (Abedi, 2008; Thompson, 2012; Umansky, 2012) or a handful of California school districts (Grissom, 2004). These studies have provided important insight into the reclassification process, but they are limited by several factors. First, they only examine ELL students in California. It is clearly important to study reclassification in this state because more ELLs attend California public schools than any other state. However, California is unlike many other states in that the policies guiding and framing the education of ELLs and set against the backdrop of California's Proposition 227. Moreover, California does not offer statewide longitudinal data that would allow for a systematic quantitative examination of reclassification across the state.

This dissertation employs a rich student-level panel dataset from Texas to examine ELL students' probability of reclassification over time. To my knowledge, this study is the first study to use longitudinal data to a) examine the factors that promote or deter reclassification for ELL

students *throughout an entire state*, and b) examine the antecedents of reclassification *outside of California*. Thus, this study contributes to the empirical research literature by providing information on reclassification in another state context, as well as analyzing how reclassification varies across the state.

The reclassification process is inherently complex and multifaceted. It includes different types of students who attend myriad schools in a wide array of school districts, and it involves teachers, administrators, district officials and parents. A tripartite theoretical framework suggests that three broad clusters of factors may drive the rate with which students are reclassified. First, the accountability movement has given more weight to the role that *performance on state assessments* play in informing a number of decisions that affect students' schooling experiences and trajectories. Because of the prominent role state assessments play in shaping the way students experience school (Hamilton, 2003), this dissertation posits that performance on these assessments will influence ELLs' likelihood of reclassification. Second, social reproduction theory suggests that schools are designed such that they reflect the values and priorities of the dominant classes (Bourdieu & Passeron, 1977; Bowles & Gintis, 1976). As such, this dissertation argues that schools draw upon *student characteristics* of ELLs in an uneven fashion, systematically valuing students with characteristics that parallel those of the dominant group and devaluing those of marginalized groups. Third, the more pronounced federal role in education has led to more centralized policies regarding schooling in this country. However, these policies are implemented by stakeholders at the local level and likely reflect local differences, preferences and traditions (Crowson & Goldring, 2009; Paige, 2006). As such, this study posits that students' probability of exiting ELL status is not uniform across the state, but that the *local context* plays a role in shaping how educators approach reclassification.

Three sets of hypotheses emerged from these frameworks. These hypotheses were then empirically tested using event history analysis to study a sample of 55,763 ELL students from the first grade cohort of 2002-2003 in Texas. This analytic method allows for the estimation of the influence of independent variables on students' probability of reclassification over time.

Table 20 provides summaries of the hypotheses and findings for each of the hypothesis tests.

Table 20
Summary of Hypotheses and Results

Hypothesis	Evidence	No Evidence	Contrary Evidence
State Assessments			
1A Students who demonstrate a high level of English proficiency, as indicated by performance on an English proficiency assessment in each of the four language modalities (listening, speaking, reading and writing), will be more likely to be reclassified.	✓		
1B ELLs who are high achievers, as indicated by demonstrating proficiency on state language arts achievement assessments in English, will be more likely to be reclassified.	✓		
1C Students who are tested in Spanish will be less likely to be reclassified than their peers who are tested in English.	✓		
Student Characteristics			
2A Students who are economically disadvantaged will be less likely to be reclassified than their peers who come from more advantaged households.	✓		
2B ELLs who are native Spanish-speakers will be less likely to be reclassified than their peers who speak other native languages.	✓		
2C ELLs who are migrant students will be less likely to be reclassified than their peers who are not migrant students.		✓	
2D ELL students who are girls will be more likely to be reclassified than their peers who are boys			✓
2E ELLs who are classified as gifted will be more likely to be reclassified than their peers who are not in gifted programs.	✓		
2F ELLs who receive special education services will be less likely to be reclassified than their peers who are not receiving such services.	✓		
2G ELLs who are in ESL programs will be more likely to be reclassified than their peers who are in bilingual education programs.		✓	
2H ELLs who are parent denials will be less likely to be reclassified than their peers who are in bilingual programs.		✓	
2I Students with behavioral challenges, as indicated by the number of disciplinary infractions, will result in a lower probability of reclassification.	✓		
2J Students who are highly mobile, as indicated by number of school switches during each academic year, will be less likely to be reclassified than ELLs who attend one school.		✓	
Local Context			
3A The higher the concentration of ELLs at the school, the less likely ELLs will be reclassified.	✓		
3B The higher the concentration of poverty, as indicated by the percentage of students who are economically disadvantaged, the less likely ELLs will be reclassified.			✓
3C ELLs will have different probabilities of reclassification across different local policy contexts, as captured by ESC region.	✓		

Among the state assessment variables, performance on both English proficiency and achievement assessments had a statistically significant influence on students' likelihood of exiting ELL status. Unsurprisingly and in accordance with state policy, students who perform better on English proficiency and achievement tests are more likely to be reclassified than their peers who do not perform as well on these assessments. Of the different language domains assessed, performing at an advanced-high level on the writing test appears to carry the most weight in terms of predicting probability of reclassification. Interestingly, in Texas, the language in which students are tested is particularly important for understanding the reclassification process; students who take achievement assessments in Spanish are approximately 12 times less likely to experience reclassification than their peers tested in English even when controlling for English proficiency performance.

With regard to student characteristics, several social demographic and educational profile characteristics were found to influence ELLs' probability of reclassification net of other factors. Coming from an economic disadvantaged family and being female as well as participating in special education and incurring disciplinary infractions were negatively related to reclassification probability. Conversely, speaking a native language other than English (as compared to Spanish) and participating in a gifted program were positively related to reclassification probability.

In terms of local context variables, the composition of the student body at the school was found to influence reclassification. Specifically, the percentage of ELLs at the school reduced the probability of reclassification while the percentage of economically disadvantaged students at the school increased the probability of reclassification, although the magnitude of the coefficient was relatively small in both cases. In addition, quite substantial differences in the probability of

reclassification were documented across different ESC regions, suggesting that approaches to reclassification vary across Texas. The implications of these findings are discussed below.

Substantive Implications

ELLs Are Not Uniform

ELLs are by no means a homogeneous group of students. Some ELLs possess basic literacy skills in their native language while others do not. Many have attended preschool and kindergarten, but some begin formal schooling in first grade. Some enter school with a working knowledge of the English language, while others are introduced to English for the first time at school. Basic descriptive results that compare initial student and school characteristics of ELLs who are reclassified at different points in time illustrate the diversity represented within the ELL subgroup. These differences between ELL students are reflected in how long students spend classified as ELLs, which varies tremendously. In the cohort studied, 10,567 students were reclassified within the first two years, while 11,216 were not reclassified during the seven-year period of observation. Despite this, the ELL label is the same for all of these students; it does not capture these early differences that could clue teachers into students who may struggle to exit ELL status, which previous research has shown can have adverse implications on myriad educational outcomes. It does not inform teachers about which students are making steady progress toward acquiring English proficiency and which ones have stalled in their second language development. It does not distinguish between ELLs who have been present in Texas schools since the beginning of their educational career and those who are more recent immigrants.

In recent years, those who study ELLs have recognized that the umbrella term for ELL

students is overly broad. In an effort to distinguish between more recent immigrant students and those who have been educated in the United States for an extended period of time the term “long-term English language learner” (LT-ELL) has been introduced. While distinguishing between ELLs and LT-ELLs is useful in many respects, it is problematic in others. Thompson (2012) argues that the LT-ELL label carries a negative connotation because it is often associated with academic underperformance and educational deficits, which can “blind us to students’ experiences, their abilities, and their successes” (Thompson, 2012, p. 122). Moreover, the LT-ELL term only identifies students who have already passed the five to seven-year threshold in ELL status. It does not act as a warning system to help identify students who are at-risk for becoming LT-ELLs.

One policy effort that may help address this problem would be to provide teachers with more nuanced information about their ELL students at the beginning of the school year. At present, much of the information that could prove useful to teachers is buried in students’ permanent records and is not available in an easily accessible, organized and systematic way. For example, it could be helpful for teachers to have access to basic information about their ELL students, such as previous English proficiency scores, achievement scores, and the number of years attending U.S. (or Texas) schools. As is evidenced by this dissertation, data obviously exists that contains this information, however, these data are de-identified and confidential. That said, the fact that the data already exist suggests that a system could be designed that teachers could access through a data dashboard tool. Such a tool would allow teachers to better target those who are at-risk for falling behind in terms of English language acquisition

Access to this type of data could be particularly useful for middle school and high school teachers. Once students enter these grades, it is often assumed that students who are classified as

ELLs are more recent immigrants rather than students who have been in U.S. schools since entering elementary school. English language development services provided to these students should reflect these differences; students who have mastered conversational English but struggle to demonstrate proficiency in academic English need very different support services than their peers who are just beginning to learn English. A data information system designed for teachers would provide all classroom teachers (not just those who teach English language development classes) with this information and would prevent teachers from having to sort through permanent records to find this information and would ultimately allow teachers to more readily make informed decisions concerning instruction and assessment on an individual student basis, which aligns with TEA's goals (TEA, 2009).

Prominent Role that Achievement Tests Play in Reclassification Is Cause for Concern

Using performance on achievement assessments to evaluate reclassification readiness has become common practice under NCLB. Like many other states, Texas embraced the concept of requiring ELL students to meet achievement standards in an effort to ensure that reclassified ELLs will possess the academic English proficiency skills to be successful in mainstream classrooms. This dissertation provides evidence that meeting reading (and in some years writing) achievement standards plays an important role in the reclassification process. Net of performance on English proficiency assessments, students who meet achievement proficiency standards (as indicated by passing the TAKS test) are nearly twice as likely to be reclassified as their peers who have not passed the test. In addition, students who meet proficiency standards *in English* are another 2.6 times as likely to be reclassified. In many ways these results are unsurprising because they concur with the way the policy is designed. However, the prominent

role that achievement tests play in the reclassification process is cause for concern for several reasons.

First, the utility of achievement tests as a criterion for exiting ELL status is questionable. Several scholars argue that these assessments were not designed for the purposes of measuring English proficiency and may therefore misrepresent their command of English (Abedi, 2008; Linquanti, 2001; Mahoney & MacSwan, 2005; Rossell, 2000). Instead of measuring English comprehension, these assessments test literacy. As such, it is often the case that monolingual English speakers struggle to meet achievement proficiency standards. While there are some similarities between reading achievement and English proficiency reading tests, they were designed for different purposes and should not be viewed as interchangeable. It is unsound policy to base reclassification decisions in part on a test that is designed to measure mastery of the state standards in reading rather than the English language proficiency standards, particularly knowing the central role that achievement tests play in determining students' probability of reclassification.

Second, using performance on achievement tests as a criterion for exiting ELL status has the potential to cause misalignment between support services and students' needs. Students who are barred from reclassification because of difficulty meeting achievement proficiency standards may not be best served by language support services, but instead may be in need of targeted academic intervention to improve literacy and writing skills in English, much like the services available to underperforming students whose first language is English. Moreover, a number of the students who are not reclassified due to difficulty meeting achievement criteria may in fact have undiagnosed cognitive disabilities that are masked by the ELL classification.

Third, for students who demonstrate a high level of English proficiency but remain

classified as ELLs for an extended period of time because they struggle to pass achievement tests, placement in English language development classes in middle and high school can often be perplexing and discouraging. These students are aware that they have a strong command of the English language and are confused as to why they are being placed in a class with more recent immigrant students who are only beginning to acquire English proficiency. These students may internalize this placement, believing that school staff have given up on them, relegating them to a English language development classroom setting for part of each day that is wrought with social stigma—a regular experience of ostracism (Thompson, 2012).

Finally, using achievement tests to make reclassification decisions has implications for the ELL subgroup as a whole. When performance on achievement assessments serve as reclassification criteria the ELL subgroup appears increasingly low-performing as time passes because ELLs who are high-achieving are exited, leaving only low-performers to represent the ELL subgroup. This results in an exaggeration of the underperformance of ELLs, making it appear that ELLs are extremely low achieving when in fact high-achieving ELLs have been siphoned off and reclassified.

While the practice of using performance on achievement tests as part of the reclassification process has become commonplace under NCLB, it is not required in this legislation. States have a choice about whether or not they want to incorporate performance on achievement assessments as reclassification criteria. If they choose to incorporate achievement assessments, they decide how much weight to give them and explain exactly how they will factor into reclassification decisions. During the 2011-2012 academic year TEA removed the reading and writing academic achievement reclassification criteria. Instead of using the TAKS test as was previously the case, schools were to use the TELPAS reading assessment as well as a

writing test from a list of state approved assessments to gauge English proficiency in the reading and writing domains, however this change is apparently only temporary. TEA has removed the achievement criteria from their prominent role in the reclassification process only for the 2011-2012 academic year in order to establish proficiency standards for a new assessment system, the State of Texas Assessment of Academic Readiness (STAAR), which has replaced the TAKS. New reclassification criteria that reinstate academic achievement criteria using the STAAR are expected during the 2012-2013 academic year.

Research examining reclassification in several districts in California (e.g., Parrish et al., 2006; Robinson, 2011; Umansky, 2012), and the research presented in this dissertation that examines the entire state of Texas, the state with the second largest ELL population, suggests that one of the primary barriers to reclassification is underperformance on achievement tests. While performance on achievement assessments is an important factor to consider when making decisions about exiting students from ELL status, it is arguable that the role that they are playing in the process is overly emphasized. One possible approach to improving reclassification policies would be to reframe the role achievement tests play in the process. Perhaps achievement tests could be included in the criteria teachers use to make their subjective evaluations. Or, perhaps performance on achievement tests could enter into the reclassification equation in a weighted fashion, counting for a portion of the English proficiency reading requirement, but not accounting for *all* of it. It is not recommended, however, to remove achievement tests from consideration in the reclassification process altogether. Performance on academic achievement instruments should be included in annual exit reviews because they can help identify students with substantial discrepancies between academic performance and English proficiency. Students with high ratings of English proficiency, but low performance on the achievement assessments

may need to be targeted for academic assistance.

Achievement Testing in Spanish Has Unintended Consequences

Many of the Spanish-speaking students in Texas receive their instruction at least in part in their first language because of bilingual programs that are offered during elementary school. In order to effectively measure students' mastery of content area objectives, the state of Texas offers achievement tests in Spanish for students in grades three through five. TEA explains that they do so because:

[m]easuring ELLs' academic skills in English before they have had time to learn English can confound assessment results. Students appear to be behind academically when, in fact, lack of English comprehension may prevent a reliable measure of either academic strengths or weaknesses. (TEA Student Assessment Division, 2010, p. 6)

The state of Texas should be commended for designing achievement assessments in Spanish because they allow for a much more accurate picture of students' mastery of academic skills, particularly for students who receive much of their instruction in Spanish through bilingual programs. However, when considered in the framework of the current reclassification process, achievement testing in Spanish has unintended consequences.

As discussed above, the role that achievement tests play in informing reclassification decisions is central. However, it is not simply performance on achievement tests that matters for reclassification. Also important is the *language* of the achievement assessment. TEA specifies that in order to be considered for reclassification students must demonstrate proficiency on the English TAKS test. Results from the event history analysis conducted in this dissertation are consistent with this policy; ELLs who test in English are more than 12 times as likely to be

reclassified as their peers who test in Spanish net of English proficiency and academic achievement performance. While providing achievement tests in Spanish likely results in a more accurate read of students' proficiency in content area skills, what these findings imply is that it inadvertently excludes Spanish-speaking ELLs who are tested in Spanish from even being considered for reclassification.

Offering achievement tests in Spanish is obviously a well-intended policy that operates appropriately when the outcome being measured is content-area achievement. However, when achievement tests are coopted for the purposes of evaluating students' English proficiency, students who do not take the English version of the test are at a disadvantage. Disproportionately disadvantaged are Spanish-speakers, since achievement tests are not offered in any other additional language besides Spanish. This indicates that while all ELLs who are speakers of Southeast Asian, Middle-Eastern and Eastern European languages meet the requirements to be considered for reclassification, many Spanish speakers do not. There are several possible approaches to remedying this oversight. First, achievement tests could be removed from the list of strict reclassification criteria and included in a more peripheral fashion, being replaced by standardized measures of English proficiency. Second, if policymakers are adamant about maintaining the prominent role that achievement assessments play in the reclassification process, students tested in Spanish could also be assessed in English for the purposes of evaluating reclassification readiness.

What It Means to Be an ELL Varies Within the State of Texas

The state of Texas has 20 Education Service Center Regions that serve several purposes, one of which is to help school districts implement policies adopted by the Texas Legislature and

the Commissioner of Education. These regions were incorporated into the analysis as a means of investigating whether or not local policy contexts influence the way centralized reclassification policies are interpreted and implemented. Results suggest that some of the variability that exists in terms of students' probability of reclassification can be explained by where they live. That is, different regions approach reclassification in different ways, which has several implications.

First, these findings suggest that ELL students receive different treatment across the state. The same student may remain classified as an ELL for a longer period of time in a low-probability reclassification region such as Region 5, based in Beaumont, while exiting ELL status more rapidly in a high-probability region such as Region 19, based in El Paso. This signifies that the same student would receive English language development services for different periods of time depending not on English proficiency level, but on the region in which he lives. This begs a question about whether some regions are reclassifying students too early thereby withdrawing language support services prematurely, or some regions are reclassifying students too late, possibly preventing students from accessing advanced coursework and important peer networks.

Second, the differences in likelihood of reclassification between regions have consequences for comparing the performance of ELLs across the state. In regions where ELLs are reclassified more slowly, the threshold for English proficiency is likely higher, indicating that a greater portion of higher performing students remain classified as ELLs, while the opposite is true in regions where ELLs have a higher probability of reclassification. This complicates the comparison of the ELL subgroup because in regions with higher English proficiency standards (lower probability of reclassification) ELLs will appear to be faring better not necessarily because the region is doing a better job of serving ELLs, but because of the students who

compose the group.

The local influence evident in this analysis may work through several channels, but two seem to be particularly probable. First, it is up to the district to select English proficiency assessments to measure listening, speaking, writing and reading (in grades one and two) from a list of state approved tests. Despite the fact that the state has cut points for English proficiency on each of these assessments, it is unlikely that all of these assessments function in the same way. In fact, in a study conducted in Arizona, Mahoney and colleagues compared reclassification rates using either the Language Assessment Scales test (LAS) and Stanford English Language Proficiency Test (SELP), both of which are approved assessments in Texas, and found that 17 percent of students were not classified consistently by both tests, with the SELP passing rate statistically exceeding that of the LAS (Mahoney, Haladyna & MacSwan, 2009). This suggests that ESC regions may exhibit different probabilities of reclassification because districts in one region may opt to use the same assessment, while districts in another region may decide to use a different assessment. Consequently, it may be beneficial for future research to examine whether or not there are trends in reclassification rates and academic performance of students who have been reclassified using different assessments.

A second possible source of variation between regions is the role of subjective teacher evaluations in the reclassification process. ESCs provide professional development for members of the LPAC, the committee that makes decisions regarding reclassification. Some regions may stress the need to include classroom teachers' voices in the reclassification process, while others may deemphasize it in favor of concentrating on standardized measures. This may occur through the offering of workshops or the provision of resources designed to guide reclassification.

States approach reclassification policies in different ways. Some states, such as Arizona,

have highly centralized reclassification policies, where districts use statewide reclassification criteria, while other states, such as Colorado and California allow districts to set their own reclassification criteria. Texas falls somewhere in the middle, specifying clear reclassification standards and procedures, but allowing district-level choices about some of the assessments and how to incorporate teachers' subjective evaluations. Consequently, there is some degree of variability in the probability of reclassification across the state. Some of this variability is expected—local interpretation and influence on policies is going to be evident when policies are implemented at the local level. However, some of it may be problematic, resulting from confusion surrounding the role of teacher evaluations.

One possible solution would be for TEA to develop some basic guidelines and resources designed to explain and codify how subjective teacher evaluations enter into the reclassification equation. Possible considerations include putting together a template for teachers to use to comment on ELL students' growth and progress over the course of the academic year that is to be included in the packet provided to the LPAC for exit reviews. Another option would be give classroom teachers a seat at the table when students' files are being reviewed by the LPAC. Either of these options would guarantee that classroom teachers' input be present and included in the reclassification decision-making process.

Student Characteristics Shape Reclassification Decisions

One of the most interesting findings from this study is that certain student characteristics appear to influence students' probability of reclassification net of their performance on achievement and English proficiency assessments, and net of local influence. This suggests that across the state of Texas, there are key characteristics that are factoring into reclassification

decisions. Perhaps the best way to explain this is that it appears that certain characteristics are tipping the reclassification readiness scale. For example, participation in special education or being economically disadvantaged appears to prompt LPAC members to keep students classified as ELLs for more time than their performance would suggest is appropriate, whereas speaking an *other* language (as compared to Spanish-speakers) or participation in a gifted and talented program signals earlier reclassification readiness.

The underlying reason for why several student characteristics appear to influence reclassification decisions is unknown. One can speculate, however, that members of the LPAC may be making a decision (either consciously or subconsciously) to keep certain students classified as ELLs for longer in an effort to extend their language support services, while reclassifying students with other characteristics more rapidly because they are perceived to possess the skills necessary to perform at a high level in a mainstream classroom without support. It is unclear, however, if doing so benefits students these students and this practice deserves more scrutiny.

Theoretical Contributions

The work completed in this dissertation has implications beyond improving the reclassification process for ELLs. The results contained in this analysis raise interesting questions and provide theoretical insight across three areas: measurement and assessment, access and equity, and policy implementation.

Measurement and Assessment

Test results are only as good as the validity of the assessment. If an assessment is used to

measure a construct that it was not designed or piloted to assess, results are often flawed. Several scholars (e.g. Abedi, 2008; MacSwan & Rolstad, 2003; Mahoney & MacSwan, 2005; Rossell, 2000) have cautioned against employing achievement tests for the purposes of gauging English proficiency and ultimately to identify and reclassify ELLs. Results from this study find that achievement assessments play a prominent role in the reclassification of ELLs in Texas, fueling criticism regarding the misuse of achievement tests.

ELLs have had a long and contentious relationship with achievement testing in the United States. In the past, achievement tests have been used to identify ELLs as low-performing and in need of remediation, prompting schools to segregate and isolate ELL students, providing them with an inferior education. While much has improved since then, important decisions that have the potential to shift ELLs' educational trajectories are still being based in large part on inappropriate assessments. This study calls for continued efforts to improve measurement and assessment for ELLs, particularly with regard to informing reclassification decisions.

Access and Equity

In public schools in the United States, students are often categorized or labeled in an effort to identify those who need access to special services. ELL is one such label, used to identify students who are in the process of acquiring English proficiency. While there are trends that emerge within the ELL subgroup, there is also a tremendous amount of diversity that can at times be obscured by the simple ELL classification. Some ELLs are also in special education, while others participate in gifted programs. Many ELLs are economically disadvantaged and participate in free and reduced lunch programs, while others come from families with financial means. While these classifications and labels are distinct, the results of this dissertation suggest

that they overlap in complex ways and factor into the provision of services. For example, this study finds that ELLs who qualify to receive special education services are less likely to be reclassified than their peers who are not in special education, indicating that special education students receive language support services longer than their peers performing at similar academic and English proficiency levels.

These programs are meant to expand learning opportunities for students by providing students with the supplemental services necessary to allow them access to a high quality and equitable education. However, this research raises questions about how services and programs interact with and affect one another. For example, are ELL students who receive special education services benefitting from receiving language support services for a longer period of time, or could it be the case that these additional language support services inhibit academic progress for a group of students who already face academic challenges? It is evident that more research is needed to understand how participation in different programs affects the way students interact with services.

Policy Implementation

This study of the reclassification process in Texas provides an interesting case of state policy meets local influence. Policies regarding the identification, monitoring and reclassification of ELLs are determined by TEA in Austin and then disseminated to regions and districts throughout the state to interpret and implement. Much like testing the effectiveness of educational interventions in randomized field trials, policies rely on a certain level of implementation fidelity in order to ensure that the core elements of the policy are included and reflected in the ways local policies are carried out on the ground. The present study

demonstrates one approach to capturing disparities in the implementation of policies by examining the influence of local contexts on the outcome of interest using a simple dummy variable approach. While this method does not allow one to establish *why* or *how* policies are functioning differently across a state, it does help to gauge the range of variation between local contexts as well as identify areas that have substantial positive or negative influence on the outcome.

Methodological Contributions

Event History Analysis and Learning Outcomes

Event history analysis is employed with great frequency throughout biostatistics as well as in political science. In fact, it has become a primary method for studying policy diffusion. However, it is rarely used to study key learning outcomes for students. This dissertation provides an illustrative example of how this analytic method can be applied in education to study the progress that different types of students in diverse school environments are making over time. In a field where timing is often a key aspect of measuring educational success (e.g., when a child masters basic phonemic awareness, when a child enrolls in an advanced course, when a child passes algebra II, etc.), event history analysis could prove to be a useful tool to researchers interested in studying factors or interventions that influence the probability of meeting these educational milestones.

State Administrative Datasets

This dissertation capitalizes on the one of the few long-standing longitudinal student-level statewide datasets by following one cohort of students for seven years. State administrative

databases are underutilized in education research, but they hold vast quantities of data that could inform any number of research questions. This dissertation showcases the advantages of using state administrative data, particularly with regard to studying a minority population, such as ELLs, who often are only studied quantitatively in large school districts with adequate sample sizes. As large scale longitudinal state administrative datasets increasing in prevalence across the United States (due in part to Race to the Top funding) this study provides one template for how to effectively employ and utilize these vast databases.

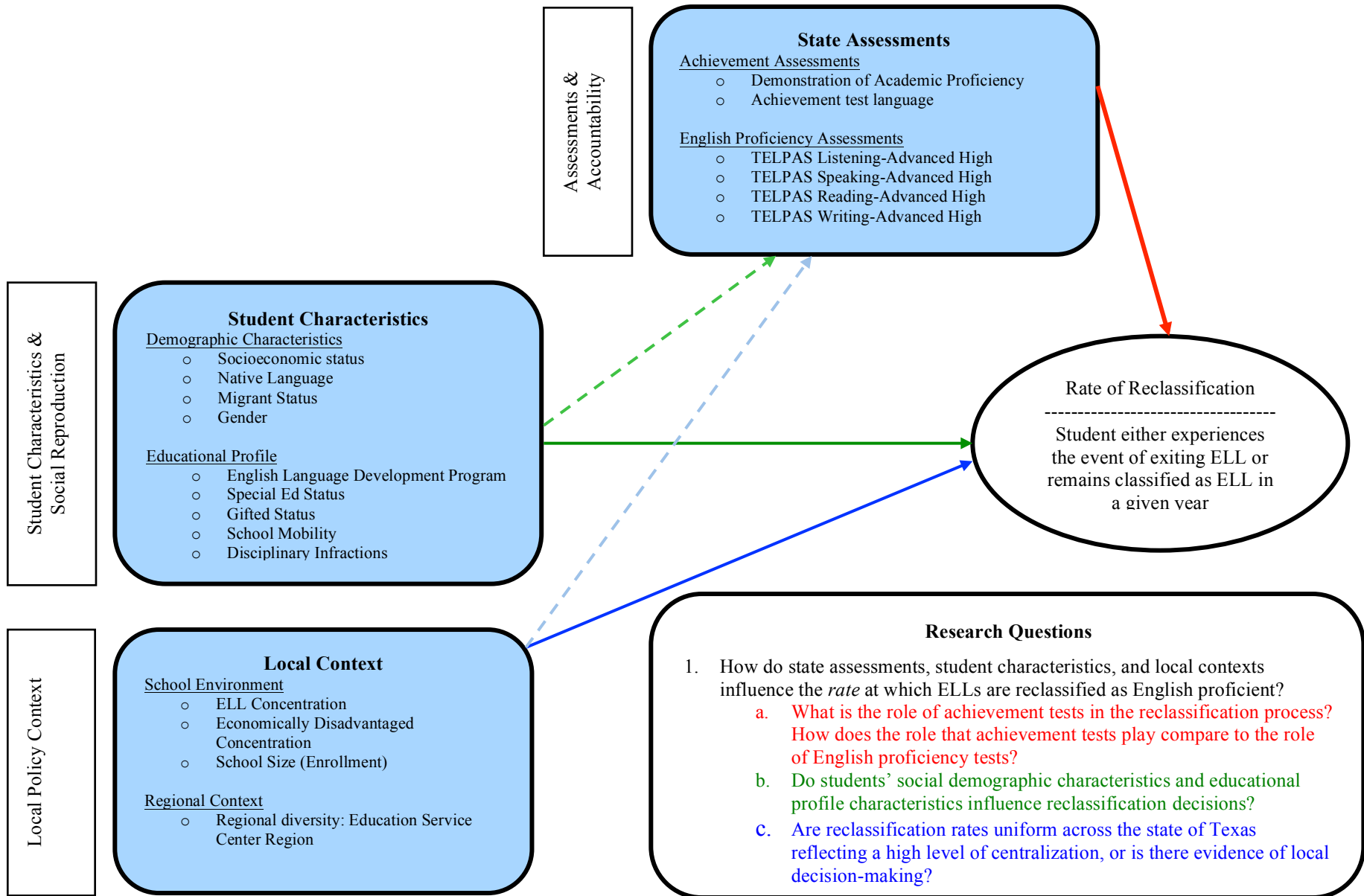
Concluding Comments

As the ELL population continues to grow and expand across the United States, it is increasingly important to have a better understanding of the reclassification process. In light of previous research that suggests that the timing of exiting ELL status may have consequences for subsequent educational outcomes, this dissertation set out to explore the antecedent factors of reclassification by disentangling how state assessments, student characteristics and local context drive the probability of reclassification. Results suggest that the process is exceptionally complex, reflecting not only students' level of English proficiency, but also academic achievement, student characteristics and local contextual influences. These findings make an important contribution to the thin knowledge base surrounding reclassification of ELLs, but they also warrant additional exploration.

Subsequent research could benefit from more detailed and nuanced information regarding how and why these variables factor into reclassification decisions. This type of information would allow researchers to probe the mechanisms by which students' demographic and educational profile characteristics enter into reclassification decisions, as well as explore possible

explanations for the variation in rates of reclassification across the state of Texas and the nation as a whole.

Appendix A: Conceptual Model for the Reclassification of ELLs



Appendix B: IRB Approval Letter



Vanderbilt University

Institutional Review Board

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01/21/2011

Madeline Mavrogordato
LPO

Nashville, TN 37211

Ellen B. Goldring
Leadership, Policy & Organizations
210 B Payne Hall 37203-5721

RE: IRB# 110057 "Exiting LEP: An Investigation of the Dynamic Process of Becoming Proficient in English for Students in Texas"

Dear [Madeline Mavrogordato](#):

A designee of the Institutional Review Board reviewed the Request for Exemption application identified above. It was determined the study poses minimal risk to participants. This study meets 45 CFR 46.101 (b) category (4) for Exempt Review. Approval is extended for the Request for Exemption application dated 1/13/2011 for Principal Investigator [Madeline Mavrogordato](#).

Any changes to this proposal that may alter its exempt status should be presented to the IRB for approval prior to implementation of the changes. In accordance with IRB Policy III.C, amendments will be accepted up to one year from the date of approval. If such changes are requested beyond this time frame, submission of a new proposal is required.

DATE OF IRB APPROVAL: 1/21/2011

Sincerely,

A handwritten signature in black ink that reads "Rebecca Abel".

Rebecca Abel, MA, CIP
Behavioral Sciences Committee

Electronic Signature: R.becca Abel/MJMC/Vanderbilt : (86C83D7DAE2D12FF3C170B10D763F9B1)
Signed On: 01/21/2011 11:21:07 AM CST

Mavrogordato, Madeline IRB # 110057

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01/21/2011

REFERENCES

- Abedi, J. (2004). The No Child Left Behind Act and English language learners: Assessment and accountability issues. *Educational Researcher*, 33(1), 4.
- Abedi, J. (2005). Issues and consequences for English language learners. *Yearbook of the National Society for the Study of Education*, 104(2), 175–198.
- Abedi, J. (2008). Classification system for English language learners: Issues and recommendations. *Educational Measurement: Issues and Practice*, 27(3), 17–31.
- Abedi, J., & Gándara, P. (2006). Performance of English language learners as a subgroup in large scale assessment: Interaction of research and policy. *Educational Measurement: Issues and Practice*, 25(4), 36–46.
- Adger, C. T., & Peyton, J. K. (1999). Enhancing the education of immigrant students in secondary school: Structural challenges and directions. In J. F. Christian & P. M. Wolfe (Eds.), *So much to say: Adolescents, bilingualism, and ESL in the secondary school* (pp. 205–224). New York, NY: Teachers College Press.
- Aguirre, N., & Castellano, J. A. (2003). ESL students in gifted education. *Special populations in gifted education: Working with diverse gifted learners* (pp. 17–27). Boston, MA: Allyn and Bacon.
- Aguirre-Muñoz, Z., & Baker, E. L. (1998). *Improving the equity and validity of assessment-based information systems*. Los Angeles, CA: National Center for Research on Evaluation, Standards, and Student Testing, Center for the Study of Evaluation, University of California Los Angeles.
- Alexander, K. L., Entwisle, D. R., & Thompson, M. S. (1987). School performance, status relations, and the structure of sentiment: Bringing the teacher back in. *American Sociological Review*, 52(5), 665–682.
- Allison, P. D. (2002). Missing data: Quantitative applications in the social sciences. *British Journal of Mathematical and Statistical Psychology*, 55(1), 193–196.
- American Institute for Research. (1977). *Interim report, evaluation of the impact of ESEA Title VII, Spanish/English bilingual education programs*. Palo Alto, CA: AIR.
- Artiles, A. J., & Ortiz, A. A. (2002). *English language learners with special education needs: Identification, placement and instruction*. Washington, D.C.: Center for Applied Linguistics.

- Artiles, A. J., Rueda, R., Salazar, J. J., & Higaeda, I. (2005). Within-group diversity in minority disproportionate representation: English language learners in urban school districts. *Exceptional Children, 71*(3), 283–300.
- Aspira of New York, Inc. v. Board of Education of the City of New York, 423 F.Supp. 647 (1976).
- August, D., & Hakuta, K. (1997). *Improving schooling for language-minority children: A research agenda*. Washington, D.C.: National Academies Press.
- August, D., & Shanahan, T. (Eds.). (2006). *Developing literacy in second-language learners: Report of the National Literacy Panel on Language Minority Children and Youth*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Ayala, L., Alvarado-Bolek, S., Galicia, M., & Vázquez, C. (2011, December). *ELL assessment update*. Presented at the Annual Texas Assessment Conference, Austin, TX. Retrieved from <http://www.tea.state.tx.us/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=2147504754&ibID=2147504749>
- Bailey, A. L., & Kelly, K. R. (2010). *The Use and Validity of Home Language Surveys in State English Language Proficiency Assessment Systems: A Review and Issues Perspective*. Los Angeles, CA: UCLA.
- Barkan, J. H., & Bernal, E. M. (1991). Gifted education for bilingual and limited English proficient students. *Gifted Child Quarterly, 35*(3), 144–47.
- Barth, F. (1969). *Ethnic groups and boundaries: The social organization of cultural difference*. New York, NY: Little, Brown and Company.
- Batlova, J., Fix, M., & Murray, J. (2006). *Measures of change: The demography and literacy of adolescent English language learners*. Washington, D.C.: Migration Policy Institute.
- Bennett, D. S. (1999). Parametric models, duration dependence, and time-varying data revisited. *American Journal of Political Science, 43*(1), 256–270.
- Bennett, W. J. (1988). *Our children & our country: Improving America's schools and affirming the common culture*. New York, NY: Simon and Schuster.
- Bergström, R., & Edin, P. A. (1992). Time aggregation and the distributional shape of unemployment duration. *Journal of Applied Econometrics, 7*(1), 5–30.
- Bernal, E. M. (2002). Three ways to achieve a more equitable representation of culturally and linguistically different students in GT programs. *Roeper Review, 24*(2), 82–88.
- Berry, F. S., & Berry, W. D. (1990). State lottery adoptions as policy innovations: An event history analysis. *The American Political Science Review, 84*(2), 395–415.

- Berry, F. S., & Berry, W. D. (1992). Tax innovation in the states: Capitalizing on political opportunity. *American Journal of Political Science*, 36(3), 715–742.
- Berry, F. S., & Berry, W. D. (2007). Innovation and diffusion models in policy research. In P. A. Sabatier (Ed.), *Theories of the policy process*. Boulder, CO: Westview Press.
- Boals, T., Wilmes, C., & Santos, M. (2007). *Issues in the development of annual measurable achievement objectives for WIDA consortium states*. Madison, WI: Wisconsin Center for Education Research.
- Bourdieu, P. (1977). Cultural reproduction and social reproduction. In J. Karabel & A. H. Halsey (Eds.), *Power and ideology in education* (pp. 487–511). New York, NY: Oxford University Press.
- Bourdieu, P., & Passeron, J. (1977). *Reproduction in education, society and culture*. London, UK: Sage.
- Bowles, S., & Gintis, H. (1976). *Schooling in capitalist America: Educational reform and the contradictions of economic life*. New York, NY: Basic Books.
- Box-Steffensmeier, J. M., & Jones, B. S. (2004). *Event history modeling: A guide for social scientists*. Cambridge, UK: Cambridge University Press.
- Box-Steffensmeier, J. M., Reiter, D., & Zorn, C. (2003). Nonproportional hazards and event history analysis in international relations. *Journal of Conflict Resolution*, 47(1), 33–53.
- Bradley, R. H., & Corwyn, R. F. (2002). Socioeconomic status and child development. *Annual Review of Psychology*, 53(1), 371–399.
- Branz-Spall, A. M., Rosenthal, R., & Wright, A. (2003). Children of the road: Migrant students, our nation's most mobile population. *Journal of Negro Education*, 55–62.
- Brown v. Board of Education, 347 U.S. 483 (1954).
- Bunch, G. (2006). “Academic English” in the 7th grade: Broadening the lens, expanding access. *Journal of English for Academic Purposes*, 5(4), 284–301.
- Callahan, R. M. (2005). Tracking and high school English learners: Limiting opportunity to learn. *American Educational Research Journal*, 42(2), 305–328.
- Callahan, R. M. (2006). The intersection of accountability and language: Can reading intervention replace English language development? *Bilingual Research Journal*, 30(1), 1–21.

- Callahan, R., Wilkinson, L., & Muller, C. (2010). Academic achievement and course taking among language minority youth in U.S. schools: Effects of ESL placement. *Educational Evaluation and Policy Analysis*, 32(1), 84–117.
- Callahan, R., Wilkinson, L., Muller, C., & Frisco, M. (2009). ESL placement and schools: Effects on immigrant achievement. *Educational Policy*, 23(2), 355–384.
- Capps, R., Fix, M., Murray, J., Ost, J., Passel, J. S., & Herwanto, S. (2005). *The new demography of America's schools: Immigration and the No Child Left Behind Act*. Washington, D.C.: Urban Institute.
- Capps, R., Fix, M., Ost, J., Reardon-Anderson, J., & Passel, J. S. (2004). *The health and well-being of young children of immigrants*. Washington, D.C.: Urban Institute.
- Cardenas, J. (1992). An educator's rationale for native-language instruction. In J. Crawford (Ed.), *Language loyalties: A sourcebook on the official English controversy* (pp. 342–351). Chicago: University of Chicago Press.
- Cardenas, J. A. (1984). The role of native language instruction in bilingual education. *Intercultural Development Research Association Newsletter*, 7.
- Castaneda v. Pickard, 648 F.2d 989 (5th Cir. 1981).
- Castellano, J. A., & Diaz, E. I. (Eds.). (2002). *Reaching New Horizons: Gifted and Talented Education for Culturally and Linguistically Diverse Students*. Boston, MA: Allyn and Bacon.
- Chen, C. (2010). *Documentation to the NCES Common Core of Data Public Elementary/Secondary School Universe Survey Preliminary File: School Year 2009-10* (No. NCES 2010-371). Washington, D.C.: National Center for Education Statistics. Retrieved from <http://nces.ed.gov/pubsearch>
- Chou, R. S., & Feagin, J. R. (2008). *The myth of the model minority: Asian Americans facing racism*. St. Paul, MN: Paradigm Publishers.
- Civil Rights Act of 1964, Pub. L. No. 88-352, § 78, Stat. 241 (1964).
- Clemetson, L. (2003, January 22). Hispanics now largest minority, census shows. *New York Times*, p. 1.
- Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2009). The academic achievement gap in grades 3 to 8. *The Review of Economics and Statistics*, 91(2), 398–419.
- Conger, D. (2009). Testing, time limits, and English learners: Does age of school entry affect how quickly students can learn English? *Social Science Research*, 38(2), 383–396.

- Cosentino de Cohen, C. (2005). *Who's left behind? Immigrant children in high- and low-LEP schools*. Washington, D.C.: Urban Institute.
- Crawford, James. (1994). Summing up the *Lau* decision: Justice is never simple. *Revisiting the Lau Decision – 20 Years After*. Presented at the National Commemorative Symposium, Oakland, CA: ARC Associates.
- Crowson, R. L., & Goldring, E. (2009). *The new localism in American education, 108th yearbook of the National Society for the Study of Education* (Vol. 1). New York, NY: Teachers College Press.
- Crowson, R. L., Goldring, E., & Taylor Haynes, K. (2010). *Successful schools and the community relationship*. Richmond, CA: McCutchan Publishing Corp.
- Cummins, J. (1984). Wanted: A theoretical framework for relating language proficiency to academic achievement among bilingual students. In C. Rivera (Ed.), *Language proficiency and academic achievement* (pp. 2–19). Clarendon, UK: Multilingual Matters Ltd.
- Cummins, J. (2000). *Language, power and pedagogy*. Clevedon, England: Multilingual Matters.
- Davies, G. (2007). *See government grow: Education politics from Johnson to Reagan*. Lawrence, KA: University Press of Kansas.
- DesJardins, S. L., Ahlburg, D. A., & McCall, B. P. (1999). An event history model of student departure. *Economics of Education Review, 18*(3), 375–390.
- Doctoroff, G. L., Greer, J. A., & Arnold, D. H. (2006). The relationship between social behavior and emergent literacy among preschool boys and girls. *Journal of Applied Developmental Psychology, 27*(1), 1–13.
- Doyle, W. R. (2006). Adoption of merit-based student grant programs: An event history analysis. *Educational Evaluation and Policy Analysis, 28*(3), 259–285.
- Eccles, J., Wigfield, A., Harold, R. D., & Blumenfeld, P. (1993). Age and gender differences in children's self and task perceptions during elementary school. *Child Development, 64*(3), 830–847.
- Entwisle, D. R., Alexander, K. L., & Olson, L. S. (1997). *Children, schools, and inequality*. Boulder, CO: Westview Press.
- Epps, E. G. (1995). Race, class, and educational opportunity: Trends in the sociology of education. *Sociological Forum, 10*(4), 593–608.
- Epstein, D., Elwood, J., Hey, V., & Maw, J. (1998). *Failing boys?: Issues in gender and achievement*. Buckingham, UK: Open University Press.

- Epstein, N. (1977). *Language, ethnicity and the schools: Policy alternatives for bilingual-bicultural education*. Washington, D.C.: Institute for Educational Leadership.
- Eriksson, M., Marschik, P. B., Tulviste, T., Almgren, M., Pereira, M. P., Wehberg, S., Marjanovi Umek, L., et al. (2011). Differences between girls and boys in emerging language skills: Evidence from 10 language communities. *British Journal of Developmental Psychology*.
- Estrada, P., Goldenberg, C., & Shields, P. (2011). *Reclassifying and Not reclassifying English learners as fluent English proficient*. Washington, D.C.: Institute of Education Sciences. Retrieved from <http://ies.ed.gov/funding/grantsearch/details.asp?ID=1203>
- Ezell, M. (2010, February 22). *Discrete time*. Class lecture presented in Sociology 313: Event History/Hazards/Survival Analysis. Nashville, TN: Vanderbilt University.
- Farkas, G. (1996). *Human capital or cultural capital?: Ethnicity and poverty groups in an urban school district*. Hawthorne, NY: Aldine de Gruyter.
- Fix, M. E., & Passel, J. S. (1994). *Immigration and immigrants: Setting the record straight*. Washington, D.C.: Urban Institute.
- Flores, E., Painter, G., & Pachon, H. (2009). *Que pasa? Are ELL students remaining in English learning classes too long?* Los Angeles, CA: Tomas Rivera Policy Institute.
- Flores, S. M. (2011). The school to college pipeline stories of English language learners in Texas: Persisters, newcomers and former ELLs. Working paper.
- Flores, S. M., Batlova, J., & Fix, M. (2012). *The educational trajectories of English-language learners in Texas*. Washington, D.C.: Migration Policy Institute.
- Flores, S. M., McLendon, M. K., Park, T. J., & Mavrogordato, M. (2010). Mitigating inequality or gaining a competitive advantage: Institutional adoption of “no loan programs” at private colleges and universities in the U.S. Presented at the Annual Meeting of the American Educational Research Association, Denver, CO.
- Flores, S. M., & Park, T. J. (2012). The effect of English language learner (ELL) identification on college-access outcomes: The role of time in program. Working paper.
- Fordham, S., & Ogbu, J. U. (1986). Black students’ school success: Coping with the “burden of ‘acting white’”. *The Urban Review*, 18(3), 176–206.
- Freeman, Y. S., Freeman, D. E., & Mercuri, S. P. (2002). *Closing the achievement gap: How to reach limited-formal-schooling and long-term English learners*. Portsmouth, NH: Heinemann.
- Gándara, P. (2000). In the aftermath of the storm: English learners in the post-227 era. *Bilingual Research Journal*, 24(1-2), 1–13.

- Gándara, P. C. (2012). Discussant comments. *How, When, and Why Are English Language Learners Reclassified as Fluent English Proficient? New Methods for Establishing and Examining English Language Learner Assessment, Accountability, and Equity Policies*. Presented at the Annual Meeting of the American Educational Research Association, Vancouver, Canada.
- Gándara, P. C., & Rumberger, R. W. (2006). *Resource needs for California's English learners*. Stanford, CA: Institute for Research on Education Policy & Practice.
- Gándara, P., & Contreras, F. (2009). *The Latino education crisis: The consequences of failed social policies*. Cambridge, MA: Harvard University Press.
- Gándara, P., Rumberger, R., Maxwell-Jolly, J., & Callahan, R. (2003). English learners in California schools: Unequal resources, unequal outcomes. *Education Policy Analysis Archives*, 11(36), 1–52.
- Garcia, E. E. (2005). *Teaching and learning in two languages: bilingualism & schooling in the United States*. New York: Teachers College Press.
- Gee, J. P. (1989). What is literacy? *Journal of Education*, 171(1), 18–25.
- General Accounting Office. (2001). *Public education: Meeting the needs of students with limited English proficiency* (No. GAO-01-226). Washington, D.C.: General Accounting Office. Retrieved from <http://www.gpo.gov/fdsys/pkg/GAOREPORTS-GAO-01-226/html/GAOREPORTS-GAO-01-226.htm>
- Genesee, F. (2006). *Educating English language learners: A synthesis of research evidence*. Cambridge, UK: Cambridge University Press.
- Gibson, M., & Hidalgo, N. (2009). Bridges to success in high school for migrant youth. *The Teachers College Record*, 111(3), 683–711.
- Gifford, B. R., & Valdés, G. (2006). The linguistic isolation of Hispanic students in California's public schools: The challenge of reintegration. *Yearbook of the National Society for the Study of Education*, 105(2), 125–154.
- Goldenberg, C. (2008). Teaching English language learners: What the research does-and does not-say. *American Educator*, 33(2), 42–44.
- Green, P. E. (2003). The undocumented: Educating the children of migrant workers in America. *Bilingual Research Journal*, 27(1), 51–71.
- Greene, J. P. (1998). *A meta-analysis of the Rossell and Baker review of bilingual education research*. Claremont, CA: Thomas Rivera Policy Institute.

- Grissom, J. B. (2004). Reclassification of English learners. *Education Policy Analysis Archives*, 12(36), 1–36.
- Guajardo, M. A., & Guajardo, F. J. (2004). The impact of *Brown* on the Brown of south Texas. *American Educational Research Journal*, 41(3), 501–526.
- Guzmán, B. (2001). *The Hispanic Population. Census 2000 Brief*. (No. C2KBR/01-3). Washington, D.C.: United States Census Bureau. Retrieved from <http://www.census.gov/prod/2001pubs/c2kbr01-3.pdf>
- Haider-Markel, D. P. (2001). Policy diffusion as a geographical expansion of the scope of political conflict: Same-sex marriage bans in the 1990s. *State Politics & Policy Quarterly*, 1(1), 5–26.
- Hakuta, K., Butler, G. Y., & Witt, D. (2000). *How long does it take English learners to attain proficiency?* Berkeley, CA: University of California Language Minority Research Institute.
- Hamilton, L. (2003). Assessment as a policy tool. *Review of Research in Education*, 27, 25–68.
- Hamilton, L. S., Stecher, B. M., Marsh, J. A., McCombs, J. S., Robyn, A., Russell, J. L., Naftel, S., et al. (2007). *Standards-based accountability under No Child Left Behind: Experiences of teachers and administrators in three states*. Santa Monica, CA: RAND Corporation.
- Harris, B., Plucker, J. A., Rapp, K. E., & Martínez, R. S. (2009). Identifying gifted and talented English language learners: A case study. *Journal for the Education of the Gifted*, 32(3), 368–393.
- Henig, J. R., Crowson, R. L., & Goldring, E. (2009). The politics of localism in an era of centralization, privatization, and choice. *Yearbook of the National Society for the Study of Education, The New Localism in American Education*, 108(1), 112–129.
- Herrington, C., & Fowler, F. (2003). Rethinking the role of states and educational governance. *Yearbook of the National Society for the Study of Education*, 102(1), 271–290.
- Humes, K., Jones, N. A., & Ramirez, R. R. (2011). *Overview of Race and Hispanic Origin: 2010, 2010 Census Briefs* (No. C2010BR-02). Washington, D.C.: United States Census Bureau. Retrieved from <http://www.census.gov/prod/cen2010/briefs/c2010br-02.pdf>
- Ingersoll, G. M., Scamman, J. P., & Eckerling, W. D. (1989). Geographic mobility and student achievement in an urban setting. *Educational Evaluation and Policy Analysis*, 11(2), 143.
- Inspector General. (1982). *Review of federal bilingual education programs in Texas*. Washington, D.C.: GPO.
- Institute of Education Sciences. (2006). *The condition of education* (No. NCES 2006-071). Washington, D.C.: U.S. Department of Education.

- Jennings, J. (2003). From the White House to the schoolhouse: Greater demands and new roles. *Yearbook of the National Society for the Study of Education*, 102(1), 291–309.
- Johnsen, S. (1999). What the research says about Latino gifted and talented students. *Tempo*, 19(2), 26–31.
- Kasinitz, P., Mollenkopf, J. H., Waters, M., & Holdaway, J. (2008). *Inheriting the city: The children of immigrants come of age*. New York, NY: Russell Sage Foundation.
- Kellam, S. G., Ling, X., Merisca, R., Brown, C. H., & Ialongo, N. (1998). The effect of the level of aggression in the first grade classroom on the course and malleability of aggressive behavior into middle school. *Development and Psychopathology*, 10(2), 165–185.
- Kieffer, M. J. (2008). Catching up or falling behind? Initial English proficiency, concentrated poverty, and the reading growth of language minority learners in the United States. *Journal of Educational Psychology*, 100(4), 851.
- Kim, J., & Herman, J. L. (2009). A three-state study of English learner progress. *Educational Assessment*, 14(3-4), 212–231.
- Kindler, A. L. (2002). *Survey of the states' limited English proficient students and available educational programs and services: 2000–2001 summary report*. Washington, D.C.: National Clearinghouse for English Language Acquisition and Language Instruction Educational Programs.
- Ladd, G. W., Birch, S. H., & Buhs, E. S. (1999). Children's social and scholastic lives in kindergarten: Related spheres of influence? *Child Development*, 70(6), 1373–1400.
- Ladd, G. W., & Burgess, K. B. (2001). Do relational risks and protective factors moderate the linkages between childhood aggression and early psychological and school adjustment? *Child Development*, 72(5), 1579–1601.
- Lau v. Nichols, 414 U.S. 563 (1974).
- Lee, S. J. (1994). Behind the model-minority stereotype: Voices of high-and low-achieving Asian American students. *Anthropology & Education Quarterly*, 25(4), 413–429.
- Lee, S. J. (1996). *Unraveling the "model minority" stereotypes: Listening to Asian American youth*. New York, NY: Teachers College Press.
- Linn, R. L. (2000). Assessments and accountability. *Educational researcher*, 29(2), 4-16.
- Linn, R. L. (2003). Accountability: Responsibility and reasonable expectations. *Educational Researcher*, 32(7), 3–13.

- Linn, R. L., Baker, E. L., & Betebenner, D. W. (2002). Accountability systems: Implications of requirements of the no child left behind act of 2001. *Educational Researcher*, 31(6), 3-16.
- Linquanti, R. (2001). *The redesignation dilemma: Challenges and choices in fostering meaningful accountability for English Learners* (No. 2001-1). Santa Barbara, CA: WestEd, University of California Linguistic Minority Research Institute.
- LoGerfo, L., Nichols, A., & Chaplin, D. (2006). *Gender gaps in math and reading gains during elementary and high school by race and ethnicity*. Washington, D.C.: Urban Institute. Retrieved from <http://www.urban.org/url.cfm?ID=411428>
- Lopez, L. C., & Stanton-Salazar, R. D. (2001). Mexican Americans: A second generation at risk. *Ethnicities: Children of immigrants in America* (pp. 57–90). Berkeley, CA: University of California Press.
- Macdonald, V. M., Botti, J. M., & Clark, L. H. (2007). From visibility to autonomy: Latinos and higher education in the US, 1965–2005. *Harvard Educational Review*, 77(4), 474–504.
- MacKey, W. F. (1977). *Bilingual schools for a bicultural community: Miami's adaptation to the Cuban refugees*. New York, NY: Newbury House Publishers.
- MacLeod, J. (1995). *Ain't no makin' it*. Boulder, CO: Westview.
- MacSwan, J., & Rolstad, K. (2003). Linguistic diversity, schooling, and social class: Rethinking our conception of language proficiency in language minority education. In C. B. Paulston & R. Tucker (Eds.), *Sociolinguistics: The essential readings* (pp. 329–340). Oxford, UK: Blackwell.
- Mahoney, K. S., Haladyna, T., & MacSwan, J. (2009). The need for multiple measures in reclassification decisions: A validity study of the Stanford English Language Proficiency Test. In T. G. Wiley, J. Lee, & R. Rumberger (Eds.), *The education of language minority immigrants in the United States* (pp. 240–262). Tonawanda, NY: Multilingual Matters.
- Mahoney, K. S., & MacSwan, J. (2005). Reexamining identification and reclassification of English language learners: A critical discussion for state practices. *Bilingual Research Journal*, 29(1), 31–42.
- Massey, D. S. (2007). *Categorically unequal: The American stratification system*. New York, NY: Russell Sage Foundation.
- Massey, D. S., & Capoferro, C. (2008). The geographic diversification of American immigration. In D. Massey (Ed.), *New faces in new places: The changing geography of American immigration* (pp. 25–50). New York, NY: Russell Sage Foundation.
- Mavrogordato, M. (In press). Educational equity policies and the centralization of American public education: The case of bilingual education. *Peabody Journal of Education*.

- McGuinn, P. (2006). *No Child Left Behind and the transformation of federal education policy, 1965-2005*. Lawrence, KA: University Press of Kansas.
- Menken, K., Kleyn, T., & Chae, N. (2007). *Meeting the needs of long-term English language learners in high school*. New York, NY: Research Institute for the Study of Language in Urban Society.
- Millard, A. V., Chapa, J., & Burillo, C. (2004). *Apple pie and enchiladas: Latino newcomers in the rural midwest*. Austin, TX: University of Texas Press.
- Mintrom, M. (1997). Policy entrepreneurs and the diffusion of innovation. *American Journal of Political Science*, 41(3), 738–770.
- Mokher, C. G. (2008). *Developing networks for educational collaboration: An event history analysis of the spread of statewide P-16 councils* (Doctoral dissertation). Vanderbilt University, Nashville, TN.
- Mokher, C. G., & McLendon, M. K. (2009). Uniting secondary and postsecondary education: An event history analysis of state adoption of dual enrollment policies. *American Journal of Education*, 115(2), 249–277.
- Montgomery, D. (Ed.). (2001). *Able underachievers*. London: Whurr.
- Mooney, C. Z., & Lee, M. H. (1995). Legislative morality in the American states: The case of pre-Roe abortion regulation reform. *American Journal of Political Science*, 39(3), 599–627.
- National Center for Education Statistics. (2012). Identification of rural locales. U.S. Department of Education. Retrieved from http://nces.ed.gov/ccd/rural_locales.asp
- No Child Left Behind (NCLB) Act of 2001, Pub. L. No. 107-110, § 115 (2002).
- Office of English Language Acquisition, Language Enhancement, and Academic Achievement for Limited English Proficient Students. (2008). *The Biennial Report to Congress on the Implementation of the Title III State Formula Grant Program, School Years 2004-06*. Washington, D.C.
- Ogbu, J. U., & Matute-Bianchi, M. E. (1986). Understanding sociocultural factors: Knowledge, identity, and school adjustment. In California State Department of Education, Bilingual Education Office (Ed.), *Beyond language: Social and cultural factors in schooling language minority students* (pp. 73–142). Sacramento, CA: California State University-Los Angeles, Evaluation, Dissemination and Assessment Center.
- Olsen, L. (2010). *Reparable harm: Fulfilling the unkept promise of educational opportunity for California's long term English learners* (p. 60). Long Beach, CA: Californians Together.

- Olsen, L., & Jaramillo, A. (1999). *Igniting school change for immigrant students: Portraits of three high schools*. Oakland, CA: California Tomorrow.
- Paige, R. (2006). No Child Left Behind: The ongoing movement for public education reform. *Harvard Educational Review*, 76(4), 461–473.
- Park, T. J. (2012, May). *The role of the community college in Texas: The impact of academic intensity, transfer, and working on student success* (Doctoral dissertation). Vanderbilt University, Nashville, TN.
- Parrish, T. B., Merickel, A., Perez, M., Linqunti, R., Socias, M., Spain, A., Speroni, C., et al. (2006). *Effects of the implementation of Proposition 227 on the education of English learners, K-12: Findings from a five-year evaluation* (p. 381). Washington, D.C.: American Institutes for Research.
- Phelan, P., Davidson, A. L., & Yu, H. C. (1993). Students' multiple worlds: Navigating the borders of family, peer, and school cultures. *Renegotiating cultural diversity in American schools*, 52–88.
- Pianta, R. C., & Stuhlman, M. W. (2004). Teacher-child relationships and children's success in the first years of school. *School Psychology Review*, 33(3), 444–458.
- Plyler v. Doe, 457 U.S. 202 (1982).
- Portes, A., & MacLeod, D. (1996). What shall I call myself? Hispanic identity formation in the second generation. *Ethnic and Racial Studies*, 19(4), 523–547.
- Portes, A., & Zhou, M. (1993). The new second generation: Segmented assimilation and its variants. *The annals of the American academy of political and social science*, 530(1), 74.
- Portes, Alejandro, & Rumbaut, R. G. (2001a). *Legacies: The story of the immigrant second generation*. Berkeley, CA: University of California Press.
- Portes, Alejandro, & Rumbaut, R. G. (2001b). *Ethnicities: Children of immigrants in America*. Berkeley, CA: University of California Press.
- Portes, Alejandro, & Rumbaut, R. G. (2006). *Immigrant America: A portrait* (Third ed.). Berkeley, CA: University of California Press.
- Pottinger, J. S. (1970). *Memorandum of May 25, 1970 to school districts with more than five percent national origin-minority group children*. Washington, D.C.: Department of Health, Education, and Welfare, Office for Civil Rights. Retrieved from <http://www2.ed.gov/about/offices/list/ocr/docs/lau1970.html>
- Ream, R. K. (2005a). *Uprooting children: Mobility, social capital, and Mexican American under-achievement*. New York: LFB Scholarly Publishing.

- Ream, R., & Stanton-Salazar, R. (2006). The uprooted: Student mobility and academic underachievement Among Mexican Americans. *Policy Matters*, 1(1), 1.
- Robinson, J. P. (2011). Evaluating criteria for English Learner reclassification: A causal-effects approach using a binding-score regression discontinuity design with instrumental variables. *Educational Evaluation and Policy Analysis*, 33(3), 267–292.
- Rossell, C. H. (2000). *Different questions, different answers: A critique of the Hakuta, Butler, and Witt report, "How long does it take English learners to attain proficiency?"* Washington, D.C.: Read Institute.
- Rubin, D. B., & Little, R. J. (2002). *Statistical analysis with missing data*. Hoboken, NJ: Wiley & Sons.
- Ruiz-de-Velasco, J., & Fix, M. (2000). *Overlooked and underserved: Immigrant students in U.S. secondary schools*. Washington, D.C.: Urban Institute.
- Rumbaut, R. G. (1991). Passages to America: Perspectives on the new immigration. In A. Wolfe (Ed.), *America at century's end* (pp. 208–244). Berkeley, CA: University of California Press.
- Rumbaut, R. G., & Ima, K. (1988). *The adaptation of Southeast Asian refugee youth*. Washington, D.C.: U.S. Office of Refugee Resettlement.
- Rumberger, R. W. (2003). The causes and consequences of student mobility. *The Journal of Negro Education*, 72(1), 6–21.
- San Miguel, G. (1984). Conflict and controversy in the evolution of bilingual education in the United States—An interpretation. *Social Science Quarterly*, 65(2), 505–518.
- San Miguel, G. (2004). *Contested policy: The rise and fall of federal bilingual education in the United States, 1960-2001* (Vol. 1). Denton, TX: Univ of North Texas Press.
- Sennett, R., & Cobb, J. (1972). *The hidden injuries of class*. New York, NY: Knopf.
- Serna v. Portales Municipal Schools. 499 F.2d 1147 (1974).
- Shipan, C. R., & Volden, C. (2006). Bottom-up federalism: The diffusion of antismoking policies from US cities to states. *American Journal of Political Science*, 50(4), 825–843.
- Shrestha, L. E., & Heisler, E. J. (2011). The changing demographic profile of the United States. Congressional Research Service. Retrieved from http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CEQQFjAA&url=http%3A%2F%2Fwww.fas.org%2Fsgp%2Fers%2Fmisc%2FRL32701.pdf&ei=iyAQULypA5Ko8gSK6oGoCA&usg=AFQjCNFeGYCQAYb_iAT-Yw6v8tJLI1EWIQ

- Singer, J. D., & Willett, J. B. (2003). *Applied longitudinal data analysis: Modeling change and event occurrence*. Oxford University Press, USA.
- Skrentny, J. D. (2002). *The minority rights revolution*. Cambridge, MA: Harvard University Press.
- Slavin, R. E., & Cheung, A. (2005). A synthesis of research on language of reading instruction for English language learners. *Review of Educational Research*, 75(2), 247–284.
- Slavin, R., Madden, N., Calderón, M., Chamberlain, A., & Hennessy, M. (2010). *Reading and language outcomes of a five-year randomized evaluation of transitional bilingual education*. Baltimore, MD: Success for All Foundation. Retrieved from http://www.bestevidence.org/word/bilingual_education_Apr_22_2010.pdf
- Snow, C. E., Burns, M. S., & Griffin, P. (1998). *Preventing reading difficulties in young children*. Washington, D.C.: National Academies Press.
- Sommers, C. H. (2000). *The war against boys: How misguided feminism is harming our young men*. New York, NY: Simon & Schuster.
- Soule, S. A., & Earl, J. (2001). The enactment of state-level hate crime law in the United States: Intrastate and interstate factors. *Sociological Perspectives*, 44(3), 281–305.
- Stanton-Salazar, R. D. (1997). A social capital framework for understanding the socialization of racial minority children and youths. *Harvard Educational Review*, 67(1), 1–40.
- Stanton-Salazar, R. D. (2001). *Manufacturing hope and despair: The school and kin support networks of U.S.-Mexican youth*. New York, NY: Teachers College Press.
- Stanton-Salazar, R. D., & Dornbusch, S. M. (1995). Social capital and the reproduction of inequality: Information networks among Mexican-origin high school students. *Sociology of Education*, 68(2), 116–135.
- Suárez-Orozco, C., Suarez-Orozco, M., & Todorova, I. (2008). *Learning in a new land: Immigrant students in American society*. Cambridge, MA: Harvard University Press.
- Suro, R., & Passel, J. S. (2003). *The rise of the second generation: Changing patterns in Hispanic population growth*. Washington, D.C.: Pew Hispanic Center.
- Teitelbaum, H., & Hiller, R. J. (1977). Bilingual education: The legal mandate. *Harvard Educational Review*, 47(2), 138–170.
- Telles, E. E., & Ortiz, V. (2008). *Generations of exclusion: Mexican Americans, assimilation, and race*. New York, NY: Russell Sage Foundation.

- Texas Comptroller of Public Accounts. (2001, January). Economic factors affecting cross-border transportation. Windows on State Government. Retrieved from <http://www.window.state.tx.us/specialrpt/border/sfatb1.html>
- Texas Education Agency. (2011a). Map of ESC coverage areas in Texas. Austin, TX: Texas Education Agency. Retrieved from <http://www.tea.state.tx.us/index.aspx?id=2147494810>
- Texas Education Agency. (2011b). PEIMS data standards. Retrieved from <http://ritter.tea.state.tx.us/peims/standards/weds/index.html>
- Texas Education Agency. (2011c). Texas Education Agency lonestar glossary. Texas Education Agency. Retrieved from <http://loving1.tea.state.tx.us/lonestar/Glossary.aspx>
- Texas Education Agency. (2009a). *LPAC decision-making process for the Texas assessment program: Procedural manual for the 2009-10 school year*. Austin, TX. Retrieved from <http://www.tea.state.tx.us/student.assessment/ell/archive/#lpac>
- Texas Education Agency. (2009b). *2008-09 state performance report*. Austin, TX. Retrieved from <http://ritter.tea.state.tx.us/perfreport/aeis/2009/state.html>
- Texas Education Agency. (2010). *Language proficiency assessment committee framework manual 2010-2011*. Austin, TX: Texas Education Agency.
- Texas Education Agency Student Assessment Division. (2010a). Technical Digest 2010-2011. Texas Education Agency. Retrieved from <http://www.tea.state.tx.us/student.assessment/techdigest/yr1011.aspx>
- Texas Education Agency Student Assessment Division. (2010b). *LPAC decision-making process for the Texas assessment program*. Austin, TX: Texas Education Agency.
- Texas Education Agency Student Assessment Division. (2011a). *Educator guide to TELPAS*. Austin, TX: Texas Education Agency.
- Texas Education Agency Student Assessment Division. (2011b). TAKS resources. Texas Education Agency. Retrieved from http://www.tea.state.tx.us/index3.aspx?id=948&menu_id=793
- Texas Education Code (1995). Retrieved from <http://www.statutes.legis.state.tx.us/?link=ED>
- Texas Education Code (1996). Retrieved from <http://www.statutes.legis.state.tx.us/?link=ED>
- Texas Education Code (2010). Retrieved from <http://www.statutes.legis.state.tx.us/?link=ED>
- Thompson, K. D. (2012, June). *Are we there yet? Exploring English learners' journey to reclassification and beyond* (Doctoral dissertation). Stanford University, Palo Alto, CA.

- Tong, F., Lara-Alecio, R., Irby, B. J., & Mathes, P. G. (2011). The effects of an instructional intervention on dual language development among First-grade Hispanic English-learning boys and girls: A two-year longitudinal study. *The Journal of Educational Research, 104*(2), 87–99.
- Traub, J. (2000, January 16). What no schools can do. *New York Times Magazine, 52–68, 81, 90–91*.
- Trueba, H. T. (2002). Multiple ethnic, racial and cultural identities in action: from marginality to a new cultural capital in modern society. *Journal of Latinos and Education, 1*(1), 7–28.
- Tyre, P. (2008). *The trouble with boys: A surprising report card on our sons, their problems at school, and what parents and educators must do*. New York, NY: Three Rivers Press.
- Umansky, I. (2012). Labels, languages and opportunity: Latino English language learner reclassification. Working paper.
- United States v. State of Texas, 506 F.Supp. 405 (1981).
- United States v. State of Texas, 342 F.Supp. 24 (1971).
- United States v. Texas, 572 F. Supp. 2d 726 (2008).
- Valdés, G., Fishman, J. A., Chávez, R., & Pérez, W. (2006). *Developing minority language resources: The case of Spanish in California*. Tonawanda, NY: Multilingual Matters.
- Van Hook, J., & Fix, M. (2000). A profile of the immigrant student population. In J. Ruiz-de-Velasco, M. Fix, & T. Clewell (Eds.), *Overlooked and underserved: Immigrant children in U.S. secondary schools* (pp. 9–33). Washington, D.C.: The Urban Institute Press.
- Walker, J. L. (1969). The diffusion of innovations among the American states. *The American Political Science Review, 63*(3), 880–899.
- Waters, M. C. (1994). Ethnic and racial identities of second-generation Black immigrants in New York City. *International Migration Review, 28*(4), 795–820.
- Webster-Stratton, C. (1996). Early onset conduct problems: Does gender make a difference? *Journal of Consulting and Clinical Psychology, 64*(3), 540.
- Wirt, F., & Kirst, M. (2005). *The political dynamics of American education*. Berkeley, CA: McCutchan.
- Wong, K. K., & Shen, F. X. (2002). Politics of state-led reform in education: Market competition and electoral dynamics. *Educational Policy, 16*(1), 161–192.

- Wooldridge, J. M. (2009). *Introductory econometrics: A modern approach* (4th ed.). South-Western Cengage Learning.
- Wortham, S. E. F., Murillo, E. G., & Hamann, E. T. (2002). *Education in the new Latino diaspora: Policy and the politics of identity*. Ablex Publishing Corporation.
- Yamaguchi, K. (1991). *Event history analysis*. Newberry Park, CA: Sage.
- Zehler, A., Fleischman, H., Hopstock, P., Stephenson, T., Pendzick, M., & Sapru, S. (2003). *Policy report: Summary of findings related to LEP and SPED-LEP students*. Arlington, VA: Development Associates.
- Zehler, A. M., Hopstock, P. J., Fleischman, H. L., & Greniuk, C. (1994). *An examination of assessment of limited English proficient students*. Arlington, VA: Special Issues Analysis Center Development Associates, Inc.
- Zehr, M. A. (2010). Home-Language Surveys for ELLs Under Fire. *Ed Week blog: Learning the Language*. Retrieved from http://www.edweek.org/ew/articles/2010/02/16/22homelanguage_ep.h29.html?tkn=POLFZ/Ps WLFT5/UXkwYJ2FJYWJYImD4uagUF&cmp=clp-edweek
- Zhou, M. (2001). Straddling different worlds: The acculturation of Vietnamese refugee children. In Alejandro Portes & R. G. Rumbaut (Eds.), *Ethnicities: Children of immigrants in America* (pp. 187–228). Berkeley, CA: University of California Press.
- Zúñiga, V., & Hernández-León, R. (2006). Introduction. In V. Zúñiga & R. Hernández-León (Eds.), *New destinations: Mexican immigration in the United States* (p. xi–xxix). New York: Russell Sage Foundation Publications.