

DIFFERENCES IN THE COLLEGE-READINESS RATES OF ENGLISH
LANGUAGE LEARNERS BY GENDER, ECONOMIC STATUS, AND
ETHNICITY/RACE: A TEXAS STATEWIDE, MULTIYEAR INVESTIGATION

A Dissertation

Presented to

The Faculty of the Department of Educational Leadership

Sam Houston State University

In Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

by

Clare A. Resilla

December, 2017

DIFFERENCES IN THE COLLEGE-READINESS RATES OF ENGLISH
LANGUAGE LEARNERS BY GENDER, ECONOMIC STATUS, AND
ETHNICITY/RACE: A TEXAS STATEWIDE, MULTIYEAR INVESTIGATION

by

Clare A. Resilla

APPROVED:

Dr. John R. Slate
Dissertation Chair

Dr. Frederick C. Lunenburg
Committee Member

Dr. George W. Moore
Committee Member

Dr. Wally Barnes
Committee Member

Approved:

Dr. Stacey L. Edmonson
Dean, College of Education

DEDICATION

I dedicate this dissertation first and foremost to my husband, Glenn Resilla, the wind beneath my wings, and to our boys, Chant and Chael, my constant source of motivation. It is my hope that this milestone be an inspiration to dream big and to keep moving forward. Know that the world is within reach and that the only hindrance to success is the failure to even attempt to try. I dedicate this dissertation to my mama, Amparo, and my papa, Emerito, my roots. There may have been times when I branched out too far and travelled the road less travelled by. However, I just knew that in time, these choices will make a difference. Their prayers have kept me going. I thank my sisters, Teresa and Frances, and my brother, Paul, for cheering me on. We share an unbreakable bond, and I am truly blessed. To my mother-in-law, Violeta and my father-in-law, Glenn Sr., my gratitude for helping us nurture our children. Their support made this journey easier.

I also would like to dedicate this dissertation to all English Language Learners who continue to press forward and break down societal barriers. Be the champion of dreams and continue to speak the language of truth, justice, equity, and love. Lastly, I dedicate this dissertation to the Lord God, Almighty for I am nothing with Him.

ABSTRACT

Resilla, Clare A., *Differences in the college-readiness rates of English Language Learners by gender, economic status, and ethnicity/race: A Texas statewide, multiyear investigation*. Doctor of Education (Educational Leadership), December 2017, Sam Houston State University, Huntsville, Texas.

Purpose

The purpose of this journal-ready dissertation was to determine the degree to which differences were present in reading, mathematics, and both subjects college-readiness for English Language Learners who were enrolled in Texas high schools. In the first investigation, the extent to which English Language Learner boys differ in their college-readiness from English Language Learner girls was addressed. In the second study, the degree to which college-readiness differed by the economic status of English Language Learners was ascertained. Finally, in the third investigation, the extent to which college-readiness differed by the ethnicity/race of English Language Learners was determined. In each of these three empirical investigations, eight years of Texas statewide public school data were analyzed. Through this multiyear analysis, the degree to which trends were present in college-readiness of English Language Learners as a function of their gender, economic status, and ethnicity/race was determined.

Method

A non-experimental, causal-comparative research design (Creswell, 2009) was used in this study. Analyzed were archival data from the Texas Education Agency Public Education Information Management System for the 2004-2005 through the 2010-2011 school years. Independent variables were gender, economic status, and the ethnicity/race of Texas English Language Learners and the dependent variables were the reading, mathematics, and both subjects college-readiness performance.

Findings

With respect to gender, English Language Learner girls outperformed English Language Learner boys in reading college-readiness and in both subjects college-readiness, whereas English Language Learner boys outperformed English Language Learner girls in mathematics college-readiness. Regarding economic status, English Language Learners who were economically disadvantaged had lower college-readiness in reading, mathematics, and in both subjects than English Language Learners who were not economically disadvantaged. Concerning ethnicity/race, Asian English Language Learner had higher college-readiness in all three areas than did White, Hispanic, and Black English Language Learners. Of note was that no White English Language Learners in Texas were college-ready in any of the three areas in any of the 7 school years and that low percentages of English Language Learners were college-ready. Results were consistent across the 7 years of school data that were analyzed. Implications for policy and recommendations for research were provided.

KEY WORDS: English Language Learners, College-readiness, Gender, Economically disadvantaged, Ethnicity/Race, Reading, Mathematics, Both subjects

ACKNOWLEDGEMENTS

I sincerely thank my dissertation committee: Dr. John R. Slate, Dr. Frederick C. Lunenburg, Dr. George W. Moore, and Dr. Wally Barnes. I appreciate the feedback and guidance shared with me to better my work. I would like to especially thank Dr. John R. Slate, the best dissertation chair anyone could ask for. His expertise in research is incomparable to none, and I am one of the lucky ones to have the privilege to be chosen as his mentee.

I would like to extend my appreciation to following professors who have given their unconditional support and unwavering inspiration, so I may successfully complete my doctoral program journey at Sam Houston State University: Dr. Julie P. Combs, Dr. Pamela Gray, Dr. George W. Moore, Dr. Cynthia Martinez-Garcia, and Dr. Rebecca Bustamante.

I also would like to thank my former principal, Mrs. Cheryl Davis, for working around my schedule, so I could share my research work and attend academic conferences to better my craft. I sincerely appreciate the support.

Lastly, to Cohort 34, I am forever grateful for the friendship and love. When this journey first began, we were strangers, but now we are family. To Martha, Chris, AZ, Jessica K., Jessica W, Katie, Kristy, and Jamie, thank you for the unconditional acceptance and support.

TABLE OF CONTENTS

	Page
DEDICATION.....	iii
ABSTRACT.....	iv
ACKNOWLEDGEMENTS.....	vi
TABLE OF CONTENTS.....	vii
LIST OF TABLES.....	x
CHAPTER I: INTRODUCTION.....	1
Statement of the Problem.....	15
Purpose of the Study	17
Significance of the Study	18
Definition of Terms.....	19
Literature Review Search Procedures.....	22
Delimitations.....	23
Limitations	24
Assumptions.....	24
Procedures.....	25
Organization of the Study	25
CHAPTER II: DIFFERENCES BETWEEN ENGLISH LANGUAGE LEARNER BOYS AND GIRLS IN THEIR COLLEGE-READINESS SKILLS: A TEXAS MULTIYEAR STATEWIDE ANALYSIS	27
Abstract.....	28
Method	36

Results.....	38
Discussion.....	48
Conclusion	53
References.....	54
CHAPTER III: DIFFERENCES IN COLLEGE-READINESS BY THE ECONOMIC STATUS OF ENGLISH LANGUAGE LEARNERS: A TEXAS MULTIYEAR STATEWIDE ANALYSIS	69
Abstract.....	70
Method	79
Results.....	81
Discussion.....	91
Conclusion	96
References.....	98
CHAPTER IV: DIFFERENCES IN COLLEGE-READINESS BY THE ETHNICITY/RACE OF ENGLISH LANGUAGE LEARNERS: A TEXAS MULTIYEAR STATEWIDE ANALYSIS.....	114
Abstract.....	115
Method	123
Results.....	124
Discussion.....	134
Conclusion	139
References.....	140
CHAPTER V: DISCUSSION.....	158

Conclusion	173
REFERENCES	175
APPENDIX.....	191
VITA.....	192

LIST OF TABLES

TABLE	Page
2.1 Frequencies and Percentages of Reading College-Readiness for English Language Learner Boys and Girls for the 2004-2005 Through the 2007-2008 School Years	60
2.2 Frequencies and Percentages of Reading College-Readiness for English Language Learner Boys and Girls for the 2008-2009 Through the 2010-2011 School Years	61
2.3 Frequencies and Percentages of Mathematics College-Readiness for English Language Learner Boys and Girls for the 2004-2005 Through the 2007-2008 School Years	62
2.4 Frequencies and Percentages of Mathematics College-Readiness for English Language Learner Boys and Girls for the 2008-2009 Through the 2010-2011 School Years	63
2.5 Frequencies and Percentages of Both Subjects College-Readiness for English Language Learner Boys and Girls for the 2004-2005 Through the 2007-2008 School Years	64
2.6 Frequencies and Percentages of Both Subjects College-Readiness for English Language Learner Boys and Girls for the 2008-2009 Through the 2010-2011 School Years	65
2.7 Summary of Reading College-Readiness Results of English Language Learner Boys and Girls for the 2004-2005 Through the 2010-2011 School Years	66

2.8 Summary of Mathematics College-Readiness Results of English Language Learner Boys and Girls for the 2004-2005 Through the 2010-2011 School Years	67
2.9 Summary of Both Subjects College-Readiness Results of English Language Learner Boys and Girls for the 2004-2005 Through the 2010-2011 School Years	68
3.1 Frequencies and Percentages of Reading College-Readiness by the Economic Status of English Language Learners for the 2004-2005 Through the 2007-2008 School Years	105
3.2 Frequencies and Percentages of Reading College-Readiness by the Economic Status of English Language Learners for the 2008-2009 Through the 2010-2011 School Years	106
3.3 Frequencies and Percentages of Mathematics College-Readiness by the Economic Status of English Language Learners for the 2004-2005 Through 2007-2008 School Years.....	107
3.4 Frequencies and Percentages of Mathematics College-Readiness by the Economic Status of English Language Learners for the 2008-2009 Through the 2010-2011 School Years.....	108
3.5 Frequencies and Percentages of Both Subjects College-Readiness by the Economic Status of English Language Learners for the 2004-2005 Through the 2007-2008 School Years.....	109

3.6 Frequencies and Percentages of Both Subjects College-Readiness by the Economic Status of English Language Learners for the 2008-2009 Through the 2010-2011 School Years.....	110
3.7 Summary of Reading College-Readiness Results by the Economic Status of English Language Learners for the 2004-2005 Through the 2010-2011 School Years	111
3.8 Summary of Mathematics College-Readiness Results by the Economic Status of English Language Learners for the 2004-2005 Through the 2010-2011 School Years.....	112
3.9 Summary of Both Subjects College-Readiness Results by the Economic Status of English Language Learners for the 2004-2005 Through the 2010-2011 School Years.....	113
4.1 Frequencies and Percentages of Reading College-Readiness for English Language Learners by Their Ethnicity/Race for the 2004-2005 Through the 2006-2007 School Years.....	146
4.2 Frequencies and Percentages of Reading College-Readiness for English Language Learners by Their Ethnicity/Race for the 2007-2008 Through the 2009-2010 School Years.....	147
4.3 Frequencies and Percentages of Reading College-Readiness for English Language Learners by Their Ethnicity/Race for the 2010-2011 School Year.....	148
4.4 Frequencies and Percentages of Mathematics College-Readiness for English Language Learners by Their Ethnicity/Race for the 2004-2005 Through the 2006-2007 School Years.....	149

4.5 Frequencies and Percentages of Mathematics College-Readiness for English Language Learners by Their Ethnicity/Race for the 2007-2008 Through the 2009-2010 School Years.....	150
4.6 Frequencies and Percentages of Mathematics College-Readiness for English Language Learners by Their Ethnicity/Race for the 2010-2011 School Year.....	151
4.7 Frequencies and Percentages of Both Subjects College-Readiness for English Language Learners by Their Ethnicity/Race for the 2004-2005 Through the 2006-2007 School Years.....	152
4.8 Frequencies and Percentages of Both Subjects College-Readiness for English Language Learners by Their Ethnicity/Race for the 2007-2008 Through the 2009-2010 School Years.....	153
4.9 Frequencies and Percentages of Both Subjects College-Readiness for English Language Learners by Their Ethnicity/Race for the 2010-2011 School Year.....	154
4.10 Summary of Reading College-Readiness Results of English Language Learners by Their Ethnicity/Race for the 2004-2005 Through the 2010-2011 School Years	155
4.11 Summary of Mathematics College-Readiness Results of English Language Learners by Their Ethnicity/Race for the 2004-2005 Through the 2010-2011 School Years	156
4.12 Summary of Both Subjects College-Readiness Results of English Language Learners by Their Ethnicity/Race for the 2004-2005 Through the 2010-2011 School Years	157

5.1 Summary of Reading College-Readiness Results of English Language Learner	
Boys and Girls for the 2004-2005 Through the 2010-2011 School Years	159
5.2 Summary of Mathematics College-Readiness Results of English Language	
Learner Boys and Girls for the 2004-2005 Through the 2010-2011	
School Years	160
5.3 Summary of Both Subjects College-Readiness Results of English Language	
Learner Boys and Girls for the 2004-2005 Through the 2010-2011	
School Years	161
5.4 Summary of Reading College-Readiness Results by the Economic Status of	
English Language Learners for the 2004-2005 Through the 2010-2011	
School Years	162
5.5 Summary of Mathematics College-Readiness Results by the Economic Status	
of English Language Learners for the 2004-2005 Through the 2010-2011	
School Years	164
5.6 Summary of Both Subjects College-Readiness Results by the Economic Status	
of English Language Learners for the 2004-2005 Through the 2010-2011	
School Years	165
5.7 Summary of Reading College-Readiness Results of English Language	
Learners by their Ethnicity/Race for the 2004-2005 Through the 2010-2011	
School Years	166
5.8 Summary of Mathematics College-Readiness Results of English Language	
Learners by their Ethnicity/Race for the 2004-2005 Through the 2010-2011	
School Years	168

5.9 Summary of Both Subjects College-Readiness Results of English Language

Learners by their Ethnicity/Race for the 2004-2005 Through the 2010-2011

School Years169

CHAPTER I

INTRODUCTION

On March 2010, the U.S. Department of Education released a publication, *A Blueprint for Reform: The Reauthorization of the Elementary and Secondary Education Act*. In the introductory statement of this journal, former-President Barack Obama (2010) asserted:

Every child in America deserves a world-class education. Today, more than ever, a world-class education is a prerequisite for success. America was once the best educated nation in the world. A generation ago, we led all nations in college completion, but today, 10 countries have passed us. It is not that their students are smarter than ours. It is that these countries are being smarter about how to educate their students. And the countries that out-educate us today will out-compete us tomorrow. (p. 2)

Former-President Obama further challenged the nation to become a global leader in college completion by the year 2020. But now, seven years after this blueprint was published and three years before the set timeline is reached, the nation is still scrambling to address the goal of the blueprint, for all high school graduates to be college and career ready. Indicated in Nation's Report Card 2016 by the National Assessment of Educational Progress is a 1% decline in the achievement level at or above proficient in mathematics from 38% to 37% and in reading from 26% to 25% between the 2013 and 2015 reports. Despite setting a clear goal for the education system of the United States for every child to be college or career ready, gaps among different student groups (e.g., ethnic/racial groups, poverty) still exist. Of interest to this journal-ready dissertation is

that English Language Learners constitute one of the subgroups of students who are trailing behind their peers.

English Language Learners' College Readiness and Gender

All 50 states in the United States were challenged to advanced educational reforms through former-President Barack Obama's program, Race to the Top (U.S. Department of Education, 2009). A specific area addressed in the Race to the Top program related to this investigation was the requirement each state needed to produce high school graduates who were college-ready and who could compete in the global workforce. In the 2012-2013 school year, the United States reached the highest high school graduation rate recorded, 81%, since the adoption of a uniform way for states to calculate graduation rates (U.S. Department of Education, 2015). Questions still remain, however, regarding whether schools across the states are merely producing high school graduates or whether they are producing high school graduates who are ready to enter and be successful in postsecondary settings. The question of whether high school graduation rates is a mere reflection of quantity rather than quality still needs to be explored.

Conley (2007) provided an operational definition of college-readiness as "the level of preparation a student needs in order to enroll and succeed—without remediation—in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program" (p. 5). Conley (2007) described college success as the ability to complete entry level courses at a level that enables the student to consider taking the subsequent course or next level course in the subject area. This concept is contradictory to the stereotypical idea of passing the freshman course but rather a college-readiness description that defines what researchers

(e.g., Conley, Aspengren, Gallagher, & Nies, 2006a, 2006b; Conley, Aspengren, Stout, & Veatch, 2006) labeled as “best practices” (Conley, 2007, p. 5) entry-level. Conley (2007) redefined college-readiness as no longer a measure of a student’s performance on the test, grade point average, and performance in college courses. Barnes, Slate, and Rojas-LeBeouf (2010), in their literature review on college-readiness, contended that “schools and school districts cannot continue to measure college-readiness solely on GPA and standardized test scores, rather students must develop college knowledge” (p. 20).

Barnes and Slate (2013) reiterated Conley’s views arguing that “postsecondary education is different from high school and college readiness is fundamentally different from high school competence” (p. 6). To address this concern, many high schools offered, and continue to offer, advanced placement courses with the assumption that students enrolled in these courses will be better prepared for college. Advanced Placement (AP) exam scores were predictors of student performance in introductory coursework in biology, chemistry, and physics (Sadler & Tai, 2007). Students who completed an AP course had an advantage over students who did not complete an AP course. However, when student economic status and prior academic achievement are controlled for, the advantages of taking an AP course are reduced by one-half.

Similarly, projected rates in middle grade and high school performance on state assessments have been used to determine students’ college-readiness rates. A study of middle grades (4-8) and high school (8-11 or 8-12) students projected rates of successfully performing on an ACT test by student demographic subgroup was conducted in Arkansas and Kentucky by Dougherty and the ACT (2014). Revealed in the study were the low percentage of projected performance rates on the Grade 8 ACT benchmark

in mathematics, reading, and science of English Language Learners and students who were enrolled in special education compared to their peers. English Language Learners had the lowest projected rates of performing successfully on an ACT test, as indicated in Grade 4 state tests aligned to Grade 8 ACT Explore scores. Not only are English Language Learners underperforming on tests to determine college-readiness, Ozuna, Saenz, Ballysing, and Yamamura (2016) uncovered a lack of strong reading and literary skills among Hispanic students. Revealed in their study was the need for literacy skills of English Language Learners to be cultivated in many different ways and in multiple languages to support college-readiness. Ozuna et al. (2016) contended a need exists to cultivate co-curricular academic skills of English Language Learners to improve their college readiness.

One of the variables often analyzed with respect to children's early language development is that of gender (Rojas & Iglesias, 2013). Bornstein, Hahn, and Haynes (2004) revealed that in monolingual students, by age three, girls develop more advanced linguistic skills than boys, and by age 10 to 11, the linguistic skills advantage that girls have over boys once again becomes evident (Coates, 1993). Dentor and West (2002) documented that girls begin to perform higher in advanced reading skills than boys in Grade 1 and in Grade 3. Rathbun, West, and Germino-Hauskin (2004) further contended that at the same grade level girls perform better in deriving contextual meaning and inferences in reading than boys. Over the past several decades, numerous authors (e.g., Coates, 1993; Marks, 2008; Martinez, Slate, & Martinez-Garcia, 2014; Tianlan & Barnard-Brak, 2015) have documented that girls outperformed boys in reading. Tianlan and Barnard-Brak (2015) confirmed these findings in their investigation into gender

differences in mathematics and reading trajectories. They surmised that for reading trajectories, girls outperform boys in both the initial baseline and growth rate. In contrast, boys outperform girls in mathematics between kindergarten and Grade 3 (Husain & Millimet, 2009; LoGerfo, Nichols, & Reardon, 2006; Rathbun et al., 2004), and girls lag behind boys in mathematics during elementary school years (Robinson & Lubienski, 2011). Tianlan and Barnard-Brak (2015) theorized that despite the equal performance of boys and girls in their mathematics initial status, boys start to outperform girls in both achievement scores and in growth rate in Grade 1. Robinson and Lubienski (2011) concluded that despite encouraging findings in their study, girls continue to underperform in mathematics compared to boys, and boys continue to underperform in reading compared to girls.

According to Combs et al. (2010), gender gaps in reading and mathematics do not end in the elementary and middle school years; the gaps continue to grow in high school. Combs et al. (2010) compared college readiness in reading and mathematics between boys and girls. In their multiyear, statewide analysis, girls outperformed boys in reading whereas boys outperformed girls in mathematics during the 2005-2006 and 2006-2007 school years. Highlighted in the Combs et al. (2010) study was the lack of college readiness skills for both boys and girls where only one third of the participants were college ready.

Researchers (e.g., Hammer, Davison, Lawrence, & Miccio 2009; Uchikoshi, 2006) presented opposing views on the role of gender in English Language Learners' vocabulary and literacy skills in English and Spanish. Uchikoshi (2006) revealed English Language Learner boys had higher English language linguistic growth than English

Language Learner girls in kindergarten. This gender difference in English language acquisition was because boys associated more with native-English speaking peers and because of the emphasis of Hispanic families on the need to learn English. However, Martinez, Slate, and Martinez-Garcia (2014) validated previous research findings (Gardner & Desrochers, 1981; Sousa, 2011) that English Language Learner girls achieve a higher language proficiency level than English Language Learner boys. Similarly, Polat, Zarecky-Hodge, and Schreiber (2016) arrived at the same conclusion in their study. Using data from the National Assessment of Educational Progress to compare Grade 4 and Grade 8 national test scores in mathematics and reading, Polat et al. (2016) established that native English speaking girls had higher average scores in reading in both Grade 4 and Grade 8 followed by native English speaking boys, English Language Learner girls and, lastly, English Language Learner boys. Consequently, native English speaking boys had the higher average national mathematics scores followed by native English speaking girls, English Language Learner boys and, lastly, English Language Learner girls.

English Language Learners' College Readiness and Economic Status

The Every Student Succeeds Act (2015) and its predecessor, No Child Left Behind Act (2001), were established to ensure the United States produces graduates who will be college and career-ready. But these two federal policies have failed, as documented by numerous researchers (e.g., Barnes & Slate, 2013; Barnes et al., 2010; Conley, 2007; Greene & Winters, 2005; Kahlenberg, 2010; Symonds et al., 2011; Ravitch, 2010; Zhao, 2009, 2013). Although the United States has reached an all-time graduation rate of 81% (U.S. Department of Education, 2015), high school students “are

graduating without the knowledge, skills, and metacognitive strategies needed to be successful at postsecondary institutions” (Barnes & Slate, 2013, p. 1). Reflected in the low scores on the National Assessment of Educational Progress was the disappointing trend of adolescents in the United States who do not meet college and career readiness standards (Radcliffe & Bos, 2013). This discouraging note was echoed by Dougherty and ACT (2014):

Educators and policymakers have set a goal that all students graduate from high school ready for college and careers. As a nation, however, we are falling short of achieving this goal, particularly for students from at-risk groups. In 2013, in states with the highest percentages of students taking the ACT college readiness assessment, 41% of students from the two lowest family income categories met ACT College Readiness Benchmarks in English, 19% in mathematics, 23% in reading, and 17% in science. (p. 1514)

In 2009, the State of Texas incorporated the College and Career Readiness Standards (CCRS) through House Bill 3, §39.024 in the Texas Essential Knowledge and Skills (TEKS) in the core content areas: English language arts, mathematics, science, and social studies. In House Bill 3, §39.024 college readiness is defined “the level of preparation a student must attain in English language arts and mathematics courses to enroll and succeed, without remediation, in an entry-level general education course for credit in that same content area for a baccalaureate degree or associate degree program” (Texas Education Agency, 2009, p. VI-14). This definition is aligned to Conley’s (2007) “level of preparation a student needs in order to enroll and succeed— without remediation—in a credit-bearing general education course at a postsecondary institution

that offers a baccalaureate degree or transfer to a baccalaureate program” (p. 5). In 2013, college and postsecondary readiness was integrated in the new Texas accountability system under Index 4. The Index 4 performance indicator “emphasize the importance for students to receive a high school diploma that provides them with the foundation necessary for success in college, the workforce, job training programs, or the military” (Texas Education Agency, 2017, p. 3).

However, for underrepresented populations, college readiness is conceptualized only in these three elements: college preparation, college awareness, and college eligibility (Baker, Clay, & Gratama, 2005). Welton and Williams (2015) argued that students who attend high poverty and high minority schools were “less likely to matriculate to any form of postsecondary education, particularly four-year universities” and are “admitted and enroll in prestigious state flagship institutions at lower rates” (p. 183) in comparison to predominantly White students and students from affluent high schools. Similarly, Leonhardt (2004) cited that 40% of freshmen in the 42 most selective universities come from households earning more than \$100,000, yet nationally, fewer than 20% of families are in this household income bracket.

Colgren and Sappington (2015) reinforced this educational socio-economic disparity contending that public schools are continually challenged by racial/ethnic divides and by the effects of poverty. Edmonds (1979), one of the first researchers who theorized the challenges confronted by schools in educating students in poverty, commented:

Inequity in American education derives first and foremost from our failure to educate the children of the poor. Education in this context refers to early

acquisition of those basic school skills that assure pupils successful access to the next level of schooling. If that seems too modest of a standard, note that as of now the schools that teach the children of the poor are dismal failures even by such a modest standard. (p. 15)

Researchers (e.g., College Board, 2011; Lee & Slate, 2014) previously established the presence of relationships between economic status and academic achievement. Lee and Slate (2014) documented that statistically significant differences were present in the Advanced Achievement standards between students in poverty from their more advantaged peers. Lee and Slate (2014) contended that students who were economically disadvantaged were not college-ready. Similarly, in 2011, the College Board described that students in the upper income brackets, whose family income ranged \$100,000 and higher, had SAT Verbal and Mathematics composite scores ranging from 1065 to 1154 and in contrast, students whose family income ranged \$40,000 or less, scored between 896-944. Reflected in these scores was a disparity of 169-210 points between students from high-income families and students from low-income families (College Board, 2011). According to Kirp (2013), established in the data from the National Center for Education Statistics was an increase of students in poverty from 17% to 21% between 2007 and 2011. As such, Kirp (2013) argued for the presence of aggravating effects on the intersectionality of race/ethnicity and poverty stating, “Add in the near-poor, those barely scraping by, and that figure nearly doubles. For Black and Hispanic youth, poverty is a double whammy” (p. 6).

The intersectionality of race/ethnicity and poverty, and its effect to academic achievement, is prevalent with respect to English Language Learners. Researchers (e.g.,

Maxwell, 2012; Sheng, Sheng, & Anderson, 2011) established that English Language Learners are more than likely to come from impoverished families than are their native English speaking counterparts. Keigher (2009), using the 2007-2008 Schools and Staffing Survey, established that more than 60% of English Language Learners were qualified for federal free and reduced lunch programs, and 40% of English Language Learners were children of parents who did not graduate from high school. Moreover, researchers (Darling-Hammond, 2004; De Cohen, Deterding, & Clewell, 2005; Noguera, 2011; Yeakey, 2012) documented that English Language Learners are enrolled in schools which are primarily located in urban areas and are classified as poor.

For English Language Learners, poverty is not the only factor that influences their academic achievement. Their limited proficiency in the English language increases their risk of dropping out of school and negatively influences their academic achievement (Abedi, 2004; Genesse, Lindholm-Leary, Saunders, & Christian, 2005; Maxwell, 2012, The Course Crafters Guide to the K-12 ELL Market, 2012). English Language Learners continue to perform below their native English-speaking peers in reading and mathematics test scores (Ardasheva, Tretter, & Kinny, 2012; Fry & Pew, 2008; Intercultural Development Research, 2015; National Center for Public Policy and Higher Education, 2005). In Texas, achievement gaps between English Language Learners and native English-speakers have been consistent, whereby English Language Learners perform below average in the State of Texas Assessment of Academic Readiness in Reading and Mathematics college readiness rates (Rodriguez & Slate, 2015), and are likely to be retained in middle and high school (Intercultural Development, 2015).

In two separate studies conducted by Haas, Huang, Tran, Yu, and Regional Educational Laboratory West (2016a, 2016b) on the achievement progress of English Language Learners in two states, Nevada and Utah, differences were present in the cumulative passing rates on the reading mathematics content tests between English Language Learners who were eligible for the free and reduced school lunch program from English Language Learners who were not eligible for the free and reduced school lunch program. In both studies in Nevada (Haas et al., 2016a) and in Utah (Haas et al., 2016b), English Language Learners who were eligible for the free and reduced school lunch program performed lower than their counterparts who were not eligible for that program. In determining English language proficiency, English Language Learners who were eligible for the free and reduced school lunch program in Utah had lower cumulative reclassification rates than their peers who did not qualify for free and reduced school lunch program. Similarly, in the same study in Nevada, English Language Learners who were eligible for the free and reduced school lunch program had a lower reclassification rate as fluent English proficient than their peers who were not eligible for the free and reduced school lunch program.

English Language Learners' College Readiness and Ethnicity/Race

Public schools in the United States are required to provide a higher and more rigorous level of education to students in this era of informational-based economy (Colgren & Sappington, 2015). Kirsch, Braun, Yamamoto, and ETS (2007) asserted that the nation is in the midst of a perfect storm initiated by three forces: (a) disproportion of literacy and numeracy, (b) economic restructuring, and (c) demographic changes. Kirsch et al. (2007) stated:

Put crudely, over the next 25 years or so, as better-educated individuals leave the workforce they will be replaced by those who, on average, have lower levels of education and skill. Over this same period, nearly half of the projected job growth will be concentrated in occupations associated with higher education and skill levels. This means that tens of millions more of our students and adults will be less able to qualify for higher paying jobs. Instead, they will be competing not only with each other and millions of newly arrived immigrants but also with equally (or better) skilled workers in lower-wage economies around the world. (p. 4)

Kirsch et al. (2007) further contended that if educational skills continue to decrease and existing gaps continue to widen, economic opportunities will not improve in key sectors of the United States.

As the current national labor force necessitate employees who have both the academic and technical skills to serve in both high and middle-skills jobs (Carnevale, Smith, & Strohl, 2010), the Organization for Economic Cooperation and Development (2016) noted that employers have difficulty finding employees who are able to fill these jobs. As the United States responds to the critical need to produce globally competitive work force, the federal government has taken initiatives such as the No Child Left Behind Act (2001) and the Every Student Succeeds Act (2015) to ensure that public schools are preparing students to be college and career ready. According to Mishkind and the American Institutes for Research (2014), the definition of college and career readiness gathered from 36 states and the District of Columbia summed up as a “multifaceted,

encompassing academic readiness, as well as knowledge, abilities, and dispositions that impact academic achievement” (p. 6).

The State of Texas has defined college readiness as meeting Index 4 in the new Texas accountability system wherein “the importance for students to receive a high school diploma that provides them with the foundation necessary for success in college, the workforce, job training programs, or the military” (Texas Education Agency, 2017, p. 3) is emphasized. Although the U.S. Department of Education (2015) reported that the United States had reached the highest high school graduation rate at 81%, “achievement equity is not currently a reality in American public schooling” (Colgren & Sappington, 2015, p. 26). Researchers (Capraro et al., 2009; Coley, 2003; Guglielmi, 2012; Kieffer, 2011; Lee, 2002; Lubienski & Lubienski, 2006; Polat, Zarecky-Hodge, & Schreiber, 2016; Sanderson & Harrington, 2005) have contended that the No Child Left Behind Act (2001) failed to close the achievement gaps among students in the United States. Holme, Richards, Jimerson, and Cohen (2010) maintained that Black students, Hispanic students, and English Language Learners were negatively influenced by the pressures imposed by high-stakes exit testing involved in the No Child Left Behind and Every Student Succeed Acts federal legislation. Holme et al. (2010) contended that the high-stakes testing was related to increased dropout rates in high poverty urban schools. Harvey (2013) established that in examining the college readiness gaps by race/ethnicity in Texas public schools, the college-readiness rates of White and Asian students were statistically significantly higher than were the college readiness rates of Hispanic and Black students. Similarly, Barnes and Slate (2014) documented that the college-readiness rates of Hispanic and Black students in reading, mathematics, and both subjects were statistically

significantly lower than the college-readiness rates in reading, mathematics, and both subjects of White students. Harvey, Slate, Moore, Barnes, and Martinez-Garcia (2013) established the presence of a stair-step effect on ACT scores: Asian students scored the highest, trailed by White students, Hispanic students, and finally by Black students.

To substantiate existence of achievement gaps in Hispanic students among their peers, Capraro, Young, Lewis, Yetkiner, and Woods (2009) documented in a study of Grade 9 and Grade 10 students in Colorado on two mathematics assessment, White and Asian students continued to outperform Hispanic students. Similarly, Sánchez, Ehrlich, Midouhas, and O'Dwyer (2009) established that Hispanic students performed lower than non-Hispanic students on the Massachusetts Comprehensive Assessment System Mathematics and English Language Arts test. Simon et al. (2011) uncovered a constant achievement gap and underperformance of Hispanic students among other ethnic/racial groups as noted in the following: (a) In 2008, the dropout rate of Hispanic students were two and a half times higher than White students and twice as likely as Black students; (b) In 2007, the number of Hispanic students graduating in high school was 6 out of 10 in comparison to White students 8 out of 10 graduation rate; (c) In 2010, Hispanic students who took Advanced Placement courses were 2 out of every 10 students; (d) In 2010, Hispanic students SAT scores in reading, writing, and mathematics were lower than the SAT scores of White students; (e) In 2010, Hispanic students ACT scores were two points lower than national average and three points lower than White peers in reading and mathematics; and (f) In 2010, Hispanic students who met readiness standards in reading and mathematics on the ACT exam was less than 50%. The National Center for

Education Statistics (2016) revealed that 69% of White students earned a Baccalaureate degree in comparison to only 11% of Hispanic students.

The United States Census Bureau (2016) reported an increase of 35.5% enrollment of Hispanic students within a 10-year period from the year 2005 to 2015. These data supported a past report by the U.S. Census Bureau (2008) on the projected increase of the number of Hispanic school-age population at 13.8 million in 2010 and to 20.1 million by 2025. Davis and Bauman (2013) cited an increase in the number of Hispanic students and a decrease in the White student population. Fry (2008) determined that a large number of Hispanic students were English Language Learners. However, achievement gaps are not only attributed to ethnicity/race, but other factors such as “English language proficiency, immigration status, acculturation challenges, racism, and socioeconomic factors” (Cook, Pérusse, & Rojas, 2015, p. 3) also influence academic performance. Bustamante et al. (2010) established that a low number of English Language Learners and other students who were enrolled in special education were college ready as indicated in their performance in the 2006-2007 and 2007-2008 school years on the Texas Assessment of Knowledge and Skills Reading and Mathematics test.

Statement of the Problem

The Every Student Succeeds Act of 2015 and its predecessor, the No Child Left Behind Act of 2001, were established to close achievement gaps between students who were disadvantaged and their peers. Additional monies to address the needs of English Language Learners and immigrant students were provided to schools and school districts through Title III funds. However, noticeable achievement gaps between the performance of English Language Learners and their English speaking counterparts have been

documented by the U.S. Department of Education Office of English Language Acquisition. Present in this report were the high rates of non-English Language Learners participation in AP classes at a rate of 2.5 times higher than English Language Learners. Similarly, non-English Language Learners had a 3.5 times higher participation rate than English Language Learners in the Gifted and Talented Education program. In the 2011-2012 school year on graduation rates by ethnicity/race, English Language Learners had the lowest percentage, 59%, whereas the national average was 80% (Stetser & Stillwell, 2014).

The English Language Proficiency Standards were adopted on December 25, 2007 under the Texas Education Code to ensure the linguistic and academic success of the English Language Learners in the state of Texas. Instituted in the English Language Proficiency Standards guidelines:

English Language Learners must acquire both social and academic language proficiency in English. Social language proficiency in English consists of the English needed for daily social interactions. Academic language proficiency consists of the English needed to think critically, understand and learn new concepts, process complex academic material, and interact and communicate in English academic settings. (Texas Education Code, Chapter 74, 2007)

However, achievement gaps between English Language Learners and native English speakers on college readiness in reading and in mathematics on the State of Texas Assessments of Academic Readiness tests have been consistent (Rodriguez & Slate, 2015). The English Language Proficiency Standards were established as guidelines for school districts to:

provide instruction in the knowledge and skills of the foundation and enrichment curriculum in a manner that is linguistically accommodated (communicated, sequenced, and scaffolded) commensurate with the student's levels of English language proficiency to ensure that the student learns the knowledge and skills in the required curriculum. (Texas Education Code, Chapter 89, 2012)

However, the Intercultural Development Research Association (2015) documented that, in Texas, one of the lowest performing subgroups was English Language Learners. The Texas Commissioner on Higher Education, Raymund Paredes (2016), during the Joint Interim Hearing of the Senate Public Education and Higher Education Committees stated that in 2006, Texas lead the nation in mandating College and Career Readiness Standards. However, despite the claim of Texas leaders that Texas leads the nation in addressing college and career readiness standards, only 20 of 100 Grade 8 students, 14 of 100 Grade 8 Hispanic, and 13 of 100 Grade 8 Black students completed a postsecondary credential within 11 years (Paredes, 2016).

Purpose of the Study

The purpose of this journal-ready dissertation was to determine the degree to which differences were present in reading, mathematics, and both subjects college-readiness for English Language Learners who were enrolled in Texas high schools. In the first investigation, the extent to which English Language Learner boys differ in their college-readiness from English Language Learner girls was addressed. In the second study, the degree to which college-readiness differed by the economic status of English Language Learners was ascertained. Finally, in the third investigation, the extent to which college-readiness differed by the ethnicity/race of English Language Learners was

determined. In each of these three empirical investigations, eight years of Texas statewide public school data were analyzed. Through this multiyear analysis, the degree to which trends were present in college-readiness of English Language Learners as a function of their gender, economic status, and ethnicity/race was determined.

Significance of the Study

Many researchers (e.g., Dougherty & ACT, 2014; O'Conner, Abedi, Tung, & Regional Educational Laboratory Mid-Atlantic, 2012; Polat, Zarecky-Hodge, & Schreiber, 2016; Rodriguez & Slate, 2015; Rojas-LeBouef, 2010; Stetser & Stillwell, 2014) have investigated differences in academic performance between English Language Learners and their native English speaking counterparts. To date, however, few researchers have examined the college-readiness rates as a function of the gender, economic status, or ethnicity/race of English Language Learners. In this multiyear analysis, the degree to which English Language Learner boys and girls might have different college-readiness skills was addressed. Similarly analyzed was the extent to which the economic status and the ethnicity/race of English Language Learners were related to their college-readiness. As such, provided in this study will be informative data which educational leaders and policymakers can utilize in addressing the college-readiness skills of English Language Learners by their demographic characteristics. These findings can become an impetus for discussion on current educational practices and opportunities afforded to English Language Learners. Given the importance of the Texas state academic accountability ratings and Title III program, the academic performance rates of English Language Learners are closely examined not only in terms of student achievement and student progress but as well as in terms of postsecondary

readiness. Furthermore, discussions on the differentiation of instruction to English Language Learners as a function of gender, economic status, and ethnicity/race are not currently discussed, and there is a need to consider exploring ways to bridge existing academic gaps.

Definition of Terms

The following terms, used in this study, are defined to assist the reader in understanding the context of this investigation.

College Readiness

In this study, college readiness is defined as meeting or exceeding the college-ready criteria on reading and mathematics in the Texas Assessment of Knowledge and Skills exit level test, Scholastic Assessment Test (SAT) test, or American College Testing (ACT) test. All Texas high schools and school districts, as mandated by the Texas Education CODE [TEC] §39.051 (b) (13), were to report college readiness on the basis of these six indicators: (a) scores in Advanced Placement exam, (b) enrollment in dual credit course, (c) scores in SAT critical reading and math, ACT English and math, or results in Texas Assessment of Knowledge and Skills (TAKS) English/language arts (ELA) and math, (d) advanced coursework in science, math, and foreign languages, (e) scores in state college-readiness assessments, and (f) percent of college-ready graduates in each high school and district as established by the first four indicators (Texas Education Agency, 2009). Another indicator for college-readiness includes a graduate having met or exceeded the college ready criteria in (a) exit-level test on TAKS ELA and TAKS mathematics, (b) SAT critical reading and SAT mathematics, or (c) ACT English and ACT mathematics (Texas Education Agency, 2009). Readers are directed to the Texas

Education Agency's website for specific college-readiness score requirements at <http://tea.state.tx.us>

Economically Disadvantaged

In this study, economically disadvantaged is a term used refer to students who are eligible for the Title I federal free and reduced lunch program in schools. This term is also associated with the word poverty. Burney and Beilke (2008) further explained that:

The Free and Reduced Price Lunch program is frequently used as a proxy indicator of poverty. Children whose families have an income of 130% or less of the Federal poverty guideline can receive free meals at school, and those whose families have incomes from 131% to 185% of the poverty guideline are eligible for reduced-price meals. (p. 297)

English Language Learner

In this study, an English Language Learner is used to describe students identified as having limited English proficiency, or English Language Learner, by the Language Proficiency Assessment Committee according to criteria established in the Texas Administrative Code (Texas Education Agency, Glossary for the Texas Academic Performance Report, 2012, p. 10).

Ethnicity/Race

In October 2007, the United States Department of Education, issued their final guidance to educational institutions on the adoption of new federal standards for collecting and reporting ethnicity and race data for students and staff (Federal Register, 2007). Ethnicity and race are collected separately using a specific two-part question, presented in a specific order as required by the United States Department of Education.

In the 2009- 2010 school year, a new federal standard for the collection of ethnicity and race information was implemented by Texas Education Agency. For this study, reading and mathematics college-readiness rate from the English Language Learner ethnic/racial groups (i.e., Asian, White, Hispanic, and Black) will be analyzed.

Index 4

Index 4 is a school and district performance indicator integrated in the new Texas accountability system in 2013 in which college and postsecondary readiness were addressed. The Index 4 performance indicator “emphasize the importance for students to receive a high school diploma that provides them with the foundation necessary for success in college, the workforce, job training programs, or the military” (Texas Education Agency, 2017, p. 3). As defined in the Texas Education Agency Accountability Manual (2015), the components of the evaluation of Index 4 “is based on all four of the following components or solely on the STAAR postsecondary readiness standard component when any of the three non-STAAR components are unavailable. For districts, high school campuses, and campuses serving grades K–12, the four components of Index 4 are equally weighted” (p. 47). The components for Index 4 accountability indicators are: (a) STAAR postsecondary readiness standards, (b) graduation rate, (c) graduation plan (recommended high school program or distinguished achievement 25% program (rhsp/dap) rate, and (d) postsecondary component: college and career readiness (Texas Education Agency Accountability Manual, 2015, p. 47).

Public Education Information Management System

The Public Education Information Management System is a compilation of detailed demographic student data utilized in monitoring and tracking student

achievement by the Texas Education Agency. Data on public education including “student demographic and academic performance, personnel, financial, and organizational information” (Public Education Information Management System - Overview, 2017, para. 1) received and requested by the Texas Education Agency are collected using the Public Education Information Management System. The Texas Education Agency and the Texas state legislature with the assistance of Public Education Information Management System data conduct legal review and functional oversight of public education in Texas (Public Education Information Management System – Overview, 2017).

Texas Assessment of Knowledge and Skills (TAKS)

The Texas Assessment of Knowledge and Skills assessments are “criterion-referenced achievement tests 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” (Texas Education Agency, 2011, para. 87).

Texas Education Agency

The Texas Education Agency is the agency that oversees public education to more than 5 million students in the state of Texas (Texas Education Agency, 2017, para. 1). The Texas Education Agency’s mission statement is to “improve outcomes for all public school students in the state by providing leadership, guidance, and support to school systems” (Texas Education Agency, 2017, para. 2).

Literature Review Search Procedures

For the purpose of this journal-ready dissertation, literature regarding English Language Learners, gender, economic status, and ethnicity/race, and the relationship of

these variables to college-readiness rates in reading and mathematics was examined. In the search for relevant literature, the phrases utilized were: *college-readiness*, *English Language Learners*, *gender*, *economically disadvantaged*, and *ethnicity/race*. All searches were conducted through the EBSCO Host database for academic journals containing scholarly peer-reviewed articles.

Key word searches for “college-readiness” yielded 8,429 results, and by narrowing the search to include “English Language Learners”, the search was reduced to 755 articles from 2000 to 2016. When the key word “gender” was used, 322 articles were retrieved. Consequently, when the key word “gender” was replaced by “economically disadvantaged” and “ethnicity/race”, this search respectively yielded 27 and 5 articles. Also reviewed were relevant articles pertaining to English Language Learners and college-readiness rates.

Delimitations

In this journal-ready dissertation, the three studies are delimited to English Language Learners who completed the Texas Assessment of Knowledge and Skills Reading/English Language Arts and Mathematics exams in the 2004-2005 through the 2010-2011 school years. Only quantitative data on reading, mathematics, and both subjects college-readiness that were present in the Texas Education Agency Public Education Information Management System were analyzed in this journal-ready dissertation. Specifically examined in this journal-ready dissertation was the extent to which differences were present in reading, mathematics, and both subjects college-readiness of English Language Learners as a function of their gender, economic status and ethnicity/race for seven consecutive school years, 2004-2005 to 2010-2011. The

only data that were analyzed in this journal-ready dissertation was on English Language Learners.

Limitations

For the purpose of this journal-ready dissertation, only quantitative data on the college-readiness of Texas English Language Learners as reported in the Texas Education Agency Public Education Information Management System were analyzed. The second limitation was that only data associated to Texas English Language Learners were analyzed; thus, the degree to which results from this journal-ready dissertation are generalizable to English Language Learners in other states is unknown. The third limitation of this study was that the State of Texas has updated their definition of what constitutes college-readiness. As such, the generalizability of the results of this study to the current college-readiness definition in Texas is not known.

Assumptions

For the purpose of this journal-ready dissertation, the assumption was made that the college-readiness data in the Texas Education Agency Public Education Information Management System were reported accurately by each school campus and by each school district. Furthermore, a second assumption was made that student demographic data (i.e., English Language Learner status, gender, economic status, and race/ethnicity) were correctly recorded in the Public Education Information Management System. The degree to which errors were present in the dataset provided by the Texas Education Agency Public Education Information Management System may adversely influence the results of this multiyear, empirical statewide investigation.

Procedures

An application was submitted to the Sam Houston State University's Institutional Review Board following approval of this journal-ready dissertation by the researcher's dissertation committee. Upon receipt of an approval letter from the Sam Houston State University Institutional Review Board, archival data for seven consecutive school years, 2004-2005 to 2010-2011, for English Language Learners in Texas public schools were then analyzed. These data had previously been obtained from the Texas Education Agency Public Education Information Management System through submission and fulfillment of a Public Information Request.

Organization of the Study

In this journal-ready dissertation, three research investigations are present. The first article focused on the degree to which differences were present in college-readiness between English Language Learner boys and English Language Learner girls. Addressed in the second article was the extent to which differences existed in college-readiness of English Language Learners as a function of their economic status (i.e., economically disadvantaged or not economically disadvantaged). In the third article, the degree to which differences were present in the college-readiness of English Language Learners as a function their ethnicity/race (i.e., Asian, Black, Hispanic, and White) was addressed.

Five chapters comprise this journal-ready dissertation. Chapter I includes the background of the study, statement of the problem, purpose of the study, significance of the study, definition of terms, delimitations, limitations, assumptions, and organization of this journal-ready dissertation. Chapter II is comprised of information relevant to the first research article. Chapter III is a discussion of the second empirical study. Chapter IV

contains information relevant to the third research investigation. Finally, included in Chapter V are discussions of the research results from the three investigations, implications for educational policies and practices, and recommendations for future research on English Language Learners college-readiness.

CHAPTER II

DIFFERENCES BETWEEN ENGLISH LANGUAGE LEARNER BOYS AND GIRLS IN THEIR COLLEGE-READINESS SKILLS: A TEXAS MULTIYEAR STATEWIDE ANALYSIS

This dissertation follows the style and format of *Research in the Schools (RITS)*.

Abstract

Examined in this study were the reading, mathematics, and both subjects college-readiness of English Language Learner boys and girls in the 2004-2005 through the 2010-2011 school years. Archival data were analyzed from the Texas Education Agency Public Education Information Management. Inferential statistical analyses revealed that English Language Learner girls had statistically significantly higher reading and both subjects college-readiness than English Language Learner boys. English Language Learner boys had statistically significantly higher mathematics college-readiness than English Language Learner girls. Of note in this investigation were the very low percentages of both English Language Learner boys and girls who were college-ready. Implications of these results and recommendations for future research are provided.

Keywords: English Language Learners, College-Readiness, Reading, Mathematics, Both Subjects, Gender

DIFFERENCES BETWEEN ENGLISH LANGUAGE LEARNER BOYS AND GIRLS
IN THEIR COLLEGE-READINESS SKILLS: A TEXAS MULTIYEAR STATEWIDE
ANALYSIS

All 50 states in the United States were challenged to advanced educational reforms through former-President Barack Obama's program, Race to the Top (U.S. Department of Education, 2009). A specific area addressed in the Race to the Top program related to this investigation was the requirement each state needed to produce high school graduates who were college-ready and who could compete in the global workforce. In the 2012-2013 school year, the United States reached the highest high school graduation rate recorded, 81%, since the adoption of a uniform way for states to calculate graduation rates (U.S. Department of Education, 2015). However, questions still remain regarding whether schools across the states are merely producing high school graduates or whether they are producing high school graduates who are ready to enter and be successful in postsecondary settings. The question on whether the high school graduation rates is a mere reflection of quantity instead of quality still needs to be explored.

Conley (2007) provided an operational definition of college-readiness as "the level of preparation a student needs in order to enroll and succeed—without remediation—in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program" (p. 5). Conley (2007) described college success as the ability to complete entry level courses at a level that enables the student to consider taking the subsequent course or next level course in the subject area. This concept is contradictory to the stereotypical idea of passing the

freshman course but rather a college-readiness description that defines what researchers (e.g., Conley, Aspengren, Gallagher, & Nies, 2006a, 2006b; Conley, Aspengren, Stout, & Veatch, 2006) labeled as “best practices” (Conley, 2007, p. 5) entry-level. Conley (2007) redefined college-readiness as no longer a measure of a student’s performance on the test, grade point average, and performance in college courses. Barnes, Slate, and Rojas-LeBeouf (2010), in their literature review on college-readiness, contended that “schools and school districts cannot continue to measure college-readiness solely on GPA and standardized test scores, rather students must develop college knowledge” (p. 20).

Barnes and Slate (2013) reiterated Conley’s views arguing that “postsecondary education is different from high school and college readiness is fundamentally different from high school competence” (p. 6). To address this concern, many high schools offered, and continue to offer, advanced placement courses with the assumption that students enrolled in these courses will be better prepared for college. Advanced Placement (AP) exam scores were predictors of student performance in introductory coursework in biology, chemistry, and physics (Sadler & Tai, 2007). Students who completed an AP course had an advantage over students who did not complete an AP course. However, when student economic status and prior academic achievement are controlled for, the advantages of taking an AP course are reduced by one-half.

Similarly, projected rates in middle grade and high school performance on state assessments have been used to determine students’ college-readiness rates. A study of middle grades (4-8) and high school (8-11 or 8-12) students projected rates of successfully performing on an ACT test by student demographic subgroup was conducted in Arkansas and Kentucky by Dougherty and the ACT (2014). Revealed in the study

were the low percentage of projected performance rates on Grade 8 ACT benchmark in mathematics, reading, and science of English Language Learners and students who were enrolled in special education compared to their peers. English Language Learners had the lowest projected rates of performing successfully in an ACT test, as indicated in Grade 4 state tests aligned to Grade 8 ACT Explore scores. Not only are English Language Learners underperforming on tests to determine college-readiness, Ozuna, Saenz, Ballysing, and Yamamura (2016) uncovered a lack of strong reading and literary skills among Hispanic students. Revealed in their study was the need for the literacy skills of English Language Learners to be cultivated in many different ways and in multiple languages to support college-readiness. Ozuna et al. (2016) contended a need exists to cultivate co-curricular academic skills of English Language Learners to improve their college readiness.

One of the variables often analyzed with respect to children's early language development is that of gender (Rojas & Iglesias, 2013). Bornstein, Hahn, and Haynes (2004) revealed that in monolingual students, by age three, girls develop advanced linguistic skills than boys, and by age 10 to 11, the linguistic skills advantage that girls have over boys once again becomes evident (Coates, 1993). Dentor and West (2002) documented that girls begin to perform higher in advanced reading skills than boys in Grade 1 and in Grade 3. Rathbun, West, and Germino-Hauskin (2004) further contended that at the same grade level girls perform better in deriving contextual meaning and inferences in reading than boys. Over the past several decades, numerous authors (e.g., Coates, 1993; Marks, 2008; Martinez, Slate, & Martinez-Garcia, 2014; Tianlan & Barnard-Brak, 2015) have documented that girls outperformed boys in reading. Tianlan

and Barnard-Brak (2015) confirmed these findings in their investigation into gender differences in mathematics and reading trajectories. They surmised that for reading trajectories, girls outperform boys in both the initial baseline and growth rate. In contrast, boys outperform girls in mathematics between kindergarten and Grade 3 (Husain & Millimet, 2009; LoGerfo, Nichols, & Reardon, 2006; Rathbun et al., 2004), and girls lag behind boys in mathematics during elementary school years (Robinson & Lubienski, 2011). Tianlan and Barnard-Brak (2015) theorized that despite the equal performance of boys and girls in their mathematics initial status, boys start to outperform girls in both achievement scores and in growth rate in Grade 1. Robinson and Lubienski (2011) concluded that despite encouraging findings in their study, girls continue to underperform in mathematics compared to boys, and boys continue to underperform in reading compared to girls.

According to Combs et al. (2010), gender gaps in reading and mathematics do not end in the elementary and middle school years, in fact, the gaps continue to grow in high school. Combs et al. (2010) compared college readiness in reading and mathematics between boys and girls. In their multiyear, statewide analysis, girls outperformed boys in reading whereas boys outperformed girls in mathematics during the 2005-2006 and 2006-2007 school years. Highlighted in the Combs et al. (2010) study was the lack of college readiness skills for both boys and girls where only one third of the participants were college ready.

Researchers (e.g., Hammer, Davison, Lawrence, & Miccio 2009; Uchikoshi, 2006) presented opposing views on the role of gender in English Language Learners' vocabulary and literacy skills in English and Spanish. Uchikoshi (2006) revealed English

Language Learner boys had higher English language linguistic growth than English Language Learner girls in kindergarten. This gender difference in English language acquisition occurred because English Language Learner boys associated more with native-English speaking peers and because of the emphasis of Hispanic families on the need to learn English. However, Martinez, Slate, and Martinez-Garcia (2014) validated previous research findings (Gardner & Desrochers, 1981; Sousa, 2011) that English Language Learner girls achieve a higher language proficiency level than English Language Learner boys. Similarly, Polat, Zarecky-Hodge, and Schreiber (2016) arrived at the same conclusion in their study. Using data from the National Assessment of Educational Progress to compare Grade 4 and Grade 8 national test scores in mathematics and reading, Polat et al. (2016) established that native English speaking girls had higher average scores in reading in both Grade 4 and Grade 8 followed by native English speaking boys, English Language Learner girls and, lastly, English Language Learner boys. Consequently, native English speaking boys had the higher average national mathematics score, followed by native English speaking girls, English Language Learner boys and, lastly, English Language Learner girls.

Statement of the Problem

The Every Student Succeeds Act of 2015 and its predecessor, the No Child Left Behind Act of 2001, were established to close achievement gaps between students who were disadvantaged and their peers. Additional monies were made available to address the needs of English Language Learners and immigrant students through Title III funds. However, noticeable achievement gaps between the performance of English Language Learners and their English speaking counterparts were documented by the U.S.

Department of Education Office of English Language Acquisition in the 2011-2012 school year. Present in this report were the high rates of non-English Language Learners participation in AP classes at a rate of 2.5 times higher than English Language Learners. Similarly, non-English Language Learners had a 3.5 times higher participation rate than English Language Learners in the Gifted and Talented Education program. In the 2011-2012 school year on graduation rates by ethnicity/race, English Language Learners had the lowest percentage, 59%, whereas the national average was 80% (Stetser & Stillwell, 2014). Educational gaps among student subgroups are further widened by factors such as gender (Combs et al., 2010; Gardner & Desrochers, 1981; Polat et al., 2016; Sousa, 2011). However, researchers (e.g., Barnes, Slate, & Rojas-LeBouef, 2010; Cook & Rojas, 2015; Dougherty & ACT 2014; Rodriguez & Slate, 2015) have been focused on comparisons between English Language Learners and their English speaking counterparts. Research investigations in which a focus was placed on the degree to which college-readiness skills might differ between English Language Learner boys and girls is limited.

Purpose of the Study

The purpose of this study was to determine the degree to which differences existed between English Language Learner boys and English Language Learner girls in their reading college-readiness. The second purpose of this study was to ascertain the extent to which differences were present in the mathematics college-readiness between English Language Learner boys and English Language Learner girls. Another purpose of this study was to determine the degree to which differences existed in both subjects college-readiness between English Language Learner boys and English Language

Learner girls. By investigating whether differences were present in the college-readiness of English Language Learners boys and English Language Learner girls, relevant data on their reading, mathematics, and both subjects college-readiness skills will be provided to educational leaders and policymakers. Finally the extent in which trends were present in college-readiness rates in reading, mathematics, and in both subjects was determined over 7-years for English Language Learner boys and English Language Learner girls.

Significance of the Study

A substantial number of research studies on college-readiness (e.g., Barnes, Slate, & Rojas-LeBouef, 2010; Byrd & McDonald, 2005; Conley, 2007, 2010; Davis, Slate, Moore, & Barnes, 2013; Noble & Sawyer, 2002; Radcliffe & Bos, 2013; Reid, & Moore, 2008; Sadler & Tai, 2007) have been published, however, empirical literature on the college-readiness skills of English Language Learners is limited. Moreover, research investigations on the college-readiness rates and achievement gaps between English Language Learner boys and girls are insufficient. Valuable information will be provided to educational leaders and policymakers on the achievement growth or decline of English Language Learner boys and girls specifically related to college-readiness. Discussion on current educational practices and opportunities afforded to English Language Learners and the differentiation provided for boys and for girls may be initiated from this research study. Given the importance apportioned to the Texas state academic accountability ratings and Title III program, English Language Learners ratings are closely examined not only in terms of student achievement and student progress but to close the achievement gap and improve postsecondary readiness.

Research Questions

The following research questions were addressed in this investigation: (a) What is the difference in reading college-readiness between English Language Learner boys and English Language Learner girls in Texas?; (b) What is the difference in mathematics college-readiness between English Language Learner boys and English Language Learner girls in Texas?; (c) What is the difference in both subjects college-readiness between English Language Learner boys and English Language Learner girls in Texas?; (d) What trend is present in reading college-readiness for English Language Learner boys and girls for the 2004-2005 school year through the 2010-2011 school year?; (e) What trend is present in mathematics college-readiness for English Language Learner boys and girls for the 2004-2005 school year through the 2010-2011 school year?; and (f) What trend is present in college-readiness in both subjects for English Language Learner boys and girls for the 2004-2005 school year through the 2010-2011 school year? The first three research questions were repeated for the 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009, 2009-2010, and 2010-2011 school years whereas the last three research questions constituted an analysis across all seven school years.

Method

Research Design

A non-experimental, causal-comparative research design (Creswell, 2009; Johnson & Christensen, 2014) was used in this study. Analyzed herein were archival data which represent past events (Johnson & Christensen, 2014). In this research article, the independent variable involved was student gender. For each school year (i.e., 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009, 2009-2010, and 2010-2011), the

dependent variables were the reading, mathematics, and both subjects college-readiness of English Language Learners. Data on two samples of English Language Learners were analyzed in this investigation: English Language Learner boys and English Language girls.

Participants and Instrumentation

For the purpose of this study, archival data obtained from the Texas Education Agency Public Education Information Management System were analyzed. Examined in this study were specific individual student level data obtained from the Public Education Information Management System on English Language Learner girls, English Language Learner boys, reading college-readiness, mathematics college-readiness, and both subjects college-readiness from the Public Education Information Management System. The last 7 years of available Texas statewide data were obtained: 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009, 2009-2010, and 2010-2011 school years.

Four variables were of interest in this investigation: English Language Learner gender and college-readiness in reading, mathematics, and both subjects. An English Language Learner is used to describe students identified as having limited English proficiency, or English Language Learner, by the Language Proficiency Assessment Committee according to criteria established in the Texas Administrative Code (Texas Education Agency, Glossary for the Texas Academic Performance Report, 2012, p. 10). As mandated by the Texas Education CODE [TEC] §39.051 (b) (13), all Texas high schools and school districts were to report college readiness on the basis of these six indicators: (a) scores in Advanced Placement exam, (b) enrollment in dual credit course, (c) scores in SAT critical reading and math, ACT English and math, or results in Texas

Assessment of Knowledge and Skills (TAKS) English/language arts (ELA) and math, (d) advanced coursework in science, math, and foreign languages, (e) scores in state college-readiness assessments, and (f) percent of college-ready graduates in each high school and district as established by the first four indicators (Texas Education Agency, 2009). Other than these six college-readiness indicators, another indicator for college-readiness includes a graduate having met or exceeded the college ready criteria in (a) exit-level test on TAKS ELA and TAKS mathematics, (b) SAT critical reading and SAT mathematics, or (c) ACT English and ACT mathematics (Texas Education Agency, 2009). The Texas Education Agency, in accordance with the Family Educational Rights and Privacy Act, conceals specific student performance data to avoid individual student identification.

Results

To determine the extent to which differences were present in college-readiness between English Language Learner boys and English Language Learner girls, statistical analyses for the 2004-2005 through the 2010-2011 school years were conducted. The specific inferential statistical procedure used to address the previously delineated research questions was the Pearson chi-square statistic. The Pearson chi-square was the appropriate statistical procedure to be used in this investigation because frequency data were present for the independent variable of gender. Moreover, the three dependent variables (i.e., reading college-readiness, mathematics college-readiness, and both subjects college-readiness) were dichotomous variables (i.e., were or were not college ready). Prior to calculating any Pearson chi-squares, its underlying assumptions were checked. Specifically examined were the sample size (i.e., more than five scores available per cell) and all data were independent. Given the statewide sample size that

were present, as well as the fact that each student whose data were analyzed in this investigation had one score for reading college-readiness, one score for mathematics college-readiness, and one score for both subjects college-readiness. As such, the underlying assumptions for using a Pearson chi-square procedure were met (Slate & Rojas-LeBouef, 2011).

Reading College-Readiness Results

For the 2004-2005 school year, in which the focus was placed on reading college-readiness between English Language Learner boys and English Language Learner girls, the Pearson chi-square procedure yielded a statistically significant result, $\chi^2(1) = 20.47$, $p < .001$. The effect size for this finding, Cramer's V, was below small, .06 (Cohen, 1988). As revealed in Table 2.1, less than 4% of both English Language Learner boys and English Language Learner girls were college ready in reading. The percentage of English Language Learner girls who met the reading college-readiness standard was almost one and a half times greater than for English Language Learner boys.

 Insert Table 2.1 about here

With respect to the 2005-2006 school year, the Pearson chi-square analysis resulted in a statistically significant difference in reading college-readiness, $\chi^2(1) = 22.02$, $p < .001$, between English Language Learner boys and English Language Learner girls. The effect size for this finding, Cramer's V, was below small, .05 (Cohen, 1988). For both English Language Learner boys and girls, less than 4% of them were college ready. In agreement with the previous school year, the percentage of English Language Learner

girls who were college-ready in reading was almost twice the percentage of English Language Learner boys. Revealed in Table 2.1 are the descriptive statistics for this school year.

Regarding the 2006-2007 school year, a statistically significant difference was again present in reading college-readiness between English Language Learner boys and English Language Learner girls, $\chi^2(1) = 8.66, p = .003$. The effect size for this finding, Cramer's V, was below small, .03 (Cohen, 1988). Commensurate with the previous school years, very small percentages, less than 4%, were college ready in reading. Again, English Language Learner girls had statistically significantly higher percentages of being college-ready in reading than English Language Learner boys. Table 2.1 contains the descriptive statistics for this analysis.

With respect to the 2007-2008 school year, the Pearson chi-square analysis resulted in a statistically significant difference, $\chi^2(1) = 15.33, p < .001$, between English Language Learner boys and English Language Learner girls. The effect size for this finding, Cramer's V, was below small, .05 (Cohen, 1988). Although the percentages of English Language Learner boys and girls who were college-ready in reading were slightly higher than the previous three school years, less than 7% of them were college-ready in reading. In this school year, the percentage of English Language Learner girls who were college-ready in reading was about one and a half times greater than the percentage of English Language boys who were college-ready in reading. Delineated in Table 2.1 are the descriptive statistics for this analysis.

For the 2008-2009 school year, the Pearson chi-square procedure yielded a statistically significant result, $\chi^2(1) = 8.12, p < .001$. The effect size for this finding,

Cramer's V , was below small, .03 (Cohen, 1988). As revealed in Table 2.2, less than 10% of English Language Learner boys were college ready in reading compared to a little over 10% of English Language Learner girls. The percentage of English Language Learner girls who were college-ready in reading were one third more than English Language Learner boys.

With respect to the 2009-2010 school year, the Pearson chi-square analysis resulted in a statistically significant difference in reading college-readiness, $\chi^2(1) = 25.51$, $p < .001$, between English Language Learner boys and English Language Learner girls. The effect size for this finding, Cramer's V , was below small, .05 (Cohen, 1988). For both English Language Learner boys and girls, less than 15% of them were college ready. The percentage of English Language Learner girls who were college-ready in reading was almost one and a third times more than the percentage of English Language Learner boys. Table 2.2 contains the descriptive statistics for this analysis.

 Insert Table 2.2 about here

Regarding the 2010-2011 school year, a statistically significant difference was again present in reading college-readiness between English Language Learner boys and English Language Learner girls, $\chi^2(1) = 31.39$, $p < .001$. The effect size for this finding, Cramer's V , was below small, .06 (Cohen, 1988). Commensurate with the previous school years, small percentages, less than 15%, were college ready in reading. Again, English Language Learner girls had statistically significantly higher percentages of being college-ready in reading than English Language Learner boys. The percentage of English

Language Learner girls who were college-ready in reading were almost one third more than English Language Learner boys. Delineated in Table 2.2 are the descriptive statistics for this analysis.

Mathematics College-Readiness Results

For the 2004-2005 school year, in which the focus was placed on mathematics college-readiness between English Language Learner boys and English Language Learner girls, the Pearson chi-square procedure yielded a statistically significant result, $\chi^2(1) = 11.72, p < .001$. The effect size for this finding, Cramer's V, was below small, .03 (Cohen, 1988). As revealed in Table 2.3, less than 10% of both English Language Learner boys and English Language Learner girls were college ready in mathematics. The percentage of English Language Learner boys who met the mathematics college-readiness standard was almost one and a fourth times greater than for English Language Learner girls.

 Insert Table 2.3 about here

With respect to the 2005-2006 school year, the Pearson chi-square analysis resulted in a statistically significant difference in mathematics college-readiness, $\chi^2(1) = 7.74, p < .001$, between English Language Learner boys and English Language Learner girls. The effect size for this finding, Cramer's V, was below small, .03 (Cohen, 1988). For both English Language Learner boys and girls, less than 12% of them were college ready in mathematics. The percentage of English Language Learner boys who were college-ready in mathematics was almost one and a fifth times more than the percentage

of English Language Learner girls. Table 2.3 contains the descriptive statistics for this analysis

Regarding the 2006-2007 school year, a statistically significant difference was again present in mathematics college-readiness between English Language Learner boys and English Language Learner girls, $\chi^2(1) = 2.22, p < .001$. The effect size for this finding, Cramer's V, was below small, .01 (Cohen, 1988). Commensurate with the previous school years, very small percentages, less than 12%, were college ready in mathematics. The mathematics college-readiness of English Language Learner boys was 1 percentage point higher than the mathematics college-readiness of English Language Learner girls. Revealed in Table 2.3 are the descriptive statistics for this analysis.

With respect to the 2007-2008 school year, the Pearson chi-square analysis resulted in a statistically significant difference in mathematics college-readiness, $\chi^2(1) = 15.30, p < .001$, between English Language Learner boys and English Language Learner girls. The effect size for this finding, Cramer's V, was below small, .05 (Cohen, 1988). The percentages of English Language Learner boys and girls who were college-ready in mathematics were slightly higher than the previous three school years. In this school year, the mathematics college-readiness of English Language Learner boys was almost 4 percentage points higher than the mathematics college-readiness of English Language Learner girls. Delineated in Table 2.3 are the descriptive statistics for this analysis.

For the 2008-2009 school year, the Pearson chi-square procedure yielded a statistically significant result, $\chi^2(1) = 23.70, p < .001$, between English Language Learner boys and girls in their mathematics college-readiness. The effect size for this finding, Cramer's V, was below small, .06 (Cohen, 1988). As revealed in Table 2.4, less than

25% of English Language Learner boys and girls were college ready in mathematics.

The mathematics college-readiness of English Language Learner boys was approximately 4 percentage points higher than the mathematics college-readiness of English Language Learner girls.

Insert Table 2.4 about here

Concerning the 2009-2010 school year, the Pearson chi-square analysis resulted in a statistically significant difference in mathematics college-readiness, $\chi^2(1) = 20.97, p < .001$, between English Language Learner boys and English Language Learner girls.

The effect size for this finding, Cramer's V, was below small, .05 (Cohen, 1988).

Slightly over 30% of English Language Learner boys were college ready in mathematics compared to less than 30% of English Language Learner girls. The mathematics college-readiness of English Language Learner boys was more than 4 percentage points higher than the mathematics college-readiness of English Language Learner girls. The descriptive statistics for this school year are presented in Table 2.4.

Regarding the 2010-2011 school year, a statistically significant difference was again present in mathematics college-readiness between English Language Learner boys and English Language Learner girls, $\chi^2(1) = 4.19, p < .001$. The effect size for this finding, Cramer's V, was below small, .03 (Cohen, 1988). Slightly over 30% of English Language Learner boys and girls were college ready in mathematics. The mathematics college-readiness of English Language Learner boys was slightly over 2 percentage

points higher than the mathematics college-readiness of English Language Learner girls. Delineated in Table 2.4 are the descriptive statistics for this analysis.

Both Subjects College-Readiness Results

For the 2004-2005 school year, in which the focus was placed on both subjects college-readiness between English Language Learner boys and English Language Learner girls, the Pearson chi-square procedure yielded a statistically significant result, $\chi^2(1) = 4.33, p < .001$. The effect size for this finding, Cramer's V, was below small, .02 (Cohen, 1988). As revealed in Table 2.5, less than 2% of both English Language Learner boys and English Language Learner girls were college-ready in both subjects. The percentage of English Language Learner girls who met the college-readiness standard in both subjects was almost one and a half times greater than for English Language Learner boys.

 Insert Table 2.5 about here

With respect to the 2005-2006 school year, the Pearson chi-square analysis resulted in a statistically significant difference in both subjects college-readiness, $\chi^2(1) = 5.61, p < .001$, between English Language Learner boys and English Language Learner girls. The effect size for this finding, Cramer's V, was below small, .03 (Cohen, 1988). Commensurate with the previous school year, very small percentages, less than 2%, of English Language Learner boys and girls were college-ready in both subjects. English Language Learner girls had statistically significantly higher percentages of being college-ready in both subjects than English Language Learner boys. The percentage of English

Language Learner girls who were college-ready in both subjects were almost one and a half times more than English Language Learner boys. Revealed in Table 2.5 are the descriptive statistics for this school year.

Regarding the 2006-2007 school year, a statistically significant difference was again present in both subjects college-readiness between English Language Learner boys and English Language Learner girls, $\chi^2(1) = 4.83, p < .001$. The effect size for this finding, Cramer's V, was below small, .02 (Cohen, 1988). English Language Learner girls had almost a 2% college-readiness rate in both subjects compared to less than 2% of English Language Learner boys. The percentage of English Language Learner girls who were college-ready in both subjects was almost twice the percentage of English Language Learner boys. Table 2.5 contains the descriptive statistics for this analysis.

Concerning the 2007-2008 school year, the Pearson chi-square analysis resulted in a statistically significant difference in both subjects college-readiness, $\chi^2(1) = 6.61, p < .001$, between English Language Learner boys and English Language Learner girls. The effect size for this finding, Cramer's V, was below small, .03 (Cohen, 1988). Although the percentages of English Language Learner boys and girls who were college-ready in both subjects were slightly higher than the previous three school years, less than 4% of them were college-ready in both subjects. In this school year, the percentage of English Language Learner girls who were college-ready in both subjects was about one third higher than the percentage of English Language boys who were college-ready in both subjects. Delineated in Table 2.5 are the descriptive statistics for this analysis.

For the 2008-2009 school year, the Pearson chi-square procedure yielded a statistically significant difference in both subjects college-readiness, $\chi^2(1) = 1.31, p <$

.001, between English Language Learner boys and girls. The effect size for this finding, Cramer's V , was below small, .01 (Cohen, 1988). As revealed in Table 2.6, less than 6% of English Language Learner boys and girls were college-ready in both subjects. The both subjects college-readiness of English Language Learner girls was less than 1 percentage point higher than the both subjects college-readiness of English Language Learner boys.

 Insert Table 2.6 about here

With respect to the 2009-2010 school year, the Pearson chi-square analysis resulted in a statistically significant difference in both subjects college-readiness, $\chi^2(1) = 4.43, p < .001$, between English Language Learner boys and English Language Learner girls. The effect size for this finding, Cramer's V , was below small, .02 (Cohen, 1988). For both English Language Learner boys and girls, less than 8% of them were college ready. The both subjects college-readiness of English Language Learner girls was slightly more than 1 percentage point higher than the both subjects college-readiness of English Language Learner boys. Table 2.6 contains the descriptive statistics for this school year.

Regarding the 2010-2011 school year, a statistically significant difference was again present in both subjects college-readiness between English Language Learner boys and English Language Learner girls, $\chi^2(1) = 10.02, p < .001$. The effect size for this finding, Cramer's V , was below small, .04 (Cohen, 1988). For both English Language Learner boys and girls, less than 10% of them were college-ready in both subjects. The

both subjects college-readiness of English Language Learner girls was slightly more than 2 percentage points higher than the both subjects college-readiness of English Language Learner boys. Delineated in Table 2.6 are the descriptive statistics for this analysis.

Discussion

Explored in this investigation was the extent to which differences were present in the reading, mathematics, and both subject college-readiness rates between English Language Learner boys and English Language Learner girls. Seven school years (i.e., 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009, 2009-2010, and 2010-2011) of data from the Texas Education Agency Public Education Information Management System were analyzed. Inferential statistical analyses revealed the presence of statistically significant differences in the reading, mathematics, and both subjects college-readiness rates between English Language Learner boys and girls in all seven school years. At this time, results will be summarized for each of the three college-readiness variables: reading, mathematics, and both subjects.

With respect to the reading college-readiness of English Language Learner boys and girls, English Language Learner girls outperformed English Language Learner boys in all seven school years. The reading college-readiness of English Language Learner girls ranged from 1 to 2 times higher than the reading college-readiness of English Language Learner boys. Delineated in Table 2.7 are the reading college-readiness results of English Language Learner boys and girls for the 2004-2005 through the 2010-2011 school years.

Insert Table 2.7 about here

Regarding the mathematics college-readiness of English Language Learner boys and girls, English Language Learner boys consistently outperformed English Language Learner girls in mathematics college-readiness in all seven years. The mathematics college-readiness of English Language Learner boys ranged from 1 to 4 percentage points higher than the mathematics college-readiness of English Language Learner girls. A summary of the mathematics college-readiness results of English Language Learner boys and girls for the 2004-2005 through the 2010-2011 school years is revealed in Table 2.8.

Insert Table 2.8 about here

Concerning the both subjects college-readiness of English Language Learner boys and girls, English Language Learner girls consistently had better college-readiness in both subjects than did English Language Learner boys in all seven years. Of importance for readers should be the very low percentages of both English Language Learner boys and girls who were college-ready in both subjects. Delineated in Table 2.9 is a summary of the results for the both subjects college-readiness of English Language Learner boys and girls for the 2004-2005 through the 2010-2011 school years.

Insert Table 2.9 about here

Connections with the Existing Literature

Considerable research studies (e.g., Combs et al., 2010; Gardner & Desrochers, 1981; Polat et al., 2016; Sousa, 2011) on the educational gaps between boys and girls have been conducted. In this multiyear, statewide investigation, results were congruent with the results of previous researchers (Coates, 1993; Combs et al., 2010; Husain & Millimet, 2009; LoGerfo et al., 2006; Marks, 2008; Martinez, Slate, & Martinez-Garcia, 2014; Rathbun et al., 2004; Robinson & Lubienski, 2011; Tianlan & Barnard-Brak, 2015) wherein girls outperform boys in reading and boys outperform girls in mathematics. Information provided herein adds to the existing literature due to the analyses conducted on the college-readiness of English Language Learners. Findings from this multiyear analysis concerning slow improvements in the percentage of English Language Learner boys and girls who were college-ready in reading, mathematics and both subjects are congruent to the results of previous researchers (e.g., Dougherty & ACT, 2014; Ozuna et al., 2016) who documented a need to improve the academic skills and college-readiness achievement of English Language Learners.

Implications for Policy and for Practice

Several implications for policy and practice can be made based upon the results of this multiyear, Texas statewide investigation. First, district multilingual program administrators and school leaders are urged to examine the degree and specific grade level where the academic performance gaps related to English Language Learners'

college-readiness occur. Are the academic performance gaps in reading and mathematics between English Language Learner boys and girls in the elementary, middle school, and high school similar or different? To what degree and extent are the gaps in gender per grade level different? To what extent does the academic performance difference influence college-readiness? What interventions and additional programs are provided to English Language Learners to address academic performance gap by gender? How are Title III funding resources used to address closing the academic performance gap and increase college-readiness performance of English Language Learners? By implementing multilingual program audits aligned to English Language Learners' performance, school and district administrators will be more purposeful in planning and utilizing the additional resources from the Title III funding to increase academic performance of English Language Learners and to prepare them for college.

Another implication of this study would be for Regional Support Centers who examine and create professional development materials and sessions for school districts to offer a more specific and differentiated strategies in which gaps and needs of English Language Learner boys and girls are addressed. Existing performance gaps in reading and mathematics are academic realities present for both English Language Learners and even in native English-speaking students. However, limited research practices and strategies have been designed to address this issue. The third implication of this study is for Texas Education Agency commissioners and directors to initiate discussions on research results regarding the college-readiness gaps between English Language Learners and native-English speaking students by gender. Failure of the educational community to address this reality because of the stigma of being politically correct and the fear of

gender bias have curtailed the holistic achievement growth and college-readiness skills of students regardless of gender.

Recommendations for Future Research

In this Texas statewide investigation, the college-readiness skills of English Language Learner boys and girls were examined for the 2004-2005 through the 2010-2011 school years. Given the fact that the State of Texas has updated their definition of what constitutes college-readiness, researchers are encouraged to replicate this investigation using data from the last several school years. The degree to which results delineated herein are generalizable to the current state definition of college-readiness is not known. Another recommendation for future research is to extend this study to other states. The increase of the English Language Learner student population in the United States is not limited to the State of Texas. Given that data analyses were conducted on only Texas English Language Learners college-readiness, the generalizability of findings from this investigation to English Language Learners to other states is unknown. Analyzed in this study were quantitative data; thus, a qualitative research study on the perceptions of administrators, teachers, and English Language Learners regarding college-readiness needs to be conducted. Another recommendation for future research is to replicate this study using student economic status as an independent variable. To what degree might differences be present in the college-readiness of English Language Learners by their economic status? Such information is limited. Finally, researchers are encouraged to examine the college-readiness of English Language Learners by their ethnicity/race. All English Language Learners are not Hispanic, even in Texas. The

extent to which ethnic/racial differences might be present in the college-readiness of English Language Learners is not known.

Conclusion

The purpose of this study was to ascertain the degree to which English Language Learner boys and girls differed in their college-readiness skills for the 2004-2005 through the 2010-2011 school years in Texas. Seven years of archival data from the Texas Education Agency Public Education Information Management System were analyzed. In each of the school years, English Language Learner girls outperformed English Language Learner boys in reading and in both subjects college-readiness, whereas, English Language Learner boys outperformed English Language Learner girls in mathematics college-readiness. Results of this 7-year Texas statewide investigation were congruent with previous researchers (Coates, 1993; Combs et al., 2010; Husain & Millimet, 2009; LoGerfo et al., 2006; Marks, 2008; Martinez et al., 2014; Rathbun et al., 2004; Robinson & Lubienski, 2011; Tianlan & Barnard-Brak, 2015) whereby English Language Learner girls performed better in reading and English Language Learner boys performed better in mathematics.

References

- Barnes, W., & Slate, J. R. (2013). College-readiness is not one-size-fits-all. *Current Issues in Education*, 16(1), 1-12. Retrieved from <https://cie.asu.edu/ojs/index.php/cieatasu/issue/view/23>
- Barnes, W., Slate, J. R., & Rojas-LeBouef, A. (2010). College-readiness and academic preparedness: The same concepts? *Current Issues in Education*, 13(4). Retrieved from <http://cie.asu.edu/ojs/index.php/cieatasu/article/view/678/56>
- Bornstein, M. H., Hahn, C. S., & Haynes, O. M. (2004). Specific and general language performance across early childhood: Stability and gender considerations. *First Language*, 24(3), 267-304.
- Byrd, K., & Macdonald, G. (2005). Defining college readiness from the inside out: First-generation college student perspective. *Community College Review*, 33(1), 22-37. doi:10.1177/009155210503300102
- Coates, J. (1993). The acquisition of gender-differentiated language. In J. Coates (Ed.), *Women, men, and language: A sociolinguistic account of gender differences in language* (2nd ed., pp. 143-167). London, England: Longman.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Combs, J. P., Slate, J. R., Moore, G., Bustamante, R., Onwuegbuzie, A. J., & Edmonson, S. (2010). Gender differences in college preparedness: A statewide study. *Urban Review*, 42(5), 441-457. doi:10.1007/s11256-009-0138-x

- Conley, D. T. (2007, March). *Redefining college readiness*. Eugene, OR: Educational Policy Improvement Center, University of Oregon. Retrieved from <http://www.epiconline.org/files/pdf/RedefiningCollegeReadiness.pdf>
- Conley, D. T., Aspengren, K., Gallagher, K., & Nies, K. (2006a, April 8). *College Board validity study for math*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Conley, D. T., Aspengren, K., Gallagher, K., & Nies, K. (2006b). *College Board validity study for science*. Eugene, OR: Center for Educational Policy Research, University of Oregon.
- Conley, D. T., Aspengren, K., Stout, O., & Veatch, D. (2006). *College Board Advanced Placement best practices course study report*. Eugene, OR: Center for Educational Policy Research, University of Oregon.
- Cook, A. L., Pérusse, R., & Rojas, E. D. (2015). Promoting college access among Latina/o English language learners: Implications for professional school counselors. *Journal of School Counseling, 13*(18), 1-43.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage.
- Denton, K., & West, J. (2002). *Children's reading and mathematics achievement in kindergarten and first grade* (NCES 2002-125). Washington, DC: National Center for Education Statistics.
- Dougherty, C., & ACT. (2014). *Catching up to college and career readiness: The challenge is greater for at-risk students*. Issue Brief. ACT, Inc. Iowa City, IA.

- Gardner, R. C., & Desrochers, A. (1981). Second-language acquisition and bilingualism: research in Canada (1970-1980), *Research in Canada*, 22(2), 146-162.
- Hammer, C. S., Davison, M. D., Lawrence, F. R., & Miccio, A. W. (2009). The effect of maternal language on bilingual children's vocabulary and emergent literacy development during Head Start and kindergarten. *Scientific Studies of Reading*, 13(2), 99-121. doi:10.1080/10888430902769541
- Husain, M., & Millimet, D. (2009). The mythical "boy crisis"? *Economics of Education Review*, 28(1), 38-48.
- Johnson, B., & Christensen, L. (2014). *Educational research: Quantitative, qualitative, and mixed approaches* (5th ed.). Thousand Oaks, CA: Sage.
- LoGerfo, L., Nichols, A., & Reardon, S. F. (2006). *Achievement gains in elementary and high school*. Washington, DC: Urban Institute. Retrieved from <http://www.urban.org/url.cfm?ID=411290>
- Marks, G. N. (2008). Accounting for the gender gaps in student performance in reading and mathematics: Evidence from 31 countries. *Oxford Review of Education*, 34(1), 89-109.
- Martinez, R. M., Slate, J. R., & Martinez-Garcia, C. (2014). English Language Learner boys and girls reading and math achievement as a function of early-exit and late-exit bilingual programs: A multiyear, statewide analysis. *Education Research International*, Vol 2014. doi:10.1155/2014/508459
- Noble, J., & Sawyer, R. (2002). *Predicting different levels of academic success in college using high school GPA and ACT Composite score*. (ACT Research Report 2002-4). Iowa City, IA: ACT.

- Ozuna, T. T., Saenz, V. B., Ballysingh, T. A., & Yamamura, E. K. (2016). Examining culturally responsive college readiness in the Rio Grande Valley of South Texas. *Journal of School Leadership*, 26(1), 154-182.
- Polat, N., Zarecky-Hodge, A., & Schreiber, J. B. (2016). Academic growth trajectories of ELLs in NAEP data: The case of fourth- and eighth-grade ELLs and non-ELLs on mathematics and reading tests. *Journal of Educational Research*, 109(5), 541-553. doi:10.1080/00220671.2014.993461
- Radcliffe, R. A., & Bos, B. (2013). Strategies to prepare middle school and high school students for college and career readiness. *Clearing House*, 86(4), 136-141. doi:10.1080/00098655.2013.782850
- Rathbun, A. H., West, J., & Germino-Hausken, E. (2004). *From kindergarten through third grade: Children's beginning school experiences* (NCES 2004-007). Washington, DC: National Center for Education Statistics.
- Reid, K. J., & Moore, J., III (2008). College readiness and academic preparation for postsecondary education: Oral histories of first-generation urban college students. *Urban Education*, 43(2), 240-261. doi:10.1177/0042085907312346
- Robinson, J. P., & Lubienski, S. T. (2011). The development of gender achievement gaps in mathematics and reading during elementary and middle school: Examining direct cognitive assessments and teacher ratings. *American Educational Research Journal*, 48(2), 268-302.
- Rodriguez, J., & Slate, J. R. (2015). Differences in postsecondary readiness for Texas students as a function of bilingual education service. *International Journal of Psychology Research*, 9(4), 345-360.

- Rojas, R., & Iglesias, A. (2013). The language growth of Spanish-speaking English Language Learners. *Child Development*, 84(2), 630-646. doi:10.1111/j.1467-8624.2012.01871
- Sadler, P., & Tai, R. (2007). Advanced Placement exam scores as a predictor of performance in introductory college biology, chemistry, and physics courses. *Science Educator*, 16(2), 1-19.
- Slate, J. R., & Rojas-LeBouef, A. (2011). *Calculating basic statistical procedures in SPSS: A self-help and practical guide to preparing theses, dissertations, and manuscripts*. Ypsilanti, MI: NCPEA Press.
- Sousa, D. A. (2011). *How the brain learns*. Thousand Oaks, CA: Corwin.
- Stetser, M. C., & Stillwell, R. (2014). Public high school four-year on-time graduation rates and event dropout rates: School years 2010-11 and 2011-12. *First Look* (NCES 2014-391). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
- Texas Education Agency. (2007). *Sec. 39.051 academic excellence indicators*. Retrieved from https://rptsvr1.tea.texas.gov/perfreport/account/2010/manual/TEC_CH_39_80th.pdf
- Texas Education Agency. (2009). *The 2009 accountability rating system for Texas public schools and school districts*. Retrieved from <https://rptsvr1.tea.texas.gov/perfreport/account/2009/manual/manual.pdf>

- Texas Education Agency. (2012). *Glossary for the Texas Academic Performance Report, 2012-2013*. Retrieved from <https://rptsvr1.tea.texas.gov/perfreport/tapr/2013/glossary.pdf>
- Tianlan, W., Xun, L., & Barnard-Brak, L. (2015). Gender differences in mathematics and reading trajectories among children from kindergarten to eighth grade. *Research in Education*, 93(1), 77-89. doi:10.7227/RIE.0015
- Uchikoshi, Y. (2006). English vocabulary development in bilingual kindergartners: What are the best predictors? *Bilingualism: Language and Cognition*, 9(1), 33-49. doi:10.1017/S1366728905002361
- U.S. Department of Education. (2001). *No Child Left Behind (NCLB)*. Retrieved from <http://www2.ed.gov/policy/elsec/leg/esea02/index.html>
- U.S. Department of Education. (2009). *Race to the Top Program Executive Summary*. Retrieved from <https://www2.ed.gov/programs/racetothetop/executive-summary.pdf>
- U.S. Department of Education. (2015a). *English learners (ELs) and college and career readiness*. Retrieved from <http://www2.ed.gov/about/offices/list/oela/fast-facts/index.html>
- U.S. Department of Education. (2015b). *Every Child Succeeds Act (ESSA)*. Retrieved from <https://www.ed.gov/ESSA>
- U.S. Department of Education. (2015c). *U.S. high school graduation rate hits new record high*. Retrieved from <http://www.ed.gov/news/press-releases/us-high-school-graduation-rate-hits-new-record-high>

Table 2.1

*Frequencies and Percentages of Reading College-Readiness for English Language**Learner Boys and Girls for the 2004-2005 Through the 2007-2008 School Years*

School Year and College-Readiness	Boys	Girls
	<i>n</i> and %age of Total	<i>n</i> and %age of Total
2004-2005		
Met	(<i>n</i> = 96) 1.90%	(<i>n</i> = 153) 3.70%
Not Met	(<i>n</i> = 5,089) 98.10%	(<i>n</i> = 4,017) 96.30%
2005-2006		
Met	(<i>n</i> = 83) 1.70%	(<i>n</i> = 134) 3.20%
Not Met	(<i>n</i> = 4,887) 98.30%	(<i>n</i> = 4,110) 96.80%
2006-2007		
Met	(<i>n</i> = 119) 2.40%	(<i>n</i> = 144) 3.50%
Not Met	(<i>n</i> = 4,745) 97.60%	(<i>n</i> = 3,974) 96.50%
2007-2008		
Met	(<i>n</i> = 164) 4.70%	(<i>n</i> = 238) 6.90%
Not Met	(<i>n</i> = 3,331) 95.30%	(<i>n</i> = 3,219) 93.10%

Table 2.2

*Frequencies and Percentages of Reading College-Readiness for English Language**Learner Boys and Girls for the 2008-2009 Through the 2010-2011 School Years*

School Year and College-Readiness	Boys	Girls
	<i>n</i> and %age of Total	<i>n</i> and %age of Total
2008-2009		
Met	(<i>n</i> = 351) 8.60%	(<i>n</i> = 422) 10.40%
Not Met	(<i>n</i> = 3,741) 91.40%	(<i>n</i> = 3,624) 89.60%
2009-2010		
Met	(<i>n</i> = 471) 9.70%	(<i>n</i> = 588) 13.10%
Not Met	(<i>n</i> = 4,364) 90.30%	(<i>n</i> = 3,915) 86.90%
2010-2011		
Met	(<i>n</i> = 396) 9.70%	(<i>n</i> = 527) 13.80%
Not Met	(<i>n</i> = 3,297) 90.30%	(<i>n</i> = 3,297) 86.20%

Table 2.3

*Frequencies and Percentages of Mathematics College-Readiness for English Language**Learner Boys and Girls for the 2004-2005 Through the 2007-2008 School Years*

School Year and College-Readiness	Boys	Girls
	<i>n</i> and %age of Total	<i>n</i> and %age of Total
2004-2005		
Met	(<i>n</i> = 479) 9.60%	(<i>n</i> = 305) 7.60%
Not Met	(<i>n</i> = 4,498) 90.40%	(<i>n</i> = 3,720) 92.40%
2005-2006		
Met	(<i>n</i> = 542) 11.30%	(<i>n</i> = 397) 9.50%
Not Met	(<i>n</i> = 4,266) 88.70%	(<i>n</i> = 3793) 90.50%
2006-2007		
Met	(<i>n</i> = 541) 11.30%	(<i>n</i> = 409) 10.30%
Not Met	(<i>n</i> = 4,242) 88.70%	(<i>n</i> = 3,556) 89.70%
2007-2008		
Met	(<i>n</i> = 655) 20.00%	(<i>n</i> = 542) 16.30%
Not Met	(<i>n</i> = 2,615) 80.00%	(<i>n</i> = 2,780) 83.70%

Table 2.4

*Frequencies and Percentages of Mathematics College-Readiness for English Language**Learner Boys and Girls for the 2008-2009 Through the 2010-2011 School Years*

School Year and College-Readiness	Boys	Girls
	<i>n</i> and %age of Total	<i>n</i> and %age of Total
2008-2009		
Met	(<i>n</i> = 1,056) 26.80%	(<i>n</i> = 861) 22.10%
Not Met	(<i>n</i> = 2,879) 73.20%	(<i>n</i> = 3,034) 77.90%
2009-2010		
Met	(<i>n</i> = 1,461) 31.40%	(<i>n</i> = 1,164) 27.00%
Not Met	(<i>n</i> = 3,194) 68.60%	(<i>n</i> = 3,150) 73.00%
2010-2011		
Met	(<i>n</i> = 1,386) 35.60%	(<i>n</i> = 1,237) 33.40%
Not Met	(<i>n</i> = 2,506) 64.40%	(<i>n</i> = 2,469) 66.60%

Table 2.5

Frequencies and Percentages of Both Subjects College-Readiness for English Language Learner Boys and Girls for the 2004-2005 Through the 2007-2008 School Years

School Year and	Boys	Girls
College-Readiness	<i>n</i> and %age of Total	<i>n</i> and %age of Total
2004-2005		
Met	(<i>n</i> = 45) 1.00%	(<i>n</i> = 55) 1.50%
Not Met	(<i>n</i> = 4,583) 99.00%	(<i>n</i> = 3,689) 98.50%
2005-2006		
Met	(<i>n</i> = 49) 1.10%	(<i>n</i> = 67) 1.70%
Not Met	(<i>n</i> = 4,349) 98.90%	(<i>n</i> = 3,811) 98.30%
2006-2007		
Met	(<i>n</i> = 59) 1.30%	(<i>n</i> = 73) 2.00%
Not Met	(<i>n</i> = 4,342) 98.70%	(<i>n</i> = 3,653) 98.00%
2007-2008		
Met	(<i>n</i> = 84) 2.70%	(<i>n</i> = 121) 3.90%
Not Met	(<i>n</i> = 3,027) 97.30%	(<i>n</i> = 3,014) 96.10%

Table 2.6

Frequencies and Percentages of Both Subjects College-Readiness for English Language Learner Boys and Girls for the 2008-2009 Through the 2010-2011 School Years

School Year and	Boys	Girls
College-Readiness	<i>n</i> and %age of Total	<i>n</i> and %age of Total
2008-2009		
Met	(<i>n</i> = 197) 5.30%	(<i>n</i> = 221) 5.90%
Not Met	(<i>n</i> = 3,504) 94.70%	(<i>n</i> = 3,503) 94.10%
2009-2010		
Met	(<i>n</i> = 292) 6.50%	(<i>n</i> = 323) 7.70%
Not Met	(<i>n</i> = 4,170) 93.50%	(<i>n</i> = 3,868) 92.30%
2010-2011		
Met	(<i>n</i> = 271) 7.40%	(<i>n</i> = 330) 9.50%
Not Met	(<i>n</i> = 3,388) 92.60%	(<i>n</i> = 3,148) 90.50%

Table 2.7

Summary of Reading College-Readiness Results of English Language Learner Boys and Girls for the 2004-2005 Through the 2010-2011 School Years

School Year	Statistically Significant	Effect Size	Higher Scoring Group
2004-2005	Yes	Below Small	Girls
2005-2006	Yes	Below Small	Girls
2006-2007	Yes	Below Small	Girls
2007-2008	Yes	Below Small	Girls
2008-2009	Yes	Below Small	Girls
2009-2010	Yes	Below Small	Girls
2010-2011	Yes	Below Small	Girls

Table 2.8

Summary of Mathematics College-Readiness Results for English Language Learner Boys and Girls for the 2004-2005 Through the 2010-2011 School Years

School Year	Statistically Significant	Effect Size	Higher Scoring Group
2004-2005	Yes	Below Small	Boys
2005-2006	Yes	Below Small	Boys
2006-2007	Yes	Below Small	Boys
2007-2008	Yes	Below Small	Boys
2008-2009	Yes	Below Small	Boys
2009-2010	Yes	Below Small	Boys
2010-2011	Yes	Below Small	Boys

Table 2.9

Summary of Both Subjects College-Readiness Results of English Language Learner Boys and Girls for the 2004-2005 Through the 2010-2011 School Years

School Year	Statistically Significant	Effect Size	Higher Scoring Group
2004-2005	Yes	Below Small	Girls
2005-2006	Yes	Below Small	Girls
2006-2007	Yes	Below Small	Girls
2007-2008	Yes	Below Small	Girls
2008-2009	Yes	Below Small	Girls
2009-2010	Yes	Below Small	Girls
2010-2011	Yes	Below Small	Girls

CHAPTER III
DIFFERENCES IN COLLEGE-READINESS BY THE ECONOMIC STATUS OF
ENGLISH LANGUAGE LEARNERS: A TEXAS MULTIYEAR STATEWIDE
ANALYSIS

This dissertation follows the style and format of *Research in the Schools (RITS)*.

Abstract

In this investigation, the reading, mathematics, and both subjects college-readiness of English Language Learners in the 2004-2005 through the 2010-2011 school years were examined. The specific emphasis in this study was on the degree to which English Language Learner economic status (i.e., Not Poor and Poor) was related to their college-readiness. In analyzing 7 years of Texas statewide data, statistically significant differences were revealed by student economic status. In a majority of the analyses, English Language Learners who were Poor had statistically significantly lower reading, mathematics, and both subjects college-readiness than English Language Learners who were Not Poor. Very low percentages of English Language Learners, regardless of their economic status, were college-ready in reading, mathematics, and in both subjects. Moreover, very high percentages of the English Language Learners in this study were economically disadvantaged. Implications of these results and recommendations for future research are provided.

Keywords: English Language Learners, College-Readiness, Reading, Mathematics, Both Subjects, Economically Disadvantaged, Economic Status

DIFFERENCES IN COLLEGE-READINESS BY THE ECONOMIC STATUS OF ENGLISH LANGUAGE LEARNERS: A TEXAS MULTIYEAR STATEWIDE ANALYSIS

The Every Student Succeeds Act (2015) and its predecessor, the No Child Left Behind Act (2001), were established to ensure the United States produces graduates who will be college and career-ready. But these two federal policies have failed, as documented by numerous researchers (e.g., Barnes & Slate, 2013; Barnes, Slate, & Rojas-LeBeouf, 2010; Conley, 2007; Greene & Winters, 2005; Kahlenberg, 2010; Ravitch, 2010; Zhao, 2009, 2013). Although the United States has reached an all-time high graduation rate of 81% (U.S. Department of Education, 2015), high school students “are graduating without the knowledge, skills, and metacognitive strategies needed to be successful at postsecondary institutions” (Barnes & Slate, 2013, p. 1). Reflected in the low scores on National Assessment of Educational Progress is the disappointing trend of adolescents in the United States who do not meet college and career readiness standards (Radcliffe & Bos, 2013). This discouraging note was echoed by Dougherty and ACT (2014):

Educators and policymakers have set a goal that all students graduate from high school ready for college and careers. As a nation, however, we are falling short of achieving this goal, particularly for students from at-risk groups. In 2013, in states with the highest percentages of students taking the ACT college readiness assessment, 41% of students from the two lowest family income categories met ACT College Readiness Benchmarks in English, 19% in mathematics, 23% in reading, and 17% in science. (p. 1514)

In 2009, the State of Texas incorporated the College and Career Readiness Standards (CCRS) through House Bill 3, §39.024 in the Texas Essential Knowledge and Skills (TEKS) in the core content areas: English language arts, mathematics, science, and social studies. In House Bill 3, §39.024 college readiness is defined

the level of preparation a student must attain in English language arts and mathematics courses to enroll and succeed, without remediation, in an entry-level general education course for credit in that same content area for a baccalaureate degree or associate degree program (Texas Education Agency, 2009, p. VI-14). This definition is aligned to Conley's (2007) "level of preparation a student needs in order to enroll and succeed—without remediation—in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program" (p. 5). In 2013, college and postsecondary readiness was integrated in the new Texas accountability system under Index 4. The purpose of the Index 4 performance indicator is to "emphasize the importance for students to receive a high school diploma that provides them with the foundation necessary for success in college, the workforce, job training programs, or the military" (Texas Education Agency, 2017, p. 3).

However, for underrepresented and underprepared populations, college readiness is conceptualized only in these three elements: college preparation, college awareness, and college eligibility (Baker, Clay, & Gratama, 2005). According to Welton and Williams (2015), students who attend high poverty and high minority schools were "less likely to matriculate to any form of postsecondary education, particularly four-year universities" and are "admitted and enroll in prestigious state flagship institutions at

lower rates” (p. 183) in comparison to predominantly White students and students from affluent high schools. Similarly, Leonhardt (2004) reported that 40% of freshmen in the 42 most selective universities come from households earning more than \$100,000, yet nationally, fewer than 20% of families are in this household income bracket.

Colgren and Sappington (2015) reinforced this educational socioeconomic disparity contending that public schools are continually challenged by racial/ethnic divides and by the effects of poverty. Edmonds (1979), one of the first researchers who theorized the challenges confronted by schools in educating students in poverty, commented:

Inequity in American education derives first and foremost from our failure to educate the children of the poor. Education in this context refers to early acquisition of those basic school skills that assure pupils successful access to the next level of schooling. If that seems too modest of a standard, note that as of now the schools that teach the children of the poor are dismal failures even by such a modest standard. (p. 15)

Researchers (e.g., College Board, 2011; Lee & Slate, 2014) previously established the presence of relationships between economic status and academic achievement. Lee and Slate (2014) documented statistically significant differences were present in the Advanced Achievement standards between students in poverty from their more advantaged peers. Lee and Slate contended students who were economically disadvantaged were not college-ready. Similarly, in 2011, the College Board described that students in the upper income brackets, whose family income ranged \$100,000 and higher, had SAT Verbal and Mathematics composite scores ranging from 1065 to 1154

and in contrast, students whose family income ranged \$40,000 or less, scored between 896-944. Reflected in these scores was a disparity of 169-210 points between students from high-income families and students from low-income families (College Board, 2011). According to Kirp (2013), established in the data from the National Center for Education Statistics, was an increase of students in poverty from 17% to 21% between 2007 and 2011. As such, Kirp argued for the presence of aggravating effects on the intersectionality of race/ethnicity and poverty stating, “Add in the near-poor, those barely scraping by, and that figure nearly doubles. For Black and Hispanic youth, poverty is a double whammy” (p. 6).

The intersectionality of race/ethnicity and poverty and its effect to academic achievement is prevalent with respect to English Language Learners. Researchers (e.g., Maxwell, 2012; Sheng, Sheng, & Anderson, 2011) established English Language Learners are more than likely to come from impoverished families than are their native English speaking counterparts. Keigher (2009), using the 2007-2008 Schools and Staffing Survey, established that more than 60% of English Language Learners were qualified for the federal free and reduced lunch programs, and 40% of English Language Learners were children of parents who did not graduate from high school. Moreover, researchers (Darling-Hammond, 2004; De Cohen, Deterding, & Clewell, 2005; Noguera, 2011; Yeakey, 2012) have documented that English Language Learners are enrolled in schools which are primarily located in urban areas and are classified as poor.

For English Language Learners, poverty is not the only factor that influences their academic achievement. Their limited proficiency in the English language increases their risk of dropping out of school and negatively influences their academic achievement

(Abedi, 2004; Genesse, Lindholm-Leary, Saunders, & Christian, 2005; Maxwell, 2012, The Course Crafters Guide to the K-12 ELL Market, 2012). English Language Learners continue to perform below their native English-speaking peers in reading and mathematics test scores (Ardasheva, Tretter, & Kinny, 2012; Fry & Pew, 2008; Intercultural Development Research, 2015; National Center for Public Policy and Higher Education, 2005). In Texas, achievement gaps between English Language Learners and native English-speakers have been consistent whereby English Language Learners perform below average in the State of Texas Assessment of Academic Readiness in Reading and Mathematics college readiness rates (Rodriguez & Slate, 2015), and are likely to be retained in middle and high school (Intercultural Development, 2015).

In two separate studies conducted by Haas, Huang, Tran, Yu, and Regional Educational Laboratory West (2016a, 2016b) on the achievement progress of English Language Learners in two states, Nevada and Utah, the researchers established differences in the cumulative passing rates on the reading content test and mathematics content test between English Language Learners who were eligible for the free and reduced school lunch program from English Language Learners who were not eligible for the free and reduced school lunch program. In both studies in Nevada (Haas et al., 2016a) and in Utah (Haas et al., 2016b), English Language Learners who were eligible for the free and reduced school lunch program performed lower than their counterparts who were eligible for that program. In determining English language proficiency, English Language Learners who were eligible for the free and reduced school lunch program in Utah had a lower cumulative reclassification rates than their peers who did not qualify for free and reduced school lunch program. Similarly, in the same study in

Nevada, English Language Learners who were eligible for the free and reduced school lunch program had a lower reclassification rate as fluent English proficient than their peers who were not eligible for the free and reduced school lunch program.

Statement of the Problem

The English Language Proficiency Standards were adopted in December 25, 2007 under the Texas Education Code to ensure the linguistic and academic success of the English Language Learners in the state of Texas. As instituted in the English Language Proficiency Standards guidelines

English Language Learners must acquire both social and academic language proficiency in English. Social language proficiency in English consists of the English needed for daily social interactions. Academic language proficiency consists of the English needed to think critically, understand and learn new concepts, process complex academic material, and interact and communicate in English academic settings. (Texas Education Code, Chapter 74, 2007)

However, achievement gaps between English Language Learners and native English speakers on college readiness in reading and in mathematics on the State of Texas Assessments of Academic Readiness tests have been consistent (Rodriguez & Slate, 2015). The English Language Proficiency Standards guidelines was established for school districts to

provide instruction in the knowledge and skills of the foundation and enrichment curriculum in a manner that is linguistically accommodated (communicated, sequenced, and scaffolded) commensurate with the student's levels of English

language proficiency to ensure that the student learns the knowledge and skills in the required curriculum. (Texas Education Code, Chapter 89, 2012)

However, the Intercultural Development Research Association (2015) documented that in Texas, one of the lowest performing subgroups is English Language Learners.

The efforts of the United States to close achievement gaps among students who are disadvantaged and their peers through the No Child Left Behind Act of 2001 and the Every Student Succeeds Act of 2015 have not been successful. The academic achievement of English Language Learners is influenced not only by one factor but by multiple factors, and economic status is one factor that strongly influences student learning. Until schools and school districts have a clear understanding of how English Language Learners can academically succeed and appropriation Title III resources among English Language Learners are uniformly dispersed, continued gaps even between the economic subgroups of English Language Learners may start to widen.

Purpose of the Study

The purpose of this study was to determine the extent to which the reading college-readiness rates of English Language Learners differed as a function of their economic status (i.e., Not Economically Disadvantaged, Economically Disadvantaged). The second purpose of this study was to ascertain the extent to which differences were present in the mathematics college-readiness rates between English Language Learners as a function of their economic status. Another purpose of this study was to determine the degree to which differences were present in both subjects college-readiness of English Language Learners as a function of their economic status. By investigating whether differences were present in college-readiness of English Language Learners by their

economic status, relevant information on their reading, mathematics, and both subjects college-readiness could be provided to educational leaders and policymakers. Finally, the extent in which a trend was present in college-readiness rates over this 7-year time period between English Language Learners of different economic status was determined.

Significance of the Study

Empirical literature on the college-readiness skills of English Language Learners is limited. Moreover, research investigations on the tracking of college-readiness and closing the achievement gap among English Language Learners as a function of economic status are insufficient. Provided in this study will be valuable information to schools, school districts, and educational agencies on the achievement growth or decline of English Language Learners, specifically in their college-readiness performance as a function of economic status. Discussion on current educational practices and opportunities afforded to English Language Learners and the differentiation provided for each sub-groups according to their economic status can be initiated in this study. Given the importance apportioned to the Texas state academic accountability ratings and Title III program, English Language Learners ratings are closely examined not only in terms of student achievement and student progress but efforts to close achievement gap and increase postsecondary readiness, as well.

Research Questions

The following research questions were addressed in this investigation: (a) What is the difference in reading college-readiness rates as a function of the economic status (i.e., Not Economically Disadvantaged, Economically Disadvantaged) of English Language Learners?; (b) What is the difference in mathematics college-readiness rates as a function

of the economic status of English Language Learners?; (c) What is the difference in both subjects college-readiness rates as a function of the economic status of English Language Learners?; (d) What trend is present in reading college-readiness rates for English Language Learners as a function of economic status from the 2004-2005 through the 2010-2011 school year?; (e) What trend is present in mathematics college-readiness rates for English Language Learners as a function of economic status from the 2004-2005 through the 2010-2011 school year?; and (f) What trend is present in college-readiness rates in both subjects for English Language Learners as a function of economic status from the 2004-2005 through the 2010-2011 school year? The first three research questions were repeated for the 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009, 2009-2010, and 2010-2011 school years whereas the last three research questions constituted an analysis across all seven school years.

Method

Research Design

Present in this study was a non-experimental, causal-comparative research design (Creswell, 2009; Johnson & Christensen, 2014). In such a research design, the independent variable and dependent variables had already occurred. As such, neither the independent variable nor the dependent variables could be manipulated. In this research article, the independent variable involved was student economic status in each school year (i.e., 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009, 2009-2010, and 2010-2011). The three dependent variables were reading, mathematics, and both subjects college-readiness rates of English Language Learners. In this investigation, data on two samples of English Language Learners were analyzed: English Language Learners who

were not economically disadvantaged and English Language Learners who were economically disadvantaged.

Participants and Instrumentation

Archival data was previously requested and obtained from the Texas Education Agency Public Education Information Management System. Specific information that was requested from this agency were: English Language Learner economic status, reading college-readiness rates, mathematics college-readiness rates, and both subjects college-readiness-rates. The last 7 years of available Texas statewide data were requested and obtained: 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009, 2009-2010, and 2010-2011 school years.

Four variables were relevant in this multiyear investigation: English Language Learner economic status and college-readiness rates in reading, mathematics, and both subjects. English Language Learner is a term used to describe students who have limited English proficiency, or English Language Learner, by the Language Proficiency Assessment Committee according to criteria established in the Texas Administrative Code (Texas Education Agency, Glossary for the Texas Academic Performance Report, 2012, p. 10). Economically disadvantaged is a term used refer to students who are eligible for the Title I federal free and reduced lunch program. This term is also associated with the word poverty. Burney and Beilke (2008) further explained that:

The Free and Reduced Price Lunch program is frequently used as a proxy indicator of poverty. Children whose families have an income of 130% or less of the Federal poverty guideline can receive free meals at school, and those whose

families have incomes from 131% to 185% of the poverty guideline are eligible for reduced-price meals. (p. 297)

All Texas high schools and school districts, as mandated by the Texas Education CODE [TEC] §39.051 (b) (13), were to report college readiness on the basis of these six indicators: (a) scores in Advanced Placement exam, (b) enrollment in dual credit course, (c) scores in SAT critical reading and math, ACT English and math, or results in Texas Assessment of Knowledge and Skills (TAKS) English/language arts (ELA) and math, (d) advanced coursework in science, math, and foreign languages, (e) scores in state college-readiness assessments, and (f) percent of college-ready graduates in each high school and district as established by the first four indicators (Texas Education Agency, 2009).

Another indicator for college-readiness includes a graduate having met or exceeded the college ready criteria in (a) exit-level test on TAKS ELA and TAKS mathematics, (b) SAT critical reading and SAT mathematics, or (c) ACT English and ACT mathematics (Texas Education Agency, 2009). In accordance with the Family Educational Rights and Privacy Act, the Texas Education Agency conceals specific student performance data to avoid individual student identification.

Results

To determine the extent to which differences were present in college-readiness between English Language Learners who were economically disadvantaged and English Language Learners who were not economically disadvantaged, statistical analyses for the 2004-2005 through the 2010-2011 school years were conducted. The specific inferential statistical procedure used to address the previously delineated research questions was the Pearson chi-square statistic. The Pearson chi-square was the appropriate statistical

procedure to be used in this investigation because frequency data were present for the independent variable of economic status (i.e., Not Poor, Poor). Moreover, the three dependent variables (i.e., reading college-readiness, mathematics college-readiness, and both subjects college-readiness) were dichotomous variables (i.e., were or were not college ready). Prior to calculating any Pearson chi-squares, its underlying assumptions were checked. Specifically examined were the sample size (i.e., more than five scores available per cell) and all data were independent. Given the statewide sample size that were present, as well as the fact that each student whose data were analyzed in this investigation had one score for reading college-readiness, one score for mathematics college-readiness, and one score for both subjects college-readiness. As such, the underlying assumptions for using a Pearson chi-square procedure were met (Slate & Rojas-LeBouef, 2011).

Reading College-Readiness Results

For the 2004-2005 school year, in which the focus was placed on reading college-readiness between English Language Learners who were economically disadvantaged and English Language Learners were not economically disadvantaged, the Pearson chi-square procedure yielded a statistically significant result, $\chi^2(1) = 6.17, p = .013$. The effect size for this finding, Cramer's V, was below small, .03 (Cohen, 1988). As revealed in Table 3.1, less than 4% of English Language Learners who were economically disadvantaged and who were not economically disadvantaged were college-ready in reading. The percentage of English Language Learners who were not economically disadvantaged and who met the reading college-readiness standard was more than one

and third times greater than English Language Learners who were economically disadvantaged.

Insert Table 3.1 about here

With respect to the 2005-2006 school year, the Pearson chi-square analysis resulted in a statistically significant difference in reading college-readiness, $\chi^2(1) = 6.24$, $p = .012$, between English Language Learners who were economically disadvantaged and English Language Learners who were not economically disadvantaged. The effect size for this finding, Cramer's V, was below small, .03 (Cohen, 1988). For both English Language Learner groups, less than 3.5% of them were college-ready in reading. The percentage of English Language Learners who were not economically disadvantaged and who were college-ready in reading was almost two times the percentage of English Language Learners who were economically disadvantaged and who were college-ready in reading. The descriptive statistics for this school year are delineated in Table 3.1.

Regarding the 2006-2007 school year, a statistically significant difference was not present in reading college-readiness, $\chi^2(1) = 1.05$, $p = .31$, by English Language Learner economic status. As revealed in Table 3.1, English Language Learners who were economically disadvantaged and English Language Learners who were not economically disadvantaged had similar percentages of students who were college-ready in reading.

Concerning the 2007-2008 school year, a statistically significant difference was not present, $\chi^2(1) = 1.98$, $p = .16$, in reading college-readiness by English Language Learner economic status. Both groups of English Language Learners had similar

percentages of students who were college-ready in reading college-readiness. Delineated in Table 3.1 are the descriptive statistics for this analysis.

For the 2008-2009 school year, the Pearson chi-square procedure yielded a statistically significant difference, $\chi^2(1) = 20.34, p < .001$, in reading college-readiness by English Language Learner economic status. The effect size for this finding, Cramer's V, was below small, .05 (Cohen, 1988). As revealed in Table 3.2, less than 14% of English Language Learners who were not economically disadvantaged were college-ready in reading compared to slightly over 9% of English Language Learners who were economically disadvantaged.

With respect to the 2009-2010 school year, the Pearson chi-square analysis resulted in a statistically significant difference in reading college-readiness, $\chi^2(1) = 28.63, p < .001$, between English Language Learners who were economically disadvantaged and English Language Learners who were not economically disadvantaged. The effect size for this finding, Cramer's V, was below small, .05 (Cohen, 1988). The percentage of English Language Learners who were not economically disadvantaged and who were college-ready in reading were one and a half times more than for English Language Learners who were economically disadvantaged and who were college-ready in reading

 Insert Table 3.2 about here

Regarding the 2010-2011 school year, a statistically significant difference was again present in reading college-readiness between English Language Learners who were economically disadvantaged and English Language Learners who were not economically

disadvantaged, $\chi^2(1) = 19.41, p < .001$. The effect size for this finding, Cramer's V, was below small, .05 (Cohen, 1988). Commensurate with the previous school years, small percentages, less than 10%, of English Language Learners who were economically disadvantaged were college ready in reading, and less than 14% of English Language Learners who were not economically disadvantaged were college-ready in reading. Again, English Language Learners who were not economically disadvantaged had statistically significantly higher percentages of being college-ready in reading, almost one third more, than English Language Learners who were economically disadvantaged. Table 3.2 contains the descriptive statistics for this analysis.

Mathematics College-Readiness Results

With respect to the 2004-2005 school year, in which the focus was placed on mathematics college-readiness by English Language Learner economic status, a statistically significant difference, $\chi^2(1) = 8.32, p = .004$, was yielded. The effect size for this finding, Cramer's V, was below small, .03 (Cohen, 1988). Slightly over 10% of English Language Learners who were not economically disadvantaged were college-ready in mathematics compared to less than 10% of English Language Learners who were economically disadvantaged. The percentage of English Language Learners who were not economically disadvantaged and who were college-ready in mathematics was about one-fourth higher than for English Language Learners who were economically disadvantaged. Table 3.3 contains the descriptive statistics for this analysis.

 Insert Table 3.3 about here

Concerning the 2005-2006 school year, a statistically significant difference was not yielded, $\chi^2(1) = 2.13, p = .14$, in mathematics college-readiness by English Language Learner economic status. The mathematics college-readiness of English Language Learners was similar for both groups of students. Table 3.3 contains the descriptive statistics for this analysis.

Regarding the 2006-2007 school year, a statistically significant difference was present in mathematics college-readiness between English Language Learners who were economically disadvantaged and English Language Learners who were not economically disadvantaged, $\chi^2(1) = 6.04, p = .014$. The effect size for this finding, Cramer's V, was below small, .03 (Cohen, 1988). Commensurate with the previous school years, very small percentages, less than 12%, were college ready in mathematics. The percentage of English Language Learners who were economically disadvantaged and who were college-ready in mathematics was one-fourth higher than for English Language Learners who were not economically disadvantaged. Table 3.3 contains the descriptive statistics for this analysis.

With respect to the 2007-2008 school year, a statistically significant difference was not present, $\chi^2(1) = 1.40, p = .22$, in mathematics college-readiness by English Language Learner economic status. In this school year, the percentages of English Language Learners who were college-ready in mathematics was similar for the two groups of students. Delineated in Table 3.3 are the descriptive statistics for this analysis.

For the 2008-2009 school year, the Pearson chi-square procedure yielded a statistically significant result, $\chi^2(1) = 3.59, p = .05$. The effect size for this finding, Cramer's V, was below small, .02 (Cohen, 1988). As revealed in Table 3.4, less than

28% of English Language Learners who were economically disadvantaged and English Language Learners who were not economically were college-ready in mathematics. The percentage of English Language Learners who were not economically disadvantaged and who were college-ready in mathematics were almost 12% higher than for English Language Learners who were economically disadvantaged.

With respect to the 2009-2010 school year, the Pearson chi-square analysis resulted in a statistically significant difference in mathematics college-readiness, $\chi^2(1) = 5.16, p = .023$, between English Language Learners who were economically disadvantaged and English Language Learners who were not economically disadvantaged. The effect size for this finding, Cramer's V , was below small, .02 (Cohen, 1988). Slightly over 33% of English Language Learners who were not economically disadvantaged were college ready in mathematics compared to only 29% of English Language Learners were economically disadvantaged. English Language Learners who were not economically disadvantaged had statistically significantly higher percentages of being college-ready in mathematics, 14%, than English Language Learners were economically disadvantaged. The descriptive statistics for this analysis are presented in Table 3.4.

 Insert Table 3.4 about here

Concerning the 2010-2011 school year, a statistically significant difference was again present in mathematics college-readiness between English Language Learners who were economically disadvantaged and English Language Learners who were not

economically disadvantaged , $\chi^2(1) = 39.21, p < .001$. The effect size for this finding, Cramer's V, was below small, .07 (Cohen, 1988). For this school year, the percentage of English Language Learners who were economically disadvantaged and who were college-ready in mathematics was one and a half times higher than English Language Learners who were not economically disadvantaged. Table 3.4 contains the descriptive statistics for this analysis.

Both Subjects College-Readiness Results

For the 2004-2005 school year, in which the focus was placed on both subjects college-readiness between English Language Learners who were economically disadvantaged and English Language Learners who were not economically disadvantaged, the Pearson chi-square procedure yielded a statistically significant result, $\chi^2(1) = 10.16, p = .001$. The effect size for this finding, Cramer's V, was below small, .04 (Cohen, 1988). As revealed in Table 3.5, only 1% of both English Language Learners who were economically disadvantaged were college-reading in both subjects, and only slightly more than 2% of English Language Learners who were not economically disadvantaged were college-ready in both subjects.

With respect to the 2005-2006 school year, the Pearson chi-square analysis resulted in a statistically significant difference in both subjects college-readiness, $\chi^2(1) = 5.14, p = .023$, between English Language Learners who were economically disadvantaged and English Language Learners who were not economically disadvantaged. The effect size for this finding, Cramer's V, was below small, .02 (Cohen, 1988). Commensurate with the previous school year, very small percentages, less than 2.5%, were college-ready in both subjects. English Language Learners who

were not economically disadvantaged had statistically significantly higher percentages of students being college-ready in both subjects, one and a half times higher, than English Language Learners who were economically disadvantaged.

Insert Table 3.5 about here

Regarding the 2006-2007 school year, a statistically significant difference was again present in both subjects college-readiness between English Language Learners who were economically disadvantaged and English Language Learners who were not economically disadvantaged, $\chi^2(1) = 6.36, p = .012$. The effect size for this finding, Cramer's V, was below small, .03 (Cohen, 1988). For English Language Learners who were not economically disadvantaged, about 3% of them were college-ready in both subjects compared to less than 2% of English Language Learners who were economically disadvantaged. The percentage of English Language Learners who were not economically disadvantaged and who were college-ready in both subjects was almost twice the percentage of English Language Learners who were economically disadvantaged. Table 3.5 contains the descriptive statistics for this analysis.

Concerning the 2007-2008 school year, the Pearson chi-square analysis resulted in a statistically significant difference, $\chi^2(1) = 18.52, p < .001$, between English Language Learners who were economically disadvantaged and English Language Learners who were not economically disadvantaged. The effect size for this finding, Cramer's V, was below small, .05 (Cohen, 1988). In this school year, the percentage of English Language Learners who were not economically disadvantaged and were college-ready in both

subjects was about two thirds higher than the percentage of English Language Learners who were economically disadvantaged and who were college-ready in both subjects. Delineated in Table 3.5 are the descriptive statistics for this analysis.

For the 2008-2009 school year, the Pearson chi-square procedure yielded a statistically significant result, $\chi^2(1) = 49.41, p < .001$. The effect size for this finding, Cramer's V, was below small, .08 (Cohen, 1988). As revealed in Table 3.6, the percentage of English Language Learners who were not economically disadvantaged and who were college-ready in both subjects was higher than the percentage of English Language Learners who were economically disadvantaged.

With respect to the 2009-2010 school year, the Pearson chi-square analysis resulted in a statistically significant difference in both subjects college-readiness, $\chi^2(1) = 100.33, p < .001$, between English Language Learners who were economically disadvantaged and English Language Learners who were not economically disadvantaged. The effect size for this finding, Cramer's V, was small, .11 (Cohen, 1988). Commensurate with the previous school years, English Language Learners who were not economically disadvantaged had statistically significantly higher percentages of being college-ready in both subjects, almost twice the percentage of English Language Learners who were economically disadvantaged.

 Insert Table 3.6 about here

Regarding the 2010-2011 school year, a statistically significant difference was not present, $\chi^2(1) = 1.01, p = .31$, in reading college-readiness by English Language Learner

economic status. Both groups of English Language Learners had similar percentages who were college-ready in reading college-readiness. Delineated in Table 3.6 are the descriptive statistics for this analysis.

Discussion

Analyzed in this investigation was the extent to which differences were present in the reading, mathematics, and both subject college-readiness rates of English Language Learners by their economic status. Seven school years (i.e., 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009, 2009-2010, and 2010-2011) of data from the Texas Education Agency Public Education Information Management System were analyzed. Inferential statistical analyses revealed the presence of statistically significant differences in the reading, mathematics, and both subjects college-readiness rates of English Language Learners by their economic status. At this time, results will be summarized for each of the three college-readiness variables: reading, mathematics, and both subjects.

With respect to the reading college-readiness of English Language Learners who were economically disadvantaged and who were not economically disadvantaged, English Language Learners who were not economically disadvantaged outperformed English Language Learners who were economically disadvantaged in five school years (i.e., 2004-2005, 2005-2006, 2008-2009, 2009-2010, 2010-2011). The percentage of reading college-readiness of English Language Learners who were not economically disadvantaged was 1 to 4 percentage points higher than the reading college-readiness of English Language Learners who were economically disadvantaged. For the 2006-2007 and 2007-2008 school years, the reading college-readiness of English Language Learners was similar for both economic groups. Table 3.7 contains a summary of the reading

college-readiness results of English Language Learners by their economic status for the 2004-2005 through the 2010-2011 school years.

Insert Table 3.7 about here

Regarding the mathematics college-readiness of English Language Learners by their economic status, English Language Learners who were not economically disadvantaged outperformed English Language Learners who were economically disadvantaged in mathematics college-readiness in three school years (i.e., 2004-2005, 2008-2009, & 2009-2010). The mathematics college-readiness of English Language Learners who were not economically disadvantaged ranged from 1 to 4 percentage points higher than the mathematics college-readiness of English Language Learners who were economically disadvantaged. For three school years, 2005-2006, 2006-2007, and 2010-2011, English Language Learners who were economically disadvantaged outperformed English Language Learners who were not economically disadvantaged. The mathematics college-readiness of English Language Learners who were economically disadvantaged ranged from 1 to 15 percentage points higher than the mathematics college-readiness of English Language Learners who were not economically disadvantaged. For two school years, 2005-2006 and 2007-2008, statistically significant differences were not present in the mathematic college-readiness of English Language Learners by their economic status. A summary of the mathematics college-readiness of English Language Learners by their economic status for the 2004-2005 through the 2010-2011 school years are revealed in Table 3.8.

Insert Table 3.8 about here

Concerning the both subjects college-readiness of English Language Learner by their economic status, English Language Learners who were not economically disadvantaged had better college-readiness in both subjects than did English Language Learners who were economically disadvantaged in six school years, 2004-2005 through 2009-2010 school years. A statistically significant difference was not present in the 2010-2011 school years. Of importance for readers should be the very low percentages of both English Language Learners who were economically disadvantaged and who were not economically disadvantaged who were college-ready in both subjects. Delineated in Table 3.9 is a summary of the results for the both subjects college-readiness of English Language Learners by their economic status for the 2004-2005 through the 2010-2011 school years.

Insert Table 3.9 about here

Connections with the Existing Literature

Results of this multiyear, statewide investigation were largely congruent with the results of previous research (Haas et al. 2016a; Haas et al., 2016b) on the educational gap between English Language Learners by their economic status. Established in this research investigation for reading and mathematics college-readiness, English Language Learners who were not economically disadvantaged had higher passing rates than did

English Language Learners who were economically disadvantaged in most of the school years. With respect to the both subjects college-readiness, English Language Learners who were not economically disadvantaged had higher passing rates than did English Language Learners who were economically disadvantaged in six of the seven school years. Results from this empirical investigation were commensurate with previous researchers (Ardasheva et al., 2012; Fry & Pew, 2008; Intercultural Development Research, 2015; National Center for Public Policy and Higher Education, 2005; Rodriguez & Slate, 2015) who established very low achievement levels in reading and mathematics for English Language Learners, regardless of their economic status. The low reading, mathematics, and both subjects college-readiness of English Language Learners were congruent with previous results reported by researchers (Abedi, 2004; Genesse, Lindholm-Leary, Saunders, & Christian, 2005; Maxwell, 2012, The Course Crafters Guide to the K-12 ELL Market, 2012) whereby limited proficiency in the English language negatively influences the academic achievement of all English Language Learners.

Implications for Policy and for Practice

Based upon the results of this multiyear, Texas statewide investigation, some implications for policy and for practice can be made. First, concerning the low academic performance related to English Language Learners' college-readiness, district multilingual program administrators and school leaders are encouraged to examine English Language Learners' academic performance by grade level. Questions addressing similarity or differences in the academic performance in reading and mathematics of English Language Learners in the elementary, middle school, and high school should be

investigated. An analysis of existing interventions and programs provided to English Language Learners to address academic performance by grade level should be examined. A need exists to conduct audits on the utilization of Title III funding resources used to address closing the academic performance gap and increasing the college-readiness performance of English Language Learners.

Another implication of this study would be for school districts serving English Language Learners to evaluate the implementation of Chapter 89, mandating school districts to address the affective, cognitive, and linguistic needs of English Language Learners. In this investigation, regardless of economic status, English Language Learners had poor college-readiness skills. The third implication of this study is for policymakers and educational service centers to provide clear guidance to school districts and schools on the implementation of Chapter 89, specifically in addressing the affective, linguistic, and cognitive needs of the English Language Learners. Accountability of the implementation of these three important components of addressing the needs of English Language Learners is critical to their academic success.

Recommendations for Future Research

In this Texas statewide investigation, the college-readiness of English Language Learners by their economic status were examined for the 2004-2005 through the 2010-2011 school years. Because the state definition of what constitutes college-readiness has been updated, a replication of this investigation using data from the last several school years is urged. The degree to which the generalizability of results delineated herein to the current state definition of college-readiness is unknown. Another recommendation for future research is to extend this study to other states. Given the continued increase in

population of English Language Learners in the United States and the fact that in this study data on only Texas English Language Learners were analyzed, the generalizability of findings of this investigation to English Language Learners in other states is not known. Analyzed in this research were quantitative data; therefore, a qualitative research study on the perceptions of administrators, teachers, and English Language Learners regarding college-readiness should be conducted. It is further recommended that this study be replicated to ascertain whether English Language Learner boys and girls differ in their college-readiness. Finally, researchers are encouraged to extend this study to determine the degree to which ethnic/racial differences might be present in the college-readiness of English Language Learners.

Conclusion

In this multiyear, statewide investigation, the degree to which the economic status of English Language Learners was related to their reading, mathematics, and both subjects college-readiness was addressed for the 2004-2005 through the 2010-2011 school years in Texas. Analyzed in this study were seven years of archival data from the Texas Education Agency Public Education Information Management System. Of the 21 statistical analyses that were conducted, English Language Learners who were economically disadvantaged had statistically significantly lower college-readiness in 14 of the analyses. English Language Learners who were economically disadvantaged had higher mathematics college-readiness in two school years. Results of this 7-year Texas statewide investigation regarding the low performance of English Language Learners were congruent with previous researchers (Ardasheva et al., 2012; Fry & Pew, 2008;

Intercultural Development Research, 2015; National Center for Public Policy and Higher Education, 2005; Rodriguez & Slate, 2015).

References

- Abedi, J. (2004). The No Child Left Behind Act and English Language Learners: Assessment and accountability issues. *Educational Researcher*, 33(4), 4-14.
- Ardasheva, Y., Tretter, T. R., & Kinny, M. (2012). English Language Learners and academic achievement: Revisiting the threshold hypothesis. *Language Learning*, 62(3), 769-812. doi:10.1111/j.1467-9922.2011.00652.x
- Baker, D. B., Clay, J. N., & Gratama, C. A. (2005). *The essence of college readiness: Implications for students, parents, schools, and researchers*. The BERC Group. Retrieved from <http://www.bercgroup.com/the-essence-of-college-readiness.html>
- Barnes, W., & Slate, J. R. (2013). College-readiness is not one-size-fits-all. *Current Issues in Education*, 16(1), 1-13. Retrieved from <https://cie.asu.edu/ojs/index.php/cieatasu/issue/view/23>
- Barnes, W., Slate, J. R., & Rojas-LeBouef, A. (2010). College-readiness and academic preparedness: The same concepts? *Current Issues in Education*, 13(4), 1-28. Retrieved from <http://cie.asu.edu/ojs/index.php/cieatasu/article/view/678/56>
- Burney, V. H., & Beilke, J. R. (2008). The constraints of poverty on high achievement. *Journal for the Education of the Gifted*, 31(3), 295-321.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Colgren, C., & Sappington, N. E. (2015). Closing the achievement gap means transformation. *Education Leadership Review Of Doctoral Research*, 2(1), 24-33. Retrieved from <https://eric.ed.gov/?id=EJ1105741>

- College Board. (2011). *2011 college-bound seniors: Total group profile report*. Retrieved from
http://professionals.collegeboard.com/profdownload/cbs2011_total_group_report.pdf
- Conley, D. T. (2007, March). *Redefining college readiness*. Eugene, OR: Educational Policy Improvement Center, University of Oregon. Retrieved from
<http://www.epiconline.org/files/pdf/RedefiningCollegeReadiness.pdf>
- Cosentino de Cohen, C., Deterding, N., Clewell, B. C. (2005). *Who's left behind? Immigrant children in high and low LEP schools*. Washington, DC: The Urban Institute.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.
- Course Crafters, Inc. (2012). *The course crafters guide to the K-12 ELL market, 2011-2012*. Haverhill, MA: Author.
- Darling-Hammond, L. (2004). Inequality and the right to learn: Access to qualified teachers in California's public schools. *Teachers College Record*, 106(10), 1936-1966.
- Davis, C. M., Slate, J. R., Moore, G. W., & Barnes, W. (2013). College readiness and Black student performance: Disaffirmed equity. *The Online Journal of New Horizons in Education*, 3(4), 23-44. Retrieved from
<http://tojnred.net/pdf/v03i04/v03i04-03.pdf>

- Dougherty, C., (2014). *Catching up to college and career readiness: The challenge is greater for at-risk students*. Issue Brief. ACT, Inc. Retrieved from <http://files.eric.ed.gov/fulltext/ED546855.pdf>
- Edmonds, R. (1979). Effective schools for the urban poor. *Educational Leadership*, 37(1), 15- 23.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.) Thousand Oaks, CA: Sage.
- Fry, R., (2008). *The role of schools in the English Language Learner achievement gap*. Washington, DC: Pew Hispanic Center. Retrieved from <http://pewhispanic.org/files/reports/89.pdf>
- Genesee, F., Lindholm-Leary, K., Saunders, W., & Christian, D. (2005). English Language Learners in U.S. schools: Overview of research findings. *Journal of Education for Students Placed at Risk*, 10(4), 363-385.
- Greene, J. P., & Winters, M. A. (2005). *Public high school graduation and college readiness rates: 1991- 2002. (Education Working Paper No. 8)*. Center for Civic Innovation at the Manhattan Institute. Retrieved from <http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED498141>
- Haas, E., Huang, M., Tran, L., & Yu, A. (2016a). *The achievement progress of English learner students in Nevada* (REL 2016–154). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory West. Retrieved from <http://ies.ed.gov/ncee/edlabs>

- Haas, E., Huang, M., Tran, L., & Yu, A. (2016b). *The achievement progress of English learner students in Utah* (REL 2016–155). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory West. Retrieved from <http://ies.ed.gov/ncee/edlabs>
- Intercultural Development Research Association. (2015, February). *New research on securing educational excellence & equity for English Language Learners in Texas secondary schools*. Jose A. Cardenas School Finance Fellows Program 2015 Symposium Proceedings. Intercultural Development Research Association, San Antonio, TX.
- Johnson, B., & Christensen, L. (2014). *Educational research: Quantitative, qualitative, and mixed approaches* (5th ed.). Thousand Oaks, CA: Sage.
- Kahlenberg, R. D. (2010). Re-education. *Washington Monthly*, 42(3/4), 46.
- Keigher, A. (2009). *Characteristics of public, private, and Bureau of Indian Education elementary and secondary schools in the United States: Results from the 2007-08 schools and staffing survey*. Washington, DC: National Center for Education Statistics.
- Kirp, D. L. (2013). *Improbable scholars: The rebirth of a great American school system and a strategy for America's schools*. New York, NY: Oxford University Press.
- Lee, K., & Slate, J. R. (2014). Differences in advanced achievement outcomes for Texas students as a function of economic disadvantage. *Journal of Education Research*, 8(3), 137-149.

Leonhardt, D. (2004, April 22). As wealthy fill top colleges, new efforts to level the field.

New York Times. Retrieved from

<http://www.nytimes.com/2004/04/22/us/aswealthy-fill-top-colleges-concerns-grow-overfairness.html?pagewanted=all&src=pm>

Maxwell, L. A. (2012). English-Learners: The educational trajectories of English Learners in Texas. *Education Week*, 31(26).

National Center for Public Policy and Higher Education. (2005). *Income of U.S.*

workforce projected to decline if education doesn't improve. Retrieved from

http://www.highereducation.org/reports/pa_decline/pa_decline.pdf#search=%22minorities%22

Noguera, P. A. (2011). A broader and bolder approach uses education to break the cycle of poverty. *Phi Delta Kappan*, 93(3), 8-14.

Ravitch, D. (2010). *The death and life of the great American school system: How testing and choice are undermining education*. New York, NY: Basic Books.

Radcliffe, R. A., & Bos, B. (2013). Strategies to prepare middle school and high school students for college and career readiness. *Clearing House*, 86(4), 136-141.
doi:10.1080/00098655.2013.782850

Rodriguez, J., & Slate, J. R. (2015). Differences in postsecondary readiness for Texas students as a function of bilingual education service. *International Journal of Psychology Research*, 9, 345-360.

Sheng, Z., Sheng, Y., & Anderson, C. J. (2011). Dropping out of school among ELL students: Implications to schools and teacher education. *Clearing House*, 84(3), 98-103.

- Slate, J. R., & Rojas-LeBouef, A. (2011). *Calculating basic statistical procedures in SPSS: A self-help and practical guide to preparing theses, dissertations, and manuscripts*. Ypsilanti, MI: NCPEA Press.
- Texas Education Agency. (2007a). *Chapter 74.4 English language proficiency standards*. Retrieved from <http://ritter.tea.state.tx.us/rules/tac/chapter074/>
- Texas Education Agency. (2007b). *Sec. 39.051 academic excellence indicators*. Retrieved from https://rptsvr1.tea.texas.gov/perfreport/account/2010/manual/TEC_CH_39_80th.pdf
- Texas Education Agency (2009). *End-of-course assessment plan. College-readiness and advanced-course readiness*. Retrieved from <http://tea.texas.gov/student.assessment/hb3plan/HB3-AppendixB.pdf>
- Texas Education Agency. (2012). *Chapter 89 adaptations for special population*. Retrieved from <http://ritter.tea.state.tx.us/rules/tac/chapter089/ch089bb.html>
- Texas Education Agency (2013). *2013 Accountability system frequently asked questions*. Retrieved from <http://ritter.tea.state.tx.us/perfreport/account/2013/faq.html>
- U.S. Department of Education. (2001). *No Child Left Behind (NCLB)*. Retrieved from <http://www2.ed.gov/policy/elsec/leg/esea02/index.html>
- U.S. Department of Education. (2015a). *Every Child Succeeds Act (ESSA)*. Retrieved from <https://www.ed.gov/ESSA>
- U.S. Department of Education. (2015b). *U.S. high school graduation rate hits new record high*. Retrieved from <https://www.ed.gov/news/press-releases/us-high-school-graduation-rate-hits-new-record-high>

Welton, A., & Williams, M. (2015). Accountability strain, college readiness drain:

Sociopolitical tensions involved in maintaining a college-going culture in a high "minority", high poverty, Texas high school. *The High School Journal*, 98, 181-204.

Yeakey, C. C. (2012). *Living on the boundaries: Urban marginality in national and international contexts*. Bingley, UK: Emerald Book Serials and Monographs.

Zhao, Y. (2009). Comments on the Common Core Standards Initiative. *AASA Journal of Scholarship & Practice*, 6(3), 46-54.

Zhao, Y. (2013). U-turn to prosperity. *Educational Leadership*, 70(5), 57-59.

Table 3.1

Frequencies and Percentages of Reading College-Readiness by the Economic Status of English Language Learners for the 2004-2005 Through the 2007-2008 School Years

School Year and College-Readiness	Economically Disadvantaged <i>n</i> and %age of Total	Not Economically Disadvantaged <i>n</i> and %age of Total
2004-2005		
Met	(<i>n</i> = 196) 2.50%	(<i>n</i> = 48) 3.70%
Not Met	(<i>n</i> = 7,735) 97.50%	(<i>n</i> = 1,264) 96.30%
2005-2006		
Met	(<i>n</i> = 171) 2.20%	(<i>n</i> = 41) 3.30%
Not Met	(<i>n</i> = 7,717) 97.80%	(<i>n</i> = 1,194) 96.70%
2006-2007		
Met	(<i>n</i> = 223) 2.90%	(<i>n</i> = 40) 3.40%
Not Met	(<i>n</i> = 7,577) 97.10%	(<i>n</i> = 1,137) 96.60%
2007-2008		
Met	(<i>n</i> = 358) 5.70%	(<i>n</i> = 44) 7.00%
Not Met	(<i>n</i> = 5,966) 94.30%	(<i>n</i> = 581) 93.00%

Table 3.2

Frequencies and Percentages of Reading College-Readiness by the Economic Status of English Language Learners for the 2008-2009 Through the 2010-2011 School Years

School Year and College-Readiness	Economically Disadvantaged <i>n</i> and %age of Total	Not Economically Disadvantaged <i>n</i> and %age of Total
2008-2009		
Met	(<i>n</i> = 651) 9.00%	(<i>n</i> = 122) 13.7%
Not Met	(<i>n</i> = 6,586) 91.00%	(<i>n</i> = 769) 86.30%
2009-2010		
Met	(<i>n</i> = 471) 9.70%	(<i>n</i> = 588) 13.10%
Not Met	(<i>n</i> = 4,364) 90.30%	(<i>n</i> = 3,915) 86.90%
2010-2011		
Met	(<i>n</i> = 396) 9.70%	(<i>n</i> = 527) 13.80%
Not Met	(<i>n</i> = 3,297) 90.30%	(<i>n</i> = 3,297) 86.20%

Table 3.3

Frequencies and Percentages of Mathematics College-Readiness by the Economic Status of English Language Learners for the 2004-2005 Through the 2007-2008 School Years

School Year and College-Readiness	Economically Disadvantaged <i>n</i> and %age of Total	Not Economically Disadvantaged <i>n</i> and %age of Total
2004-2005		
Met	(<i>n</i> = 642) 8.50%	(<i>n</i> = 139) 10.90%
Not Met	(<i>n</i> = 6,954) 91.50%	(<i>n</i> = 1,133) 89.10%
2005-2006		
Met	(<i>n</i> = 825) 10.70%	(<i>n</i> = 109) 9.30%
Not Met	(<i>n</i> = 6,857) 89.30%	(<i>n</i> = 1,059) 90.70%
2006-2007		
Met	(<i>n</i> = 854) 11.20%	(<i>n</i> = 96) 8.70%
Not Met	(<i>n</i> = 6,788) 88.80%	(<i>n</i> = 1,006) 91.30%
2007-2008		
Met	(<i>n</i> = 1,081) 18.00%	(<i>n</i> = 116) 20.00%
Not Met	(<i>n</i> = 4,929) 82.00%	(<i>n</i> = 463) 80.00%

Table 3.4

Frequencies and Percentages of Mathematics College-Readiness by the Economic Status of English Language Learners for the 2008-2009 Through the 2010-2011 School Years

School Year and College-Readiness	Economically Disadvantaged <i>n</i> and %age of Total	Not Economically Disadvantaged <i>n</i> and %age of Total
2008-2009		
Met	(<i>n</i> = 1,687) 24.20%	(<i>n</i> = 230) 27.20%
Not Met	(<i>n</i> = 5,279) 75.80%	(<i>n</i> = 616) 72.80%
2009-2010		
Met	(<i>n</i> = 4,429) 29.00%	(<i>n</i> = 196) 33.40%
Not Met	(<i>n</i> = 5,954) 71.00%	(<i>n</i> = 391) 66.60%
2010-2011		
Met	(<i>n</i> = 2,532) 35.40%	(<i>n</i> = 91) 20.80%
Not Met	(<i>n</i> = 4,613) 64.60%	(<i>n</i> = 347) 79.20%

Table 3.5

Frequencies and Percentages of Both Subjects College-Readiness by the Economic Status of English Language Learners for the 2004-2005 Through the 2007-2008 School Years

School Year and College-Readiness	Economically Disadvantaged <i>n</i> and %age of Total	Not Economically Disadvantaged <i>n</i> and %age of Total
2004-2005		
Met	(<i>n</i> = 75) 1.00%	(<i>n</i> = 24) 2.10%
Not Met	(<i>n</i> = 7,131) 99.00%	(<i>n</i> = 1,104) 97.90%
2005-2006		
Met	(<i>n</i> = 92) 1.30%	(<i>n</i> = 22) 2.20%
Not Met	(<i>n</i> = 7,135) 98.70%	(<i>n</i> = 997) 97.80%
2006-2007		
Met	(<i>n</i> = 107) 1.50%	(<i>n</i> = 25) 2.60%
Not Met t	(<i>n</i> = 7,051) 98.50%	(<i>n</i> = 941) 97.40%
2007-2008		
Met	(<i>n</i> = 173) 3.00%	(<i>n</i> = 32) 6.60%
Not Met	(<i>n</i> = 5,589) 97.00%	(<i>n</i> = 450) 93.40%

Table 3.6

Frequencies and Percentages of Both Subjects College-Readiness by the Economic Status of English Language Learners for the 2008-2009 Through the 2010-2011 School Years

School Year and College-Readiness	Economically Disadvantaged <i>n</i> and %age of Total	Not Economically Disadvantaged <i>n</i> and %age of Total
2008-2009		
Met	(<i>n</i> = 197) 5.30%	(<i>n</i> = 221) 5.90%
Not Met	(<i>n</i> = 3,504) 94.70%	(<i>n</i> = 3,503) 94.10%
2009-2010		
Met	(<i>n</i> = 522) 6.40%	(<i>n</i> = 93) 18.10%
Not Met	(<i>n</i> = 7,618) 93.60%	(<i>n</i> = 420) 81.90%
2010-2011		
Met	(<i>n</i> = 579) 8.50%	(<i>n</i> = 22) 6.90%
Not Met	(<i>n</i> = 6,235) 91.50%	(<i>n</i> = 297) 93.10%

Table 3.7

*Summary of Reading College-Readiness Results by the Economic Status of English**Language Learners for the 2004-2005 Through the 2010-2011 School Years*

School Year	Statistically Significant	Effect Size	Poorest Performing Group
2004-2005	Yes	Below Small	Economically Disadvantaged
2005-2006	Yes	Below Small	Economically Disadvantaged
2006-2007	No	N/A	N/A
2007-2008	No	N/A	N/A
2008-2009	Yes	Below Small	Economically Disadvantaged
2009-2010	Yes	Below Small	Economically Disadvantaged
2010-2011	Yes	Below Small	Economically Disadvantaged

Table 3.8

Summary of Mathematics College-Readiness Results by the Economic Status of English Language Learners for the 2004-2005 Through the 2010-2011 School Years

School Year	Statistically Significant	Effect Size	Poorest Performing Group
2004-2005	Yes	Below Small	Economically Disadvantaged
2005-2006	No	N/A	N/A
2006-2007	Yes	Below Small	Not Economically Disadvantaged
2007-2008	No	N/A	N/A
2008-2009	Yes	Below Small	Economically Disadvantaged
2009-2010	Yes	Below Small	Economically Disadvantaged
2010-2011	Yes	Below Small	Not Economically Disadvantaged

Table 3.9

Summary of Both Subjects College-Readiness Results by the Economic Status of English Language Learners for the 2004-2005 Through the 2010-2011 School Years

School Year	Statistically Significant	Effect Size	Poorest Performing Group
2004-2005	Yes	Below Small	Economically Disadvantaged
2005-2006	Yes	Below Small	Economically Disadvantaged
2006-2007	Yes	Below Small	Economically Disadvantaged
2007-2008	Yes	Below Small	Economically Disadvantaged
2008-2009	Yes	Below Small	Economically Disadvantaged
2009-2010	Yes	Small	Economically Disadvantaged
2010-2011	No	N/A	N/A

CHAPTER IV

DIFFERENCES IN COLLEGE-READINESS BY THE ETHNICITY/RACE OF ENGLISH LANGUAGE LEARNERS: A TEXAS MULTIYEAR STATEWIDE ANALYSIS

This dissertation follows the style and format of *Research in the Schools (RITS)*.

Abstract

In this investigation, the reading, mathematics, and both subjects college-readiness of English Language Learners in the 2004-2005 to 2010-2011 school years were examined. The degree to which the ethnicity/race (i.e., Asian, White, Hispanic, Black) of English Language Learners with their reading, mathematics, and both subjects college-readiness was addressed. Analyzed were archival data obtained from Texas Education Agency Public Education Information Management. Inferential statistical procedures revealed the presence of statistically significant differences in reading, mathematics, and both-subjects college-readiness of English Language Learners by their ethnicity/race. Asian English Language Learners outperformed White, Hispanic, and Black English Language Learners in reading, mathematics, and both subjects college-readiness for most of the school years. Implications of these results and recommendations for future research are provided.

Keywords: English Language Learners, College-Readiness, Reading, Mathematics, Both Subjects, Ethnicity/Race, Asian, White, Hispanic, Black

DIFFERENCES IN COLLEGE-READINESS BY THE ETHNICITY/RACE OF ENGLISH LANGUAGE LEARNERS: A TEXAS MULTIYEAR STATEWIDE ANALYSIS

Public schools in the United States, now more than ever, are required to provide a higher and more rigorous level of education to students in this era of informational-based economy (Colgren & Sappington, 2015). Kirsch, Braun, Yamamoto, and ETS (2007) asserted that the nation is in the midst of a perfect storm initiated by three forces: (a) disproportion of literacy and numeracy, (b) economic restructuring, and (c) demographic changes. Kirsch et al. stated:

Put crudely, over the next 25 years or so, as better-educated individuals leave the workforce they will be replaced by those who, on average, have lower levels of education and skill. Over this same period, nearly half of the projected job growth will be concentrated in occupations associated with higher education and skill levels. This means that tens of millions more of our students and adults will be less able to qualify for higher paying jobs. Instead, they will be competing not only with each other and millions of newly arrived immigrants but also with equally (or better) skilled workers in lower-wage economies around the world. (p.

4)

Kirsch et al. (2007) further contended that if educational skills continue to decrease and existing gaps continue to widen, economic opportunities will not improve in key sectors of the United States.

As the current national labor force necessitate employees who have both the academic and technical skills to serve in both high and middle-skills jobs (Carnevale,

Smith, & Strohl, 2010), the Organization for Economic Cooperation and Development (2016) noted that employers have difficulty finding employees who are able to fill these jobs. As the United States responds to the critical need to produce globally competitive work force, the federal government has taken initiatives such as the No Child Left Behind Act (2001) and the Every Student Succeeds Act (2015) to ensure that public schools are preparing students to be college and career ready. According to Mishkind and the American Institutes for Research (2014), the definition of college and career readiness gathered from 36 states and the District of Columbia summed up as a “multifaceted, encompassing academic readiness, as well as knowledge, abilities, and dispositions that impact academic achievement” (p. 6).

The State of Texas has defined college readiness as meeting Index 4 in the new Texas accountability system, wherein “the importance for students to receive a high school diploma that provides them with the foundation necessary for success in college, the workforce, job training programs, or the military” (Texas Education Agency, 2017, p. 3) is emphasized. Although the U.S. Department of Education (2015) reported that the United States had reached the highest high school graduation rate at 81%, “achievement equity is not currently a reality in American public schooling” (Colgren & Sappington, 2015, p. 26). Researchers (Capraro Young, Lewis, Yetkiner, & Woods, 2009; Coley, 2003; Guglielmi, 2012; Kieffer, 2011; Lee, 2002; Lubienski & Lubienski, 2006; Polat, Zarecky-Hodge, & Schreiber, 2016; Sanderson & Harrington, 2005) have contended that the No Child Left Behind Act (2001) failed to close the achievement gaps among students in the United States. Holme, Richards, Jimerson, and Cohen (2010) maintained that Black students, Hispanic students, and English Language Learners were negatively

influenced by the pressures imposed by high-stakes exit testing involved in the No Child Left Behind (2001) and Every Student Succeeds Act (2015) federal legislations. Holme et al. (2010) contended that the high-stakes testing was related to increased dropout rates in high poverty urban schools. Harvey (2013) established that in examining the college readiness gaps by race/ethnicity in Texas public schools, the college-readiness rates of White and Asian students were statistically significant higher than were the college readiness rates of Hispanic and Black students. Similarly, Barnes and Slate (2014) documented that the college-readiness rates of Hispanic and Black students in reading, mathematics, and both subjects were statistically significantly lower than the college-readiness rates in reading, mathematics, and both subjects of White students. Harvey, Slate, Moore, Barnes, and Martinez-Garcia (2013) established the presence of a stair-step effect on ACT scores: Asian students scored the highest, trailed by White students, Hispanic students, and finally by Black students.

To substantiate the existence of achievement gaps in Hispanic students among their peers, Capraro et al. (2009) documented in a study of Grade 9 and Grade 10 students in Colorado on two mathematics assessment that White and Asian students continued to outperform Hispanic students. Similarly, Sánchez, Ehrlich, Midouhas, and O'Dwyer (2009) established that Hispanic students performed lower than non-Hispanic students on the Massachusetts Comprehensive Assessment System Mathematics and English Language Arts test. Simon et al. (2011) uncovered constant achievement gaps and underperformance of Hispanic students in comparison to other ethnic/racial groups as noted in the following: (a) In 2008, the dropout rate of Hispanic students were two and a half times higher than White students and twice as high as Black students; (b) In 2007,

the number of Hispanic students graduating in high school was 6 out of 10 in comparison to White students 8 out of 10 graduation rate; (c) In 2010, Hispanic students who took Advanced Placement courses were 2 out of every 10 Hispanic students; (d) In 2010, Hispanic students SAT scores in reading, writing, and mathematics were lower than the SAT scores of White students; (e) In 2010, Hispanic students ACT scores were two points lower than national average and three points lower than White peers in reading and mathematics; and (f) In 2010, Hispanic students who met readiness standards in reading and mathematics on the ACT exam was less than 50%. The National Center for Education Statistics (2016) revealed that 69% of White students earned a Baccalaureate degree in comparison to only 11% of Hispanic students.

The United States Census Bureau (2016) reported an increase of 35.5% enrollment of Hispanic students in pre-Kindergarten to college within a 10-year period from the year 2005 to 2015. These data supported a past report by the U.S. Census Bureau (2008) on the projected increase of the number of Hispanic school-age population at 13.8 million in 2010 and to 20.1 million by 2025. Davis and Bauman (2013) cited an increase in the number of Hispanic students and a decrease in the White student population at all levels. Fry (2008) determined that a large number of Hispanic students were English Language Learners. However, achievement gaps are not only attributed to ethnicity/race, but other factors such as “English language proficiency, immigration status, acculturation challenges, racism, and socioeconomic factors” (Cook, Pérusse, & Rojas, 2015, p. 3) also influence academic performance. Bustamante et al. (2010) established that a low number of English Language Learners and students who were enrolled in special education were college ready as indicated in their performance in the

2006-2007 and 2007-2008 school years on the Texas Assessment of Knowledge and Skills Reading and Mathematics tests.

Statement of the Problem

The National Center for Education Statistics (2016) reported an increase in English Language Learners enrolled in the public schools in the 2014-2015 school year with an estimated 4.6 million students, compared to an estimated 4.3 million students in the 2004-2005 school year with. The State of Texas is one of the seven states including the District of Columbia that have seen an influx of enrollment of English Language Learners with a 10% or more increase in the 2014-2015 school year (National Center for Education Statistics, 2016). The Texas Commissioner on Higher Education, Raymund Paredes (2016), during the Joint Interim Hearing of the Senate Public Education and Higher Education Committees stated that in 2006, Texas lead the nation in mandating College and Career Readiness Standards. However, despite this claim, only 20 of 100 Grade 8 students, 14 of 100 Grade 8 Hispanic, 13 of 100 Grade 8 Black students in Texas complete a postsecondary credential within 11 years (Paredes, 2016).

In examining differences in college readiness rates of Texas students, several researchers (e.g., Barnes & Slate, 2014; Bustamante et al., 2010; Harvey, 2013; Harvey et al., 2013) focused their studies on ethnic/racial variables and differences between English Language Learners and native-English speaking students. Only limited research studies were located on the college readiness rates of English Language Learners as a function of their ethnicity/race. Considering the rising number of English Language Learners in Texas and the continued academic gap widening between them and their native-English speaking peers (Bustamante et al., 2010), Craft and Slate (2012) asserted “In addition to

second language acquisition issues, the general public may not fully comprehend the educational needs of students designated as LEP” (p. 189). Thus, research on the college-readiness skills of English Language Learners by their ethnicity/race is warranted.

Purpose of the Study

The purpose of this study was to determine the extent to which reading college-readiness differed as a function of the ethnicity/race (i.e., Asian, White, Hispanic, and Black) of English Language Learners. The second purpose of this study was to ascertain the extent to which differences were present in mathematics college-readiness as a function of the ethnicity/race of English Language Learners. Another purpose of this study was to determine the degree to which differences were present in both subjects college- as a function of the ethnicity/race of English Language Learners. By investigating whether differences exist in college-readiness as a function of the ethnicity/race of English Language Learners, relevant data on their reading, mathematics, and both subjects college-readiness and the degree to which changes have occurred were analyzed. Finally the extent to which a trend was present in college-readiness over this 7 year time period by the ethnicity/race of English Language Learners was determined.

Significance of the Study

Empirical literature on the college-readiness skills of English Language Learners is limited. Moreover, research investigations on the tracking of college-readiness and closing the achievement gaps among English Language Learners as a function of their ethnicity/race are insufficient. Provided in the findings of this study will be valuable information to schools, school districts, and educational agencies on the achievement

growth or decline of English Language Learners, specifically in their college-readiness performance as a function of race/ethnicity. Discussion on current educational practices and opportunities afforded to English Language Learners and the differentiation provided for each of the racial/ethnic sub-groups will be initiated as a result of this research.

Given the importance apportioned to the Texas state academic accountability ratings and Title III program, English Language Learners ratings are closely examined not only in terms of student achievement and student progress but to close achievement gap and increase postsecondary readiness, as well.

Research Questions

The following research questions were addressed in this investigation: (a) What is the difference in reading college-readiness as a function of the ethnicity/race (i.e., Asian, White, Hispanic, and Black) of English Language Learners in Texas?; (b) What is the difference in mathematics college-readiness as a function of the ethnicity/race of English Language Learners in Texas?; (c) What is the difference in both subjects college-readiness as a function of the ethnicity/race of English Language Learners in Texas? (d) What trend is present in reading college-readiness as a function of the ethnicity/race of English Language Learners in Texas for the 2004-2005 school year through the 2010-2011 school year?; (e) What trend is present in mathematics college-readiness as a function of the ethnicity/race of English Language Learners in Texas for the 2004-2005 school year through the 2010-2011 school year?; and (f) What trend is present in college-readiness in both subjects readiness as a function of the ethnicity/race of English Language Learners in Texas for the 2004-2005 school year through the 2010-2011 school year? The first three research questions were repeated for the 2004-2005, 2005-2006,

2006-2007, 2007-2008, 2008-2009, 2009-2010, and 2010-2011 school years whereas the last three research questions constituted an analysis across all seven school years.

Method

Research Design

A non-experimental, causal-comparative research design (Creswell, 2009; Johnson & Christensen, 2014) was present in this study. Because the independent variable of ethnicity/race cannot be manipulated and because the three dependent variables had already occurred, a causal-comparative research design was present. The dependent variables in this research study were the reading, mathematics, and both subjects college-readiness skills of English Language Learners for each of the following school years (i.e., 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009, 2009-2010, and 2010-2011).

Archival individual student level data from the Texas Education Agency were obtained from the Public Education Information Management System and were analyzed for the purpose of this study. Specific information on English Language Learners' ethnicity/race: White, Black, Asian, and Hispanic, reading college-readiness, mathematics college-readiness, and both subjects college-readiness from the Public Education Information Management System were analyzed. The last 7 years of available Texas statewide data were obtained: 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009, 2009-2010, and 2010-2011 school years.

One independent variable and three dependent variables were of interest in this investigation. The independent variable comprised four ethnic/racial groups (i.e., Asian, White, Hispanic, and Black) or English Language Learners. English Language Learner is

a term used to describe students who have limited English proficiency, or English Language Learner, by the Language Proficiency Assessment Committee according to criteria established in the Texas Administrative Code (Texas Education Agency, Glossary for the Texas Academic Performance Report, 2012, p. 10). As mandated by the Texas Education CODE [TEC] §39.051 (b) (13), all Texas high schools and school districts, were to report college readiness on the basis of these six indicators: (a) scores in Advanced Placement exam, (b) enrollment in dual credit course, (c) scores in SAT critical reading and math, ACT English and math, or results in Texas Assessment of Knowledge and Skills (TAKS) English/language arts (ELA) and math, (d) advanced coursework in science, math, and foreign languages, (e) scores in state college-readiness assessments, and (f) percent of college-ready graduates in each high school and district as established by the first four indicators (Texas Education Agency, 2009). Other than the six aforementioned indicators, another indicator for college-readiness includes a graduate having met or exceeded the college ready criteria in (a) exit-level test on TAKS ELA and TAKS mathematics, (b) SAT critical reading and SAT mathematics, or (c) ACT English and ACT mathematics (Texas Education Agency, 2009). The Texas Education Agency conceals specific student performance data to avoid individual student identification in compliance with the Family Educational Rights and Privacy Act.

Results

To determine the extent to which differences were present in college-readiness for English Language Learners by their ethnicity/race, statistical analyses for the 2004-2005 through the 2010-2011 school years were conducted. The specific inferential statistical procedure used to address the previously delineated research questions was the Pearson

chi-square statistic. The Pearson chi-square was the appropriate statistical procedure to be used in this investigation because frequency data were present for the independent variable of economic status (i.e., Asian, White, Hispanic, Black). Moreover, the three dependent variables (i.e., reading college-readiness, mathematics college-readiness, and both subjects college-readiness) were dichotomous variables (i.e., were or were not college ready). Prior to calculating any Pearson chi-squares, its underlying assumptions were checked. Specifically examined were the sample size (i.e., more than five scores available per cell) and all data were independent. Given the statewide sample size that were present, as well as the fact that each student whose data were analyzed in this investigation had one score for reading college-readiness, one score for mathematics college-readiness, and one score for both subjects college-readiness. As such, the underlying assumptions for using a Pearson chi-square procedure were met (Slate & Rojas-LeBouef, 2011).

Reading College-Readiness Results

For the 2004-2005 school year, in which the focus was placed on reading college-readiness of English Language Learners by their ethnicity/race, the Pearson chi-square procedure yielded a statistically significant result, $\chi^2(3) = 39.16, p < .001$. The effect size for this finding, Cramer's V, was below small, .06 (Cohen, 1988). As revealed in Table 4.1, almost 30% of Asian English Language Learners were college-ready in reading compared to less than 10% of English Language Learners who were White, Hispanic, or Black. The percentage of Asian English Language Learners who met the reading college-readiness standard was twice the percentage of Hispanic English Language Learners. The percentage of Hispanic English Language Learners who met reading

college-readiness was almost twice the percentage of Black English Language Learners, and the percentage of Black English Language Learners who met reading college-readiness was almost one and half times greater than White English Language Learners.

Insert Table 4.1 about here

With respect to the 2005-2006 school year, the Pearson chi-square analysis resulted in a statistically significant difference in reading college-readiness, $\chi^2(3) = 43.11$, $p < .001$, by the ethnicity/race of English Language Learners. The effect size for this finding, Cramer's V, was below small, .07 (Cohen, 1988). Less than 9% of Asian and Hispanic English Language Learners were college ready in reading. No Black English Language Learners or White English Language Learners met the reading college-readiness standard in this school year. In agreement with the previous school year's results, the percentage of Asian English Language Learners who were college-ready in reading was twice the percentage of Hispanic English Language Learners. Revealed in Table 4.1 are the descriptive statistics for this school year.

Regarding the 2006-2007 school year, a statistically significant difference was again present in reading college-readiness by the ethnicity/race of English Language Learners $\chi^2(3) = 28.51$, $p < .001$. The effect size for this finding, Cramer's V, was below small, .07 (Cohen, 1988). Commensurate with the previous school years, very small percentages, less than 9%, were college-ready in reading. Again, Asian English Language Learners had statistically significantly higher percentages, two times higher, of being college-ready in reading, than either Hispanic or Black English Language Learners.

In this school year, no White English Language Learners met the reading college-readiness standard. Table 4.1 contains the descriptive statistics for this analysis.

With respect to the 2007-2008 school year, the Pearson chi-square analysis resulted in a statistically significant difference, $\chi^2(3) = 19.62, p < .001$, by the ethnicity/race of English Language Learners. The effect size for this finding, Cramer's V , was below small, .05 (Cohen, 1988). In this school year, Black English Language Learners had a higher percentage, 1%, who were college-ready in reading than Asian English Language Learners. Again, no White English Language Learners were college-ready in reading. Delineated in Table 4.2 are the descriptive statistics for this analysis.

 Insert Table 4.2 about here

For the 2008-2009 school year, the Pearson chi-square procedure yielded a statistically significant result, $\chi^2(3) = 51.18, p < .001$. The effect size for this finding, Cramer's V , was below small, .08 (Cohen, 1988). As revealed in Table 4.2, less than 50% of Asian English Language Learners were college ready in reading compared to less than 25% of Hispanic English Language Learners. Similar to the previous school years, no White English Language Learners met the reading college-readiness standard. A stair-step effect (Carpenter, Ramirez, & Severn, 2006) was present wherein Asian English Language Learners performed highest among the groups followed by Hispanic, Black, and White English Language Learners.

With respect to the 2009-2010 school year, the Pearson chi-square analysis resulted in a statistically significant difference in reading college-readiness, $\chi^2(3) = 73.73$,

$p < .001$, by the ethnicity/race of English Language Learners. The effect size for this finding, Cramer's V , was below small, .09 (Cohen, 1988). Results for this school year were almost identical to the previous school year. Table 4.2 contains the descriptive statistics for this analysis.

Regarding the 2010-2011 school year, a statistically significant difference was again present in reading college-readiness by the ethnicity/race of English Language Learners, $\chi^2(3) = 24.73, p < .001$. The effect size for this finding, Cramer's V , was below small, .06 (Cohen, 1988). For this school year, small percentages, less than 15%, were college-ready in reading. Black English Language Learners had statistically significantly higher percentages of being college-ready in reading followed by Hispanic and then Asian English Language Learners. Again, no White English Language Learners met the reading college-readiness standard. The percentage of Black English Language Learners who were college-ready in reading was more than one fourth higher than the percentage of Hispanic English Language Learners and two thirds more than Asian English Language Learners. Delineated in Table 4.3 are the descriptive statistics for this analysis.

 Insert Table 4.3 about here

Mathematics College-Readiness Results

Concerning the 2004-2005 school year, in which the focus was placed on mathematics college-readiness by the ethnicity/race of English Language Learners, the Pearson chi-square procedure yielded a statistically significant result, $\chi^2(3) = 140.38, p < .001$. The effect size for this finding, Cramer's V , was small, .12 (Cohen, 1988). As

revealed in Table 4.4, a stair-step effect (Carpenter et al., 2006) was present wherein Asian English Language Learners had the highest college-readiness in mathematics followed by Hispanic, Black, and White English Language Learners.

Insert Table 4.4 about here

With respect to the 2005-2006 school year, the Pearson chi-square analysis resulted in a statistically significant difference in mathematics college-readiness, $\chi^2(3) = 73.39, p < .001$, by the ethnicity/race of English Language Learners. The effect size for this finding, Cramer's V, was below small, .09 (Cohen, 1988). Less than 25% of Asian English Language Learners and less than 11% of Hispanic English Language Learners were college-ready in mathematics. No Black or White English Language Learners were college-ready in mathematics. Table 4.4 contains the descriptive statistics for this analysis

Regarding the 2006-2007 school year, a statistically significant difference was again present in mathematics college-readiness, $\chi^2(3) = 54.96, p < .001$. The effect size for this finding, Cramer's V, was below small, .01 (Cohen, 1988). Commensurate with the previous school years, only the Asian and Hispanic group had any students who were college-ready in mathematics. The mathematics college-readiness of Asian English Language Learners was more than twice as much as the percentage of Hispanic English Language Learners. Revealed in Table 4.4 are the descriptive statistics for this analysis.

With respect to the 2007-2008 school year, the Pearson chi-square analysis resulted in a statistically significant difference in mathematics college-readiness, $\chi^2(3) =$

60.43, $p < .001$. The effect size for this finding, Cramer's V , was small, .10 (Cohen, 1988). Again, a stair-step effect (Carpenter et al., 2006) was present wherein Asian English Language Learners had the highest percentage of students who were college-ready in mathematics, followed by Hispanic, Black, and White English Language Learners. Delineated in Table 4.5 are the descriptive statistics for this analysis.

 Insert Table 4.5 about here

For the 2008-2009 school year, the Pearson chi-square procedure yielded a statistically significant result, $\chi^2(3) = 80.00$, $p < .001$. The effect size for this finding, Cramer's V , was small, .10 (Cohen, 1988). As revealed in Table 4.5, less than 50% of Asian English Language Learners, less than 25% for Hispanic English Language Learners, and less than 6% of Black English Language Learners were college-ready in mathematics. Again, commensurate with the previous school years, no White English Language Learners met the mathematics college-readiness standard in this school year.

Concerning the 2009-2010 school year, the Pearson chi-square analysis resulted in a statistically significant difference in mathematics college-readiness, $\chi^2(3) = 77.51$, $p < .001$. The effect size for this finding, Cramer's V , was below small, .09 (Cohen, 1988). Results for this school year were identical to the previous year where a stair-step effect (Carpenter et al., 2006) was present. Asian English Language Learners had the highest percentage of students who were college-ready in mathematics, followed by Hispanic, Black, and White English Language Learners. The descriptive statistics for this school year are presented in Table 4.5.

Regarding the 2010-2011 school year, a statistically significant difference was again present in mathematics college-readiness, $\chi^2(3) = 54.40, p < .001$. The effect size for this finding, Cramer's V, was below small, .08 (Cohen, 1988). Over 30% of Hispanic and Asian English Language Learners and 17% of Black English Language Learners were college-ready in mathematics. Delineated in Table 4.6 are the descriptive statistics for this analysis.

Insert Table 4.6 about here

Both Subjects College-Readiness Results

For the 2004-2005 school year, in which the focus was placed on both subjects college-readiness by the ethnicity/race of English Language Learners, the Pearson chi-square procedure yielded a statistically significant result, $\chi^2(3) = 104.20, p < .001$. The effect size for this finding, Cramer's V, was small, .11 (Cohen, 1988). As revealed in Table 4.7, a stair-step effect (Carpenter et al., 2006) was present. Asian English Language Learners had the highest college-readiness in both subjects, followed by Hispanic and Black English Language Learners. Of note to readers is that no White English Language Learners met the both subjects college-readiness standard in this school year.

Insert Table 4.7 about here

With respect to the 2005-2006 school year, the Pearson chi-square analysis resulted in a statistically significant difference in both subjects college-readiness, $\chi^2(3) = 55.22, p < .001$, by the ethnicity/race of English Language Learners. The effect size for this finding, Cramer's V, was below small, .08 (Cohen, 1988). Asian English Language Learners had statistically significantly higher percentages of being college-ready in both subjects than either Hispanic, Black, or White English Language Learners. No Black and no White English Language Learners met the both subjects college-readiness standard in this school year. Revealed in Table 4.7 are the descriptive statistics for this school year.

Regarding the 2006-2007 school year, a statistically significant difference was again present in both subjects college-readiness, $\chi^2(3) = 49.43, p < .001$. The effect size for this finding, Cramer's V, was below small, .08 (Cohen, 1988). Commensurate to the previous school year, the percentage of Asian English Language Learners who were college-ready in both subjects were almost one and a half times more than the percentage of Hispanic English Language Learners were college-ready in both subjects. Similar to the previous school year's results, no Black English Language Learners and no White English Language Learners met the both subjects college-readiness standard. Table 4.7 contains the descriptive statistics for this analysis.

Concerning the 2007-2008 school year, the Pearson chi-square analysis resulted in a statistically significant difference in both subjects college-readiness, $\chi^2(3) = 66.84, p < .001$. The effect size for this finding, Cramer's V, was small, .10 (Cohen, 1988). A stair-step effect (Carpenter et al., 2006) was present wherein Asian English Language Learners had the highest both subjects college-readiness, followed by Hispanic and Black English Language Learners. Of note to readers is that no White English Language

Learners met the both subjects college-readiness standard in this school year. Delineated in Table 4.8 are the descriptive statistics for this analysis.

 Insert Table 4.8 about here

For the 2008-2009 school year, the Pearson chi-square procedure yielded a statistically significant difference in both subjects college-readiness, $\chi^2(3) = 141.65, p < .001$. The effect size for this finding, Cramer's V, was small, .14 (Cohen, 1988). As revealed in Table 4.8, almost 25% of Asian English Language Learners, 10% of Black English Language Learners, and 5% of Hispanic English Language Learners were college-ready in both subjects.

With respect to the 2009-2010 school year, the Pearson chi-square analysis resulted in a statistically significant difference in both subjects college-readiness, $\chi^2(3) = 173.56, p < .001$. The effect size for this finding, Cramer's V, was small, .14 (Cohen, 1988). Less than 30% of Asian English Language Learners were college-ready and less than 10% Hispanic English Language Learners and Black English Language Learners were college-ready. Again, no White English Language Learners met the both subjects college-readiness standard in this school year. Table 4.8 contains the descriptive statistics for this school year.

Regarding the 2010-2011 school year, a statistically significant difference was again present in both subjects college-readiness, $\chi^2(3) = 4.64, p < .001$. The effect size for this finding, Cramer's V, was below small, .03 (Cohen, 1988). For this school year, Black English Language Learners had the highest percentage of students who were

college-ready in both subjects, followed by Hispanic and Asian English Language Learners. Delineated in Table 4.9 are the descriptive statistics for this analysis.

Insert Table 4.9 about here

Discussion

Addressed in this investigation was the extent to which differences were present in the reading, mathematics, and both subject college-readiness rates of English Language Learners by their ethnicity/race. Seven school years (i.e., 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009, 2009-2010, and 2010-2011) of data from the Texas Education Agency Public Education Information Management System were analyzed. Inferential statistical analyses revealed the presence of statistically significant differences in the reading, mathematics, and both subjects college-readiness rates by ethnicity/race in all seven school years. At this time, results will be summarized for each of the three college-readiness variables: reading, mathematics, and both subjects.

With respect to the reading college-readiness of English Language Learners by their ethnicity/race, Asian English Language Learners had higher college-readiness skills than did White, Hispanic, and Black English Language Learners in five school years (2004-2005, 2005-2006, 2006-2007, 2008-2009, and 2009-2010). Black English Language Learners had higher reading college-readiness skills than Asian, White, and Hispanic English Language Learners in the 2007-2008 and 2010-2011 school years. White English Language Learners consistently had the lowest reading college-readiness skills. For six consecutive school years, 2005-2006 to 2010-2011, no White English

Language Learners met the reading college-readiness standard. Delineated in Table 4.10 are the reading college-readiness results of English Language Learners by their ethnicity/race for the 2004-2005 through the 2010-2011 school years.

Insert Table 4.10 about here

Regarding the mathematics college-readiness of English Language Learners by their ethnicity/race, Asian English Language Learners had higher mathematics college-readiness skills than White, Hispanic, and Black English Language Learners in six consecutive school years, 2004-2005 to 2009-2010. A stair-step effect (Carpenter et al., 2006) was present for six school years wherein Asian English Language Learners had the highest percentage of students who were college-ready in mathematics, followed by Hispanic, Black, and White English Language Learners. The percentage of mathematics college-readiness of Asian English Language Learners were twice as high as the mathematics college-readiness of Hispanic, Black, and White English Language Learners. In the 2010-2011 school year, Hispanic English Language Learners had the highest percentage of students who were college-ready in mathematics. Of importance for readers was that no White English Language Learners met the mathematics college-readiness standard. The mathematics college-readiness results of English Language Learners by their ethnicity/race for the 2004-2005 through the 2010-2011 school years are revealed in Table 4.11.

Insert Table 4.11 about here

Concerning the both subjects college-readiness of English Language Learners by their ethnicity race, Asian English Language Learners consistently had the highest percentages of students who were college-ready in both subjects. Similar to the reading and mathematics college-readiness results, no White English Language Learners were college-ready in both subjects. Delineated in Table 4.12 is a summary of the results for the both subjects college-readiness of English Language Learners by their ethnicity/race for the 2004-2005 through the 2010-2011 school years.

Insert Table 4.12 about here

Connections with the Existing Literature

With respect to existing research (Barnes, 2013; Barnes & Slate, 2014; Capraro et al., 2009; Harvey et al., 2013) on the presence of achievement gaps by ethnicity/race, results of this multiyear, statewide investigation were contradictory with respect to the educational gaps of English Language Learners by their ethnicity/race. White English Language Learners were the least likely to be college-ready compared to Hispanic and Black English Language Learners. However, congruent with the existing literature (Barnes, 2013; Barnes & Slate, 2014; Capraro et al., 2009; Harvey et al., 2013; Sánchez et al., 2009; Simon et al., 2011), Asian English Language Learners continue to outperform Hispanic and Black English Language Learners. Commensurate with

previous researchers (Bustamante et al., 2010; Capraro et al., 2009; Coley, 2003; Guglielmi, 2012; Holme et al., 2010; Kieffer, 2011; Lee, 2002; Lubienski & Lubienski, 2006; Polat et al., 2016; Sanderson & Harrington, 2005), very low percentages of English Language Learners, regardless of their ethnicity/race, met the reading, mathematics, and both subjects college-readiness standards in this multiyear statewide investigation..

Implications for Policy and for Practice

Some implications for policy and for practice can be made based upon the results of this multiyear, Texas statewide investigation. First, concerning the low numbers or lack thereof of White English Language Learners meeting reading, mathematics, and both subjects college-readiness, district multilingual program administrators and school leaders are encouraged to cease assuming that all English Language Learners have the same needs regardless of their ethnicity/race. By considering the ethnicity/race of each English Language Learner differentiated programming strategies should to be adopted and implemented by each campus in the district. An analysis of existing interventions and adopted instructional strategies by programs (e.g., Bilingual Program, Dual Language Program, Structured English Immersion, English as a Second Language) provided to English Language Learners to address academic performance should be examined to identify how each program influences student college-readiness. Programming audits on the utilization of Title III funding resources used to address closing academic performance gaps and increasing the college-readiness performance of English Language Learners necessitates an investigation.

Recommendations for Future Research

Based upon the results of this statewide investigation, several recommendations for future research can be made. Within the ethnic/racial composition of each English Language Learner group, subgroupings exist. That is, Asian students can be from several different countries (e.g., Japan, China, Vietnam, Philippines) as can Hispanic students (e.g., Mexico, Honduras, El Salvador, Cuba). In future research, researchers are encouraged to determine more precisely the country of origin for the English Language Learners in their sample. The assumption should not be made that all Asian English Language Learners are the same. The same statement can be made for all ethnic/racial groups. Second, with the majority of English Language Learners in Texas being Hispanic from Mexico, the degree to which results from this investigation would be generalizable to states where their English Language Learners are not primarily Hispanics from Mexico is not known. Accordingly, researchers are encouraged to replicate this study in other states with substantial percentages of English Language Learners.

The generalizability of results delineated in this study to the current state definition of college-readiness is unknown because the Texas state definition of what constitutes college-readiness has been updated. Therefore, a replication of this investigation using data from the last several school years is encouraged. A qualitative research study on the perceptions of administrators, teachers, parents, and English Language Learners on how different English Language Learner programs (e.g., bilingual, English as a Second Language, dual language, structured English immersion) influence the academic performance of English Language Learners by their ethnicity/race needs to

be conducted because analyzed in this research were only quantitative data. Another recommendation is conduct a qualitative study on the shared experiences by White English Language Learners in Texas, and how the current Texas English Language Learner programs offered in schools and districts affect White English Language Learners' academic performance. It is further recommended that researchers extend this study to determine whether English Language Learner boys and girls differ in their college-readiness. Finally, researchers are urged to replicate this study to determine the degree to which economic status differences might be present in the college-readiness of English Language Learners.

Conclusion

In this multiyear, statewide investigation, the degree to which the ethnicity/race of English Language Learners was related to their reading, mathematics, and both subjects college readiness was addressed for the 2004-2005 through the 2010-2011 school years in Texas. Seven years of archival data from the Texas Education Agency Public Education Information Management System were analyzed. Asian English Language Learners had statistically significantly higher college-readiness in 17 of the 21 statistical analyses that were conducted. White English Language Learners had the lowest college-readiness in reading, mathematics, and both subjects college-readiness in all seven years. Congruent with previous researchers (Bustamante et al., 2010; Capraro et al., 2009; Coley, 2003; Guglielmi, 2012; Holme et al., 2010; Kieffer, 2011; Lee, 2002; Lubienski & Lubienski, 2006; Polat et al., 2016; Sanderson & Harrington, 2005), very low percentages of English Language Learners in all four ethnic/racial groups were college-ready.

References

- Barnes, W., & Slate, J. R. (2014). College-readiness rates in Texas: A statewide, multiyear study of ethnic differences. *Education & Urban Society*, 46(1), 36-59. doi:10.1177/0013124511423775
- Bustamante, R. M., Slate, J. R., Edmonson, S., Combs, J. P., Moore, G., & Onwuegbuzie, A. J. (2010). College-readiness for English language learners and students with special learning needs. *International Journal of Educational Leadership Preparation*, 5(4), 1-22.
- Capraro, M. M., Capraro, R. M., Yetkiner, Z. E., Rangel-Chavez, A. F., & Lewis, C. F. (2010). Examining Hispanic student mathematics performance on high-stakes tests: An examination of one urban school district in Colorado. *Urban Review*, 42(3), 193-209. doi:10.1007/s 11256-009-0127-0
- Capraro, R. M., Young, J. R., Lewis, C. W., Yetkiner, Z. E., & Woods, M. N. (2009). An examination of mathematics achievement and growth in a midwestern urban school district: Implications for teachers and administrators. *Journal of Urban Mathematics Education*, 2(2), 46-65.
- Carnevale, A. P., Smith, N., & Strohl, J. (2010). *Help wanted: Projections of jobs and education requirements through 2018*. Washington, DC: Georgetown University Center on Education and the Workforce. Retrieved from <http://cew.georgetown.edu/jobs2018/>
- Carpenter, D., Ramirez, A., & Severn, L. (2006). Gap or gaps: Challenging the singular definition of the achievement gap. *Education and Urban Society*, 39(1), 113-127.

- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Coley, R. (2003). *Growth in school revisited: Achievement gains from the fourth to the eighth grade (ETS Policy Information Report)*. Princeton, NJ: Educational Testing Service.
- Colgren, C., & Sappington, N. E. (2015). Closing the achievement gap means transformation. *Education Leadership Review Of Doctoral Research*, 2(1), 24-33. Retrieved from <https://eric.ed.gov/?id=EJ1105741>
- Cook, A. A., Pérusse, R., & Rojas, E. D. (2015). Promoting college access among Latina/o English Language Learners: Implications for professional school counselors. *Journal of School Counseling*, 13(18), 1-43.
- Craft, K., & Slate, J. R. (2012). The achievement gap between Hispanic and white students in middle school: A conceptual analysis. *Journal of Educational Research*, 6(2), 187-215.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.
- Davis, J., & Baumann, K. (2013). *School enrollment in the United States: 2011 population characteristics*. U.S. Census Bureau. Retrieved from <https://www.census.gov/content/dam/Census/library/publications/2013/demo/p20-571.pdf>
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.) Thousand Oaks, CA: Sage.

- Fry, R. (2008). *The role of schools in the English Language Learner achievement gap*.
Pew Hispanic Center. Retrieved from <http://pewhispanic.org/files/reports/89.pdf>
- Guglielmi, R. S. (2012). Math and science achievement in English Language Learners: A multivariate latent growth modeling of predictors, mediators, and moderators. *Journal of Educational Psychology, 104*(3), 580-602. doi:10.1037/a0027378
- Harvey, D. W. (2013). *Gaps in college readiness: ACT and SAT differences by ethnicity across 10 school years* (Unpublished doctoral dissertation). Sam Houston State University, Huntsville, TX.
- Harvey, D. W., Slate, J. R., Moore, G. W., Barnes, W., & Martinez-Garcia, C. (2013). And the equity gaps continue in ACT scores: A multiyear statewide analysis. *E Journal of Organizational Learning & Leadership, 11*(2), 36-59.
- Holme, J. J., Richards, M. P., Jimerson, J. B., & Cohen, R. W. (2010). Assessing the effects of high school exit examinations. *Review of Educational Research, 80*(4), 476-526.
- Johnson, B., & Christensen, L. (2014). *Educational research: Quantitative, qualitative, and mixed approaches* (5th ed.). Thousand Oaks, CA: Sage.
- Kieffer, M. J. (2011). Converging trajectories: Reading growth in language minority learners and their classmates, kindergarten to Grade 8. *American Educational Research Journal, 48*(5), 1187-1225. doi:10.3102/0002831211419490
- Kirsch, I., Braun, H., Yamamoto, K., Sum, A., & Educational Testing Service, P. N. (2007). *America's perfect storm: Three forces changing our nation's future*. Princeton, NJ: Educational Testing Service.

- Lee, J. (2002). Racial and ethnic achievement gap trends: Reversing the progress toward equity? *Educational Researcher*, 31(1), 3-12.
- Lubienski, S. T., & Lubienski, C. (2006). School sector and academic achievement: A multilevel analysis of NAEP mathematics data. *American Educational Research Journal*, 43(4), 651-698.
- Mishkind, A., & American Institutes for Research. (2014). *Overview: State definitions of college and career readiness*. Washington DC: College & Career Readiness & Success Center at American Institutes for Research. Retrieved from http://www.ccrscenter.org/sites/default/files/CCRS%20Defintions%20Brief_REV_1.pdf
- National Center for Education Statistics. (2016). *The condition of education 2016* (NCES 2016-144). English Language Learners in Public Schools. Retrieved from <https://nces.ed.gov/fastfacts/display.asp?id=96>
- Organization for Economic Cooperation and Development. (2016). *Getting skills right: Assessing and anticipating changing skill needs*. Paris, France: OECD Publishing. <http://dx.doi.org/10.1787/9789264252073-en>
- Paredes, R. (2016). 20X30TX. Paper presented at Joint Interim Hearing of the Senate Public Education and Higher Education Committees, Austin, TX. Abstract retrieved from <http://www.thecb.state.tx.us/reports/PDF/7488.PDF?CFID=58128266&CFTOKEN=72339435>
- Polat, N., Zarecky-Hodge, A., & Schreiber, J. B. (2016). Academic growth trajectories of ELLs in NAEP data: The case of fourth- and eighth-grade ELLs and non-ELLs on

mathematics and reading tests. *Journal of Educational Research*, 109(5), 541-553. doi:10.1080/00220671.2014.993461

Sánchez, M. T., Ehrlich, S., Midouhas, E., & O'Dwyer, L. (2009). *Analyzing performance by grade 10 Hispanic high school students on the Massachusetts state assessment (Issues and Answers Report, REL 2009-No. 071)*. Washington, DC: U.S.

Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northeast and Islands.

Sanderson, H. L., & Harrington, P. (2005). *Trends and patterns of Utah's White and Hispanic 4th grade students compared to the nation: An NAEP achievement gap analysis*. Salt Lake City, UT: Utah State Office of Education.

Simon, C., Lewis, S., Uro, G., Uzzell, R., Palacios, M., Casserly, M., & Council of the Great City Schools. (2011). *Today's promise, tomorrow's future: The social and educational factors contributing to the outcomes of Hispanics in urban schools*. Washington, DC: Council of the Great City Schools.

Slate, J. R., & Rojas-LeBouef, A. (2011). *Calculating basic statistical procedures in SPSS: A self-help and practical guide to preparing theses, dissertations, and manuscripts*. Ypsilanti, MI: NCPEA Press.

Texas Education Agency. (2007a). *Sec. 39.051 academic excellence indicators*. Retrieved from
https://rptsvr1.tea.texas.gov/perfreport//account/2010/manual/TEC_CH_39_80th.pdf

- Texas Education Agency. (2009). *The 2009 accountability rating system for Texas public schools and school districts*. Retrieved from <https://rptsvr1.tea.texas.gov/perfreport/account/2009/manual/manual.pdf>
- Texas Education Agency. (2013). *2013 Accountability system frequently asked questions*. Retrieved from <http://ritter.tea.state.tx.us/perfreport/account/2013/faq.html>
- Texas Education Agency. (2017). *Overview of 2017 accountability*. Retrieved from <http://tea.texas.gov/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=51539611645&libID=51539611645>
- U.S. Census Bureau. (2008). *Projections of the Hispanic population (any race) by age and sex for the United States: 2010 to 2050* [np2008-table 20]. Retrieved from www.census.gov
- U.S. Census Bureau. (2016). *School enrollment in the United States: 2015*. Retrieved from <https://www.census.gov/newsroom/press-releases/2016/cb16-tps142.html>
- U.S. Department of Education. (2001). *No Child Left Behind (NCLB)*. Retrieved from <http://www2.ed.gov/policy/elsec/leg/esea02/index.html>
- U.S. Department of Education. (2015a). *Every Student Succeeds Act (ESSA)*. Retrieved from <https://www.ed.gov/ESSA>
- U.S. Department of Education. (2015b). *U.S. high school graduation rate hits new record high*. Retrieved from <http://www.ed.gov/news/press-releases/us-high-school-graduation-rate-hits-new-record-high>

Table 4.1

*Frequencies and Percentages of Reading College-Readiness for English Language**Learners by Their Ethnicity/Race for the 2004-2005 Through the 2006-2007 School**Years*

School Year and College-Readiness	Asian <i>n</i> and %age of Total	White <i>n</i> and %age of Total	Hispanic <i>n</i> and %age of Total	Black <i>n</i> and %age of Total
2004-2005				
Met	(<i>n</i> = 24) 8.50%	(<i>n</i> = 2) 1.70%	(<i>n</i> = 216) 2.50%	(<i>n</i> = 2) 3.40%
Not Met	(<i>n</i> = 260) 91.50%	(<i>n</i> = 113) 98.30%	(<i>n</i> = 8,600) 97.50%	(<i>n</i> = 57) 96.60%
2005-2006				
Met	(<i>n</i> = 20) 8.30%	(<i>n</i> = 0) 0.0%	(<i>n</i> = 192) 2.20%	(<i>n</i> = 0) 0.00%
Not Met	(<i>n</i> = 221) 91.70%	(<i>n</i> = 128) 100.00%	(<i>n</i> = 8,526) 97.80%	(<i>n</i> = 62) 100.00%
2006-2007				
Met	(<i>n</i> = 20) 8.40%	(<i>n</i> = 0) 0.00%	(<i>n</i> = 242) 2.80%	(<i>n</i> = 1) 2.80%
Not Met	(<i>n</i> = 219) 91.60%	(<i>n</i> = 107) 100.00%	(<i>n</i> = 8,358) 97.20%	(<i>n</i> = 35) 97.20%

Table 4.2

*Frequencies and Percentages of Reading College-Readiness for English Language**Learners by Their Ethnicity/Race for the 2007-2008 Through the 2009-2010 School**Years*

School Year and College-Readiness	Asian <i>n</i> and %age of Total	White <i>n</i> and %age of Total	Hispanic <i>n</i> and %age of Total	Black <i>n</i> and %age of Total
2007-2008				
Met	(<i>n</i> = 21) 12.40%	(<i>n</i> = 0) 0.00%	(<i>n</i> = 376) 5.60%	(<i>n</i> = 5) 13.20%
Not Met	(<i>n</i> = 149) 87.60%	(<i>n</i> = 32) 100.00%	(<i>n</i> = 6,335) 94.40%	(<i>n</i> = 33) 86.80%
2008-2009				
Met	(<i>n</i> = 52) 22.00%	(<i>n</i> = 0) 0.0%	(<i>n</i> = 720) 9.20%	(<i>n</i> = 1) 4.2%
Not Met	(<i>n</i> = 184) 78.00%	(<i>n</i> = 63) 100.00%	(<i>n</i> = 7,086) 90.80%	(<i>n</i> = 23) 95.80%
2009-2010				
Met	(<i>n</i> = 79) 25.70%	(<i>n</i> = 0) 0.00%	(<i>n</i> = 978) 11.00%	(<i>n</i> = 2) 5.90%
Not Met	(<i>n</i> = 228) 74.30%	(<i>n</i> = 64) 100.00%	(<i>n</i> = 7,950) 89.00%	(<i>n</i> = 32) 94.10%

Table 4.3

*Frequencies and Percentages of Reading College-Readiness for English Language**Learners by Their Ethnicity/Race for the 2010-2011 School Year*

School Year and	Asian	White	Hispanic	Black
College-Readiness	<i>n</i> and %age of Total	<i>n</i> and %age of Total	<i>n</i> and %age of Total	<i>n</i> and %age of Total
2010-2011				
Met	(<i>n</i> = 19)	(<i>n</i> = 0)	(<i>n</i> = 894)	(<i>n</i> = 10)
	6.20%	0.00%	12.10%	15.60%
Not Met	(<i>n</i> = 287)	(<i>n</i> = 105)	(<i>n</i> = 6,518)	(<i>n</i> = 54)
	93.80%	100.00%	87.90%	84.40%

Table 4.4

Frequencies and Percentages of Mathematics College-Readiness for English Language Learners by Their Ethnicity/Race for the 2004-2005 Through the 2006-2007 School Years

School Year and College-Readiness	Asian <i>n</i> and %age of Total	White <i>n</i> and %age of Total	Hispanic <i>n</i> and %age of Total	Black <i>n</i> and %age of Total
2004-2005				
Met	(<i>n</i> = 77) 28.10%	(<i>n</i> = 2) 1.70%	(<i>n</i> = 700) 8.30%	(<i>n</i> = 2) 3.20%
Not Met	(<i>n</i> = 197) 71.90%	(<i>n</i> = 117) 98.30%	(<i>n</i> = 7,748) 91.70%	(<i>n</i> = 61) 96.80%
2005-2006				
Met	(<i>n</i> = 59) 24.30%	(<i>n</i> = 0) 0.0%	(<i>n</i> = 875) 10.40%	(<i>n</i> = 0) 0.00%
Not Met	(<i>n</i> = 184) 75.70%	(<i>n</i> = 132) 100.00%	(<i>n</i> = 7,566) 89.60%	(<i>n</i> = 69) 100.00%
2006-2007				
Met	(<i>n</i> = 50) 24.40%	(<i>n</i> = 0) 0.00%	(<i>n</i> = 900) 10.70%	(<i>n</i> = 0) 0.00%
Not Met	(<i>n</i> = 155) 75.60%	(<i>n</i> = 104) 100.00%	(<i>n</i> = 7,513) 89.30%	(<i>n</i> = 27) 100.00%

Table 4.5

Frequencies and Percentages of Mathematics College-Readiness for English Language Learners by Their Ethnicity/Race for the 2007-2008 Through the 2009-2010 School Years

School Year and College-Readiness	Asian <i>n</i> and %age of Total	White <i>n</i> and %age of Total	Hispanic <i>n</i> and %age of Total	Black <i>n</i> and %age of Total
2007-2008				
Met	(<i>n</i> = 65)	(<i>n</i> = 0)	(<i>n</i> = 1,130)	(<i>n</i> = 2)
	38.50%	0.00%	17.80%	6.30%
Not Met	(<i>n</i> = 104)	(<i>n</i> = 45)	(<i>n</i> = 5,215)	(<i>n</i> = 30)
	61.50%	100.00%	82.20%	93.80%
2008-2009				
Met	(<i>n</i> = 104)	(<i>n</i> = 0)	(<i>n</i> = 1,812)	(<i>n</i> = 1)
	45.20%	0.0%	24.20%	5.9%
Not Met	(<i>n</i> = 126)	(<i>n</i> = 71)	(<i>n</i> = 5,687)	(<i>n</i> = 16)
	54.80%	100.00%	75.80%	94.10%
2009-2010				
Met	(<i>n</i> = 137)	(<i>n</i> = 0)	(<i>n</i> = 2,484)	(<i>n</i> = 4)
	49.50%	0.00%	28.80%	14.80%
Not Met	(<i>n</i> = 140)	(<i>n</i> = 47)	(<i>n</i> = 6,132)	(<i>n</i> = 23)
	50.50%	100.00%	71.20%	85.20%

Table 4.6

Frequencies and Percentages of Mathematics College-Readiness for English Language

Learners by Their Ethnicity/Race for the 2010-2011 School Year

School Year and College-Readiness	Asian <i>n</i> and %age of Total	White <i>n</i> and %age of Total	Hispanic <i>n</i> and %age of Total	Black <i>n</i> and %age of Total
2010-2011				
Met	(<i>n</i> = 99)	(<i>n</i> = 0)	(<i>n</i> = 2,515)	(<i>n</i> = 9)
	34.00%	0.00%	35.20%	17.00%
Not Met	(<i>n</i> = 192)	(<i>n</i> = 87)	(<i>n</i> = 4,634)	(<i>n</i> = 44)
	66.00%	100.00%	64.80%	83.00%

Table 4.7

Frequencies and Percentages of Both Subjects College-Readiness for English Language Learners by Their Ethnicity/Race for the 2004-2005 Through the 2006-2007 School Years

School Year and College-Readiness	Asian <i>n</i> and %age of Total	White <i>n</i> and %age of Total	Hispanic <i>n</i> and %age of Total	Black <i>n</i> and %age of Total
2004-2005				
Met	(<i>n</i> = 20)	(<i>n</i> = 0)	(<i>n</i> = 77)	(<i>n</i> = 1)
	8.00%	0.00%	1.00%	2.10%
Not Met	(<i>n</i> = 231)	(<i>n</i> = 87)	(<i>n</i> = 7,886)	(<i>n</i> = 47)
	92.00%	100.00%	99.00%	97.90%
2005-2006				
Met	(<i>n</i> = 15)	(<i>n</i> = 0)	(<i>n</i> = 99)	(<i>n</i> = 0)
	7.20%	0.0%	1.30%	0.00%
Not Met	(<i>n</i> = 192)	(<i>n</i> = 106)	(<i>n</i> = 7,802)	(<i>n</i> = 37)
	92.80%	100.00%	98.70%	100.00%
2006-2007				
Met	(<i>n</i> = 15)	(<i>n</i> = 0)	(<i>n</i> = 117)	(<i>n</i> = 0)
	7.90%	0.00%	1.50%	0.00%
Not Met	(<i>n</i> = 175)	(<i>n</i> = 93)	(<i>n</i> = 7,709)	(<i>n</i> = 19)
	92.10%	100.00%	98.50%	100.00%

Table 4.8

Frequencies and Percentages of Both Subjects College-Readiness for English Language Learners by Their Ethnicity/Race for the 2007-2008 Through the 2009-2010 School Years

School Year and College-Readiness	Asian <i>n</i> and %age of Total	White <i>n</i> and %age of Total	Hispanic <i>n</i> and %age of Total	Black <i>n</i> and %age of Total
2007-2008				
Met	(<i>n</i> = 21) 15.40%	(<i>n</i> = 0) 0.00%	(<i>n</i> = 182) 3.00%	(<i>n</i> = 2) 7.10%
Not Met	(<i>n</i> = 115) 84.60%	(<i>n</i> = 21) 100.00%	(<i>n</i> = 5,878) 97.00%	(<i>n</i> = 26) 92.90%
2008-2009				
Met	(<i>n</i> = 49) 24.60%	(<i>n</i> = 0) 0.0%	(<i>n</i> = 368) 5.10%	(<i>n</i> = 1) 10.0%
Not Met	(<i>n</i> = 150) 75.40%	(<i>n</i> = 50) 100.00%	(<i>n</i> = 6,794) 94.90%	(<i>n</i> = 9) 90.00%
2009-2010				
Met	(<i>n</i> = 72) 27.60%	(<i>n</i> = 0) 0.00%	(<i>n</i> = 542) 6.50%	(<i>n</i> = 1) 5.00%
Not Met	(<i>n</i> = 189) 72.40%	(<i>n</i> = 41) 100.00%	(<i>n</i> = 7,787) 93.50%	(<i>n</i> = 19) 95.00%

Table 4.9

Frequencies and Percentages of Both Subjects College-Readiness for English Language Learners by Their Ethnicity/Race for the 2010-2011 School Year

School Year and College-Readiness	Asian <i>n</i> and %age of Total	White <i>n</i> and %age of Total	Hispanic <i>n</i> and %age of Total	Black <i>n</i> and %age of Total
2010-2011				
Met	(<i>n</i> = 19)	(<i>n</i> = 0)	(<i>n</i> = 577)	(<i>n</i> = 5)
	7.90%	0.00%	12.10%	10.60%
Not Met	(<i>n</i> = 221)	(<i>n</i> = 46)	(<i>n</i> = 6,221)	(<i>n</i> = 42)
	92.10%	100.00%	91.50%	89.40%

Table 4.10

Summary of Reading College-Readiness Results of English Language Learners by Their Ethnicity/Race for the 2004-2005 Through the 2010-2011 School Years

School Year	Statistically Significant	Effect Size	Higher Scoring Group
2004-2005	Yes	Below Small	Asian
2005-2006	Yes	Below Small	Asian
2006-2007	Yes	Below Small	Asian
2007-2008	Yes	Below Small	Black
2008-2009	Yes	Below Small	Asian
2009-2010	Yes	Below Small	Asian
2010-2011	Yes	Below Small	Black

Table 4.11

Summary of Mathematics College-Readiness Results of English Language Learners by Their Ethnicity/Race for the 2004-2005 Through the 2010-2011 School Years

School Year	Statistically Significant	Effect Size	Higher Scoring Group
2004-2005	Yes	Small	Asian
2005-2006	Yes	Below Small	Asian
2006-2007	Yes	Below Small	Asian
2007-2008	Yes	Small	Asian
2008-2009	Yes	Small	Asian
2009-2010	Yes	Below Small	Asian
2010-2011	Yes	Below Small	Hispanic

Table 4.12

Summary of Both Subjects College-Readiness Results of English Language Learners by Their Ethnicity/Race for the 2004-2005 Through the 2010-2011 School Years

School Year	Statistically Significant	Effect Size	Higher Scoring Group
2004-2005	Yes	Small	Asian
2005-2006	Yes	Below Small	Asian
2006-2007	Yes	Below Small	Asian
2007-2008	Yes	Small	Asian
2008-2009	Yes	Small	Asian
2009-2010	Yes	Small	Asian
2010-2011	Yes	Below Small	Hispanic

CHAPTER V

DISCUSSION

The purpose of this journal-ready dissertation was to determine the degree to which differences were present in reading, mathematics, and both subjects college-readiness for English Language Learners who were enrolled in Texas high schools. In the first investigation, the extent to which English Language Learner boys differed in their college-readiness from English Language Learner girls was addressed. In the second study, the degree to which college-readiness differed by the economic status of English Language Learners was ascertained. Finally, in the third investigation, the extent to which college-readiness was different by the ethnicity/race of English Language Learners was determined. In each of these three empirical investigations, seven years of Texas statewide public school data were analyzed. Through this multiyear analysis, the degree to which trends were present in college-readiness of English Language Learners as a function of their gender, economic status, and ethnicity/race was determined.

In this chapter, results are discussed and a summary of each of the three articles is presented. Implications for policy and practice are also considered and discussed. Finally, recommendations for future research are provided.

Summary of Results for Study One

In the first investigation, the extent to which differences were present in the reading, mathematics, and both subject college-readiness rates between English Language Learner boys and English Language Learner girls were explored. With respect to the reading college-readiness of English Language Learner boys and girls, English Language Learner girls outperformed English Language Learner boys with a below small

size effect present in all seven school years. The reading college-readiness percentage of English Language Learner girls ranged from 3.20% to 13.80%, and the reading college-readiness percentage of English Language Learner boys ranged from 1.70% to 9.70%. The reading college-readiness of English Language Learner girls ranged from 1 to 2 times higher than the reading college-readiness of English Language Learner boys.

Table 5.1

Summary of Reading College-Readiness Results of English Language Learner Boys and Girls for the 2004-2005 Through the 2010-2011 School Years

School Year	Statistically Significant	Effect Size	Higher Scoring Group
2004-2005	Yes	Below Small	Girls
2005-2006	Yes	Below Small	Girls
2006-2007	Yes	Below Small	Girls
2007-2008	Yes	Below Small	Girls
2008-2009	Yes	Below Small	Girls
2009-2010	Yes	Below Small	Girls
2010-2011	Yes	Below Small	Girls

Regarding the mathematics college-readiness of English Language Learner boys and girls, English Language Learner boys consistently outperformed English Language Learner girls in mathematics college-readiness with a below small size effect present in all seven years. The mathematics college-readiness percentage of English Language Learner boys extended from 9.60% to 35.60%, and the mathematics college-readiness

percentage of English Language Learner girls ranged from 7.60% to 33.40%. The mathematics college-readiness of English Language Learner boys ranged from 1 to 4 percentage points higher than the mathematics college-readiness of English Language Learner girls.

Table 5.2

Summary of Mathematics College-Readiness Results of English Language Learner Boys and Girls for the 2004-2005 Through the 2010-2011 School Years

School Year	Statistically Significant	Effect Size	Higher Scoring Group
2004-2005	Yes	Below Small	Boys
2005-2006	Yes	Below Small	Boys
2006-2007	Yes	Below Small	Boys
2007-2008	Yes	Below Small	Boys
2008-2009	Yes	Below Small	Boys
2009-2010	Yes	Below Small	Boys
2010-2011	Yes	Below Small	Boys

Concerning the both subjects college-readiness of English Language Learner boys and girls, English Language Learner girls consistently had better college-readiness in both subjects than did English Language Learner boys. A below small size effect was present in all seven years. The both subjects college-readiness percentage of English Language Learner girls ranged from 1.50% to 9.80%, and the reading college-readiness percentage of English Language Learner boys ranged from 1.00% to 7.40%. Of

importance for readers should be the low percentages of both English Language Learner boys and girls who were college-ready in both subjects.

Table 5.3

Summary of Both Subjects College-Readiness Results of English Language Learner Boys and Girls for the 2004-2005 Through the 2010-2011 School Years

School Year	Statistically Significant	Effect Size	Higher Scoring Group
2004-2005	Yes	Below Small	Girls
2005-2006	Yes	Below Small	Girls
2006-2007	Yes	Below Small	Girls
2007-2008	Yes	Below Small	Girls
2008-2009	Yes	Below Small	Girls
2009-2010	Yes	Below Small	Girls
2010-2011	Yes	Below Small	Girls

Summary of Results for Study Two

In the second investigation, the extent to which differences were present in the reading, mathematics, and both subject college-readiness rates of English Language Learner by their economic status were examined. With respect to the reading college-readiness of English Language Learners who were economically disadvantaged and who were not economically disadvantaged, English Language Learners who were not economically disadvantaged outperformed English Language Learner who were economically disadvantaged in five school years (i.e., 2004-2005, 2005-2006, 2008-2009,

2009-2010, 2010-2011). The reading college-readiness percentage of English Language Learners who were not economically disadvantaged ranged from 3.30% to 13.80%, and the reading college-readiness percentage of English Language Learners who were economically disadvantaged ranged from 2.20% to 9.70%. All effect sizes for statistically significant differences in this investigation were below small. The percentage of reading college-readiness of English Language Learners who were not economically disadvantaged ranged 1 to 4 percentage points higher than the reading college-readiness of English Language Learners who were economically disadvantaged. For the 2006-2007 and 2007-2008 school years, the reading college-readiness of English Language Learners for both economic groups was not statistically significant.

Table 5.4

Summary of Reading College-Readiness Results by the Economic Status of English Language Learners for the 2004-2005 Through the 2010-2011 School Years

School Year	Statistically Significant	Effect Size	Poorest Performing Scoring Group
2004-2005	Yes	Below Small	Economically Disadvantaged
2005-2006	Yes	Below Small	Economically Disadvantaged
2006-2007	No	N/A	N/A
2007-2008	No	N/A	N/A
2008-2009	Yes	Below Small	Economically Disadvantaged
2009-2010	Yes	Below Small	Economically Disadvantaged
2010-2011	Yes	Below Small	Economically Disadvantaged

Regarding the mathematics college-readiness of English Language Learners by their economic status, English Language Learners who were not economically disadvantaged outperformed English Language Learners who were economically disadvantaged in mathematics college-readiness in three school years (i.e., 2004-2005, 2008-2009, 2009-2010). The mathematics college-readiness percentage of English Language Learners who were not economically disadvantaged ranged from 8.70% to 33.40%, and the mathematics college-readiness percentage of English Language Learners who were economically disadvantaged ranged from 8.50% to 35.40%. The mathematics college-readiness of English Language Learners who were not economically disadvantaged ranged from 1 to 4 percentage points higher than the mathematics college-readiness of English Language Learners who were economically disadvantaged. For two school years, 2006-2007, and 2010-2011, English Language Learners who were economically disadvantaged outperformed English Language Learners who were not economically disadvantaged. The mathematics college-readiness of English Language Learner who were economically disadvantaged ranged from 1 to 15 percentage points higher than the mathematics college-readiness of English Language Learners who were not economically disadvantaged. All effect sizes for statistically significant differences in this investigation were below small. For two school years, 2005-2006 and 2007-2008, statistically significant differences were not present in the mathematic college-readiness by English Language Learner economic status.

Table 5.5

Summary of Mathematics College-Readiness Results by the Economic Status of English Language Learners for the 2004-2005 Through the 2010-2011 School Years

School Year	Statistically Significant	Effect Size	Poorest Performing Group
2004-2005	Yes	Below Small	Economically Disadvantaged
2005-2006	No	N/A	N/A
2006-2007	Yes	Below Small	Not Economically Disadvantaged
2007-2008	No	N/A	N/A
2008-2009	Yes	Below Small	Economically Disadvantaged
2009-2010	Yes	Below Small	Economically Disadvantaged
2010-2011	Yes	Below Small	Not Economically Disadvantaged

Concerning the both subjects college-readiness of English Language Learner economic status, English Language Learners who were not economically disadvantaged had better college-readiness in both subjects than did English Language Learners who were economically disadvantaged in six school years, 2004-2005 through 2009-2010 school years. The both subjects college-readiness percentage of English Language Learners who were not economically disadvantaged ranged from 2.10% to 18.10%, and the both subjects college-readiness percentage of English Language Learners who were economically disadvantaged ranged from 1.00% to 8.50%. A statistically significant difference was not present in the 2010-2011 school years. Of importance for readers should be the low percentages of both English Language Learners who were

economically disadvantaged and who were not economically disadvantaged and who were college-ready in both subjects.

Table 5.6

Summary of Both Subjects College-Readiness Results by the Economic Status of English Language Learners for the 2004-2005 Through the 2010-2011 School Years

School Year	Statistically Significant	Effect Size	Poorest Performing Group
2004-2005	Yes	Below Small	Economically Disadvantaged
2005-2006	Yes	Below Small	Economically Disadvantaged
2006-2007	Yes	Below Small	Economically Disadvantaged
2007-2008	Yes	Below Small	Economically Disadvantaged
2008-2009	Yes	Below Small	Economically Disadvantaged
2009-2010	Yes	Small	Economically Disadvantaged
2010-2011	No	N/A	N/A

Summary of Results for Study Three

In this third investigation, the reading, mathematics, and both subjects college-readiness of English Language Learners in the 2004-2005 to 2010-2011 school years were examined. The degree to which the ethnicity/race (i.e., Asian, White, Hispanic, Black) of English Language Learners was related to their reading, mathematics, and both subjects college-readiness was addressed. With respect to the reading college-readiness of English Language Learners by their ethnicity/race, Asian English Language Learners had higher college-readiness skills than did White, Hispanic, and Black English

Language Learners in five school years (i.e., 2004-2005, 2005-2006, 2006-2007, 2008-2009, 2009-2010). Black English Language Learners had higher reading college-readiness skills than Asian, White, and Hispanic English Language Learners in the 2007-2008 and 2010-2011 school years. The range of reading college-readiness percentage of English Language Learners by their ethnicity/race were as follows: (a) Asian, 8.30% to 25.70%; (b) White, 0.00% to 1.70%; (c) Hispanic, 2.2% to 11.00%; and (d) Black, 0.00% to 13.20%. For all statistically significant differences in this investigation, below small effect sizes were present. White English Language Learners consistently had the lowest reading college-readiness skills.

Table 5.7

Summary of Reading College-Readiness Results of English Language Learners by Their Ethnicity/Race for the 2004-2005 Through the 2010-2011 School Years

School Year	Statistically Significant	Effect Size	Higher Scoring Group
2004-2005	Yes	Below Small	Asian
2005-2006	Yes	Below Small	Asian
2006-2007	Yes	Below Small	Asian
2007-2008	Yes	Below Small	Black
2008-2009	Yes	Below Small	Asian
2009-2010	Yes	Below Small	Asian
2010-2011	Yes	Below Small	Black

Regarding the mathematics college-readiness of English Language Learners by their ethnicity/race, Asian English Language Learners had higher mathematics college-readiness skills than White, Hispanic, and Black English Language Learners in six consecutive school years, 2004-2005 to 2009-2010. A stair-step effect (Carpenter et al., 2006) was present for six school years wherein Asian English Language Learners had the highest percentage of students who were college-ready in mathematics, followed by Hispanic, Black, and White English Language Learners. The percentage of mathematics college-readiness of Asian English Language Learners were twice as high as the mathematics college-readiness of Hispanic, Black, and White English Language Learners. In the 2010-2011 school year, Black English Language Learners had the highest percentage of students who were college-ready in mathematics. The range of mathematics college-readiness percentage of English Language Learners by their ethnicity/race were as follows: (a) Asian, 24.30% to 49.50%; (b) White, 0.00%; (c) Hispanic, 8.30% to 35.20%; and (d) Black, 0.00% to 14.80%. For all school years where a statistically significant differences was present, below small and small effect sizes were present. Of importance for readers was that no White English Language Learners met the mathematics college-readiness standard.

Table 5.8

Summary of Mathematics College-Readiness Results of English Language Learners by Their Ethnicity/Race for the 2004-2005 Through the 2010-2011 School Years

School Year	Statistically Significant	Effect Size	Higher Scoring Group
2004-2005	Yes	Small	Asian
2005-2006	Yes	Below Small	Asian
2006-2007	Yes	Below Small	Asian
2007-2008	Yes	Small	Asian
2008-2009	Yes	Small	Asian
2009-2010	Yes	Below Small	Asian
2010-2011	Yes	Below Small	Hispanic

Concerning the both subjects college-readiness of English Language Learners by their ethnicity race, Asian English Language Learners consistently had the highest percentages of students who were college-ready in both subjects. The range of reading college-readiness percentage of English Language Learners by their ethnicity/race were as follows: (a) Asian, 7.20% to 27.60%; (b) White, 0.00%; (c) Hispanic, 3.00% to 12.10%; and (d) Black, 5.00% to 10.60%. For all school years, the statistically significant differences present were between below small and small effect sizes. Similar to the reading and mathematics college-readiness results, no White English Language Learners were college-ready in both subjects.

Table 5.9

Summary of Both Subjects College-Readiness Results of English Language Learners by Their Ethnicity/Race for the 2004-2005 Through the 2010-2011 School Years

School Year	Statistically Significant	Effect Size	Higher Scoring Group
2004-2005	Yes	Small	Asian
2005-2006	Yes	Below Small	Asian
2006-2007	Yes	Below Small	Asian
2007-2008	Yes	Small	Asian
2008-2009	Yes	Small	Asian
2009-2010	Yes	Small	Asian
2010-2011	Yes	Below Small	Hispanic

Connections with Existing Literature

Evident in this 7-year investigation were differences in the college-readiness of English Language Learner boys and girls. Results were congruent with the extant literature (Coates, 1993; Combs et al., 2010; Husain & Millimet, 2009; LoGerfo, Nichols, & Reardon, 2006; Marks, 2008; Martinez, Slate, & Martinez-Garcia, 2014; Rathbun et al., 2004; Robinson & Lubienski, 2011; Tianlan & Barnard-Brak, 2015) whereby girls outperform boys in reading and boys outperform girls in mathematics. Consistent with the results of previous researchers (Haas et al., 2016a, 2016b) on the educational gaps between English Language Learners by their economic status, results of this multiyear, statewide investigation were higher percentages of English Language Learners who were

not economically disadvantaged who were college-ready in all three areas than English Language Learners who were economically disadvantaged in six of the seven school years.

In contrast to existing research (Barnes, 2013; Barnes & Slate, 2014; Capraro et al., 2009; Harvey et al., 2013) on achievement gaps by ethnicity/race, presented in the results of this multiyear, statewide investigation were low percentages of White English Language Learners who were college-ready compared to Hispanic and Black English Language Learners. However, congruent to the existing literature (Barnes, 2013; Barnes & Slate, 2014; Capraro et al., 2009; Harvey et al., 2013; Sánchez et al, 2009; Simon et al., 2011), Asian English Language Learners continue to outperform Hispanic and Black English Language Learners.

The low and protracted improvements in the percentage of English Language Learners who were college-ready in reading, mathematics and both subjects were consistent with the results of previous researchers (Abedi, 2004; Ardasheva et al., 2012; Bustamante et al., 2010; Capraro et al., 2009; Coley, 2003; Fry & Pew, 2008; Genesse et al., 2005; Guglielmi, 2012; Holme et al., 2010; Intercultural Development Research, 2015; Kieffer, 2011; Lee, 2002; Lubienski & Lubienski, 2006; Maxwell, 2012; National Center for Public Policy and Higher Education, 2005; Polat et al., 2016; Rodriguez & Slate, 2015; Sanderson & Harrington, 2005; The Course Crafters Guide to the K-12 ELL Market, 2012) who established low achievement levels in reading and mathematics for English Language Learners and the documented research (e.g., Dougherty & ACT, 2014; Ozuna et al., 2016) on the need to improve the academic skills and college-readiness achievement of English Language Learners.

Implications for Policy and Practice

Several implications for policy and practice can be made based upon the results of the three articles discussed in this journal-ready dissertation. Documented in the results of all three articles were the consistent low percentages in reading, mathematics, and both subjects college-readiness of English Language Learners regardless of their gender, economic status, and ethnicity/race. As such, district multilingual program administrators and school leaders are urged to examine the specific grade level where the academic performance gaps related to English Language Learners' college-readiness occur. A second implication would be for schools and districts to implement multilingual program audits aligned to English Language Learners' performance, such as the utilization of Title III funds and the implementation of Chapter 89, mandating school districts to address the affective, cognitive, and linguistic needs of English Language Learners. As a fourth implication of this study, policymakers and educational service centers provide clear guidance to school districts and to school campuses on the implementation of Chapter 89 specifically in addressing the affective, linguistic, and cognitive needs of the English Language Learners. Accountability for the implementation of these three important components of addressing the needs of English Language Learners is critical to their academic success. Lastly, an analysis of existing interventions and adopted instructional strategies by programs (e.g., Bilingual Program, Dual Language Program, Structured English Immersion, English as a Second Language) provided to English Language Learners to address academic performance should be examined to identify how each program is related to student college-readiness.

Recommendations for Future Research

In this Texas statewide investigation, the college-readiness skills of English Language Learners in Texas were examined for the 2004-2005 through the 2010-2011 school years. Based upon the results, several recommendations for future research can be made. First, within the racial/ethnic composition of each English Language Learner group, subgroupings exist. That is, Asian students may originate from several different countries (e.g., Japan, China, Vietnam, Philippines) as can Hispanic students (e.g., Mexico, Honduras, El Salvador, Cuba). Future researchers are encouraged to determine more precisely the country of origin for the English Language Learners in their sample. The assumption should not be made that all Asian (or Hispanic or Black or White) English Language Learners are the same. Second, with the majority of English Language Learners in Texas being Hispanic from Mexico, the degree to which results from this investigation would be generalizable to states where their English Language Learners are not primarily Hispanics is not known. Accordingly, researchers are encouraged to replicate this study in other states with substantial percentages of English Language Learners.

The generalizability of results delineated in this study to the current state definition of college-readiness is unknown because the Texas state definition of what constitutes college-readiness has been updated. Therefore, a third recommendation that this investigation be replicated using data from the last several school years is encouraged. Fourth, a qualitative research study on the perceptions of administrators, teachers, parents, and English Language Learners on how different English Language Learner programs (e.g., bilingual, English as a Second Language, dual language,

structured English immersion) influence the academic performance of English Language Learners by their ethnicity/race should be conducted because analyzed in this research were only quantitative data. A fifth recommendation is conduct a qualitative study on the shared experiences by White English Language Learners in Texas, and how the current Texas English Language Learner programs offered in schools and districts affect White English Language Learners' academic performance. Finally, given the fact that the State of Texas has updated their definition of what constitutes college-readiness, researchers are encouraged to replicate this investigation using data from the last several school years. The degree to which results delineated herein are generalizable to the current state definition of college-readiness is not known.

Conclusion

The purpose of this journal-ready dissertation was to determine the degree to which differences were present in reading, mathematics, and both subjects college-readiness for English Language Learners who were enrolled in Texas high schools. Analyzed were data from the Texas Education Agency Public Education Information Management System on English Language Learners for seven school years, 2004-2005 through 2010-2011. Inferential statistical analyses yielded the presence of statistically significant differences in all school years. With respect to gender, English Language Learner girls outperformed English Language Learner boys in reading and both subject college-readiness whereas English Language Learner boys outperformed English Language Learner girls in mathematics college-readiness. Concerning economic status, English Language Learners who were not economically disadvantaged had higher percentage of college-readiness in reading, mathematics, and both-subjects compared to

English Language Learners who were economically disadvantaged. Regarding ethnicity/race, Asian English Language Learner outperformed White, Hispanic, and Black English Language Learners in reading, mathematics, and both subject college-readiness. Of note to readers were the low college-readiness rates of English Language Learners and the fact that no White English Language Learners in Texas were college-ready in any of the three areas.

REFERENCES

- Abedi, J. (2004). The No Child Left Behind Act and English Language Learners: Assessment and accountability issues. *Educational Researcher*, 33(1), 4-14.
- Ardasheva, Y., Tretter, T. R., & Kinny, M. (2012). English Language Learners and academic achievement: Revisiting the threshold hypothesis. *Language Learning*, 62(3), 769-812. doi:10.1111/j.1467-9922.2011.00652.x
- Baker, D. B., Clay, J. N., & Gratama, C. A. (2005). *The essence of college readiness: Implications for students, parents, schools, and researchers*. The BERC Group. Retrieved from <http://www.bercgroup.com/the-essence-of-college-readiness.html>
- Barnes, W., & Slate, J. R. (2013). College-readiness is not one-size-fits-all. *Current Issues in Education*, 16(1), 1-12. Retrieved from <https://cie.asu.edu/ojs/index.php/cieatasu/issue/view/23>
- Barnes, W., & Slate, J. R. (2014). College-readiness rates in Texas: A statewide, multiyear study of ethnic differences. *Education & Urban Society*, 46(1), 36-59. doi:10.1177/0013124511423775
- Barnes, W., Slate, J. R., & Rojas-LeBouef, A. (2010). College-readiness and academic preparedness: The same concepts? *Current Issues in Education*, 13(4), 1-28. Retrieved from <http://cie.asu.edu/ojs/index.php/cieatasu/article/view/678/56>
- Bornstein, M. H., Hahn, C. S., & Haynes, O. M. (2004). Specific and general language performance across early childhood: Stability and gender considerations. *First Language*, 24(3), 267-304.
- Burney, V. H., & Beilke, J. R. (2008). The constraints of poverty on high achievement. *Journal for the Education of the Gifted*, 31(3), 295-321.

- Bustamante, R. M., Slate, J. R., Edmonson, S., Combs, J. P., Moore, G., & Onwuegbuzie, A. J. (2010). College-readiness for English language learners and students with special learning needs. *International Journal of Educational Leadership Preparation*, 5(4), 1-18.
- Byrd, K., & Macdonald, G. (2005). Defining college readiness from the inside out: First-generation college student perspective. *Community College Review*, 33(1), 22-37. doi:10.1177/009155210503300102
- Capraro, M. M., Capraro, R. M., Yetkiner, Z. E., Rangel-Chavez, A. F., & Lewis, C. F. (2010). Examining Hispanic student mathematics performance on high-stakes tests: An examination of one urban school district in Colorado. *Urban Review*, 42(1), 193-209. doi:10.1007/s 11256-009-0127-0
- Capraro, R. M., Young, J. R., Lewis, C. W., Yetkiner, Z. E., & Woods, M. N. (2009). An examination of mathematics achievement and growth in a midwestern urban school district: Implications for teachers and administrators. *Journal of Urban Mathematics Education*, 2(2), 46-65.
- Carnevale, A. P., Smith, N., & Strohl, J. (2010). *Help wanted: Projections of jobs and education requirements through 2018*. Washington, DC: Georgetown University Center on Education and the Workforce. Retrieved from <http://cew.georgetown.edu/jobs2018/>
- Carpenter, D., Ramirez, A., & Severn, L. (2006). Gap or gaps: Challenging the singular definition of the achievement gap. *Education and Urban Society*, 39(1), 113-127.

- Coates, J. (1993). The acquisition of gender-differentiated language. In J. Coates (Ed.), *Women, men, and language: A sociolinguistic account of gender differences in language* (2nd ed., pp. 143-167). London, England: Longman.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Coley, R. (2003). *Growth in school revisited: Achievement gains from the fourth to the eighth grade (ETS Policy Information Report)*. Princeton, NJ: Educational Testing Service.
- Colgren, C., & Sappington, N. E. (2015). Closing the achievement gap means transformation. *Education Leadership Review Of Doctoral Research*, 2(1), 24-33. Retrieved from <https://eric.ed.gov/?id=EJ1105741>
- College Board. (2011). *2011 college-bound seniors: Total group profile report*. Retrieved from http://professionals.collegeboard.com/profdownload/cbs2011_total_group_report.pdf
- Combs, J., Slate, J. R., Moore, G., Bustamante, R., Onwuegbuzie, A., & Edmonson, S. (2010). Gender differences in college preparedness: A statewide study. *Urban Review*, 42(5), 441-457. doi:10.1007/s11256-009-0138-x
- Conley, D. T. (2007). *Redefining college readiness*, Volume 3. Eugene, OR: Educational Policy Improvement Center.
- Conley, D. T., Aspengren, K., Gallagher, K., & Nies, K. (2006a, April). *College Board validity study for math*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

- Conley, D. T., Aspengren, K., Gallagher, K., & Nies, K. (2006b). *College Board validity study for science*. Eugene, OR: Center for Educational Policy Research, University of Oregon.
- Conley, D. T., Aspengren, K., Stout, O., & Veatch, D. (2006). *College Board Advanced Placement best practices course study report*. Eugene, OR: Educational Policy Improvement Center.
- Cook, A. A., Pérusse, R., & Rojas, E. D. (2015). Promoting college access among Latina/o English Language Learners: Implications for professional school counselors. *Journal of School Counseling, 13*(18), 1-43.
- Cosentino de Cohen, C., Deterding, N., Clewell, B. C. (2005). *Who's left behind? Immigrant children in high and low LEP schools*. Washington, DC: The Urban Institute.
- Course Crafters, (2012). *The course crafters guide to the K-12 ELL market, 2011-2012*. Haverhill, MA: Author.
- Craft, K., & Slate, J. R. (2012). The achievement gap between Hispanic and White students in middle school: A conceptual analysis. *Journal of Educational Research, 6*(2), 187-215.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.
- Darling-Hammond, L. (2004). Inequality and the right to learn: Access to qualified teachers in California's public schools. *Teachers College Record, 106*(10), 1936-1966.

Davis, C. M., Slate, J. R., Moore, G. W., & Barnes, W. (2013). College readiness and

Black student performance: Disaffirmed equity. *The Online Journal of New*

Horizons in Education, 3(4), 23-44. Retrieved from

<http://tojoined.net/pdf/v03i04/v03i04-03.pdf>

Davis, J., & Baumann, K. (2013). *School enrollment in the United States: 2011*

population characteristics. Washington, DC: U.S. Census Bureau. Retrieved from

<https://www.census.gov/content/dam/Census/library/publications/2013/demo/p20-571.pdf>

Denton, K., & West, J. (2002). *Children's reading and mathematics achievement in*

kindergarten and first grade (NCES 2002-125). Washington, DC: National

Center for Education Statistics.

Dougherty, C. (2014). *Catching up to college and career readiness: The challenge is*

greater for at-risk students. Issue Brief. Iowa City, IA: ACT, Inc.

Edmonds, R. (1979). Effective schools for the urban poor. *Educational Leadership*,

37(1), 15-23.

Federal Register. (2007). *The daily journal of the United States government*. Retrieved

from <http://www.ed.gov/legislation/FedRegister/other/2007-4/101907c.pdf>

Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.) Thousand

Oaks, CA: Sage.

Fry, R. (2008). *The role of schools in the English Language Learner achievement gap*.

Pew Hispanic Center. Retrieved from <http://pewhispanic.org/files/reports/89.pdf>

Gardner, R. C., & Desrochers, A. (1981). Second-language acquisition and bilingualism:

research in Canada (1970-1980). *Research in Canada*, 22(2), 146-162.

- Genesee, F., Lindholm-Leary, K., Saunders, W., & Christian, D. (2005). English Language Learners in U.S. schools: Overview of research findings. *Journal of Education for Students Placed at Risk*, 10(4), 363-385.
- Greene, J. P., & Winters, M. A. (2005). *Public high school graduation and college readiness rates: 1991- 2002. (Education Working Paper No. 8)*. Center for Civic Innovation at the Manhattan Institute. Retrieved from <http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED498141>
- Guglielmi, R. S. (2012). Math and science achievement in English language learners: A multivariate latent growth modeling of predictors, mediators, and moderators. *Journal of Educational Psychology*, 104(3), 580-602. doi:10.1037/a0027378
- Haas, E., Huang, M., Tran, L., & Yu, A. (2016a). *The achievement progress of English learner students in Nevada* (REL 2016-154). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory West. Retrieved from <http://ies.ed.gov/ncee/edlabs>
- Haas, E., Huang, M., Tran, L., & Yu, A. (2016b). *The achievement progress of English learner students in Utah* (REL 2016-155). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory West. Retrieved from <http://ies.ed.gov/ncee/edlabs>
- Hammer, C. S., Davison, M. D., Lawrence, F. R., & Miccio, A. W. (2009). The effect of maternal language on bilingual children's vocabulary and emergent literacy

- development during Head Start and kindergarten. *Scientific Studies of Reading*, 13(2), 99-121. doi:10.1080/10888430902769541
- Harvey, D. W. (2013). *Gaps in college readiness: ACT and SAT differences by ethnicity across 10 school years* (Unpublished doctoral dissertation). Sam Houston State University, Huntsville, TX.
- Harvey, D. W., Slate, J. R., Moore, G. W., Barnes, W., & Martinez-Garcia, C. (2013). And the equity gaps continue in ACT scores: A multiyear statewide analysis. *E Journal of Organizational Learning & Leadership*, 11(2), 36-59.
- Holme, J. J., Richards, M. P., Jimerson, J. B., & Cohen, R. W. (2010). Assessing the effects of high school exit examinations. *Review of Educational Research*, 80(4), 476-526.
- Husain, M., & Millimet, D. (2009). The mythical “boy crisis”? *Economics of Education Review*, 28(1), 38-48.
- Intercultural Development Research Association. (2015, February). *New research on securing educational excellence & equity for English Language Learners in Texas secondary schools*. Jose A. Cardenas School Finance Fellows Program 2015 Symposium Proceedings. Intercultural Development Research Association, San Antonio, TX.
- Johnson, B., & Christensen, L. (2014). *Educational research: Quantitative, qualitative, and mixed approaches* (5th ed.). Thousand Oaks, CA: Sage.
- Kahlenberg, R. D. (2010). Re-education. *Washington Monthly*, 42(3/4), 46.
- Keigher, A. (2009). *Characteristics of public, private, and Bureau of Indian Education elementary and secondary schools in the United States: Results from the 2007-08*

schools and staffing survey. Washington, DC: National Center for Education Statistics.

- Kieffer, M. J. (2011). Converging trajectories: Reading growth in language minority learners and their classmates, kindergarten to Grade 8. *American Educational Research Journal*, 48(5), 1187-1225. doi:10.3102/0002831211419490
- Kirp, D. L. (2013). *Improbable scholars: The rebirth of a great American school system and a strategy for America's schools*. New York, NY: Oxford University Press.
- Kirsch, I., Braun, H., Yamamoto, K., Sum, A., & Educational Testing Service, P. N. (2007). *America's perfect storm: Three forces changing our nation's future*. Princeton, NJ: Educational Testing Service.
- Lee, J. (2002). Racial and ethnic achievement gap trends: Reversing the progress toward equity? *Educational Researcher*, 31(1), 3-12.
- Lee, K., & Slate, J. R. (2014). Differences in advanced achievement outcomes for Texas students as a function of economic disadvantage. *Journal of Education Research*, 8(3), 137-149.
- Leonhardt, D. (2004, April 22). As wealthy fill top colleges, new efforts to level the field. *New York Times*. Retrieved from <http://www.nytimes.com/2004/04/22/us/aswealthy-fill-top-colleges-concerns-grow-overfairness.html?pagewanted=all&src=pm>
- LoGerfo, L., Nichols, A., & Reardon, S. F. (2006). *Achievement gains in elementary and high school*. Washington, DC: Urban Institute. Retrieved from <http://www.urban.org/url.cfm?ID=411290>

- Lubienski, S. T., & Lubienski, C. (2006). School sector and academic achievement: A multilevel analysis of NAEP mathematics data. *American Educational Research Journal*, 43, 651-698.
- Marks, G. N. (2008). Accounting for the gender gaps in student performance in reading and mathematics: Evidence from 31 countries. *Oxford Review of Education*, 34(1), 89-109.
- Martinez, R. M., Slate, J. R., & Martinez-Garcia, C. (2014). English Language Learner boys and girls reading and math achievement as a function of early-exit and late-exit bilingual programs: A multiyear, statewide analysis. *Education Research International*, 2014. doi:10.1155/2014/508459
- Maxwell, L. A. (2012). English-Learners: The educational trajectories of English Learners in Texas. *Education Week*, 31(26).
- Mishkind, A., & American Institutes for Research. (2014). *Overview: State definitions of college and career readiness*. Washington, DC: College & Career Readiness & Success Center at American Institutes for Research. Retrieved from http://www.ccrscenter.org/sites/default/files/CCRS%20Defintions%20Brief_REV_1.pdf
- National Center for Public Policy and Higher Education. (2005). *Income of U.S. workforce projected to decline if education doesn't improve*. Retrieved from http://www.highereducation.org/reports/pa_decline/pa_decline.pdf#search=%22minorities%22
- National Assessment of Educational Progress. (2016). *Nation's report card*. Retrieved from <https://www.nationsreportcard.gov/#>

- National Center for Education Statistics. (2016). *The condition of education 2016* (NCES 2016-144), English Language Learners in Public Schools. Retrieved from <https://nces.ed.gov/fastfacts/display.asp?id=96>
- Noble, J., & Sawyer, R. (2002). *Predicting different levels of academic success in college using high school GPA and ACT Composite score*. (ACT Research Report 2002-4). Iowa City, IA: ACT.
- Noguera, P. A. (2011). A broader and bolder approach uses education to break the cycle of poverty. *Phi Delta Kappan*, 93(3), 8-14.
- O'Conner, R., Abedi, J., & Tung, S. (2012). *A descriptive analysis of enrollment and achievement among English Language Learner students in Pennsylvania*. (Issues and Answers Report, REL 2012–No. 127). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Mid-Atlantic. Retrieved from <http://ies.ed.gov/ncee/edlabs>
- Organization for Economic Cooperation and Development. (2016). *Getting skills right: Assessing and anticipating changing skill needs*. Paris, France: OECD Publishing <http://dx.doi.org/10.1787/9789264252073-en>
- Ozuna, T. T., Saenz, V. B., Ballysingh, T. A., & Yamamura, E. K. (2016). Examining culturally responsive college readiness in the Rio Grande Valley of South Texas. *Journal of School Leadership*, 26(1), 154-182.
- Paredes, R. (2016). 20X30TX. Paper presented at Joint Interim Hearing of the Senate Public Education and Higher Education Committees, Austin, TX. Abstract retrieved from

<http://www.thecb.state.tx.us/reports/PDF/7488.PDF?CFID=58128266&CFTOKEN=72339435>

Polat, N., Zarecky-Hodge, A., & Schreiber, J. B. (2016). Academic growth trajectories of ELLs in NAEP data: The case of fourth- and eighth-grade ELLs and non-ELLs on mathematics and reading tests. *Journal of Educational Research, 109*(5), 541-553. doi:10.1080/00220671.2014.993461

Public Education Information Management System. (2017). *PEIMS-Overview*. Retrieved from http://tea.texas.gov/Reports_and_Data/Data_Submission/PEIMS/PEIMS__Overview/

Radcliffe, R. A., & Bos, B. (2013). Strategies to prepare middle school and high school students for college and career readiness. *Clearing House, 86*(4), 136-141. doi:10.1080/00098655.2013.782850

Rathbun, A. H., West, J., & Germino-Hausken, E. (2004). *From kindergarten through third grade: Children's beginning school experiences* (NCES 2004-007). Washington, DC: National Center for Education Statistics.

Ravitch, D. (2010). *The death and life of the great American school system: How testing and choice are undermining education*. New York, NY: Basic Books.

Reid, K. J., & Moore, J., III. (2008). College readiness and academic preparation for postsecondary education: Oral histories of first-generation urban college students. *Urban Education, 43*(2), 240-261. doi:10.1177/0042085907312346

Robinson, J. P., & Lubienski, S. T. (2011). The development of gender achievement gaps in mathematics and reading during elementary and middle school: Examining

- direct cognitive assessments and teacher ratings. *American Educational Research Journal*, 48(2), 268-302.
- Rodriguez, J., & Slate, J. R. (2015). Differences in postsecondary readiness for Texas students as a function of bilingual education service. *International Journal of Psychology Research*, 9, 345-360.
- Rojas, R., & Iglesias, A. (2013). The language growth of Spanish-speaking English Language Learners. *Child Development*, 84(2), 630-646. doi:10.1111/j.1467-8624.2012.01871
- Rojas-LeBouef, A. (2010). *Differences in reading and math achievement among students who are Hispanic, Limited English Proficient, or White: A multi-year study* (Doctoral dissertation). Retrieved from ProQuest (AAT No. 34700883)
- Sadler, P., & Tai, R. (2007). Advanced Placement exam scores as a predictor of performance in introductory college biology, chemistry, and physics courses. *Science Educator*, 16(2), 1-19.
- Sánchez, M. T., Ehrlich, S., Midouhas, E., & O'Dwyer, L. (2009). *Analyzing performance by Grade 10 Hispanic high school students on the Massachusetts state assessment (Issues and Answers Report, REL 2009-No. 071)*. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northeast and Islands.
- Sanderson, H. L., & Harrington, P. (2005). *Trends and patterns of Utah's White and Hispanic 4th grade students compared to the nation: An NAEP achievement gap analysis*. Salt Lake City, UT: Utah State Office of Education.

- Sheng, Z., Sheng, Y., & Anderson, C. J. (2011). Dropping out of school among ELL students: Implications to schools and teacher education. *Clearing House*, 84(3), 98-103.
- Simon, C., Lewis, S., Uro, G., Uzzell, R., Palacios, M., Casserly, M., & Council of the Great City Schools. (2011). *Today's promise, tomorrow's future: The social and educational factors contributing to the outcomes of Hispanics in urban schools*. Washington, DC: Council of the Great City Schools.
- Slate, J. R., & Rojas-LeBouef, A. (2011). *Calculating basic statistical procedures in SPSS: A self-help and practical guide to preparing theses, dissertations, and manuscripts*. Ypsilanti, MI: NCPEA Press.
- Sousa, D. A. (2011). *How the brain learns*. Thousand Oaks, CA: Corwin Press.
- Stetser, M. C., & Stillwell, R. (2014). Public high school four-year on-time graduation rates and event dropout rates: School years 2010-11 and 2011-12. *First Look* (NCES 2014-391). Washington, DC: National Center for Education Statistics.
- Texas Education Agency. (2007a). *Chapter 74.4 English language proficiency standards*. Retrieved from <http://ritter.tea.state.tx.us/rules/tac/chapter074/>
- Texas Education Agency. (2007b). *Sec. 39.051 academic excellence indicators*. Retrieved from https://rptsvr1.tea.texas.gov/perfreport/account/2010/manual/TEC_CH_39_80th.pdf
- Texas Education Agency. (2009a). *End-of-course assessment plan. College-readiness and advanced-course readiness*. Retrieved from <http://tea.texas.gov/student.assessment/hb3plan/HB3-AppendixB.pdf>

- Texas Education Agency. (2009b). *Public Education Information Management System data standards 2009-2010 Appendix F: New federal requirements for ethnicity and race data collection and reporting*. Retrieved from <http://tea.texas.gov/index4.aspx?id=3967>
- Texas Education Agency. (2009c). *The 2009 accountability rating system for Texas public schools and school districts*. Retrieved from <https://rptsvr1.tea.texas.gov/perfreport/account/2009/manual/manual.pdf>
- Texas Education Agency. (2012a). *Chapter 89 adaptations for special population*. Retrieved from <http://ritter.tea.state.tx.us/rules/tac/chapter089/ch089bb.html>
- Texas Education Agency. (2012b). *Glossary for the Texas Academic Performance Report, 2012-2013*. Retrieved from <https://rptsvr1.tea.texas.gov/perfreport/tapr/2013/glossary.pdf>
- Texas Education Agency. (2013). *2013 Accountability system frequently asked questions*. Retrieved from <https://rptsvr1.tea.texas.gov/perfreport/account/2013/faq.html>
- Texas Education Agency. (2015). *2015 Accountability manual for Texas public school districts and campuses*. Retrieved from <https://rptsvr1.tea.texas.gov/perfreport/account/2015/manual/manual.pdf>
- Texas Education Agency. (2017a). *Overview of 2017 accountability*. Retrieved from <http://tea.texas.gov/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=51539611645&libID=51539611645>
- Texas Education Agency. (2017b). *Public Education Information Management System overview*. Retrieved from

http://tea.texas.gov/Reports_and_Data/Data_Submission/PEIMS/PEIMS_-_Overview/

Texas Education Agency (2017). *About TEA: Welcome and overview*. Retrieved from

http://tea.texas.gov/About_TEA/Welcome_and_Overview/

Tianlan, W., Xun, L., & Barnard-Brak, L. (2015). Gender differences in mathematics and reading trajectories among children from kindergarten to eighth grade. *Research in Education*, 93(1), 77-89. doi:10.7227/RIE.0015

Uchikoshi, Y. (2006). English vocabulary development in bilingual kindergartners: What are the best predictors? *Bilingualism: Language and Cognition*, 9(1), 33-49.

doi:10.1017/S1366728905002361

U.S. Census Bureau. (2008). *Projections of the Hispanic population (any race) by age and sex for the United States: 2010 to 2050* [np2008-table 20]. Retrieved from www.census.gov

U.S. Census Bureau. (2016). *School enrollment in the United States: 2015*. Retrieved from <https://www.census.gov/newsroom/press-releases/2016/cb16-tps142.html>

U.S. Department of Education. (2001). *No Child Left Behind (NCLB)*. Retrieved from <http://www2.ed.gov/policy/elsec/leg/esea02/index.html>

U.S. Department of Education. (2009). *Race to the Top Program Executive Summary*. Retrieved from <https://www2.ed.gov/programs/racetothetop/executive-summary.pdf>

U.S. Department of Education. (2010). *A blueprint for reform: The reauthorization of the Elementary and Secondary Education Act*. Retrieved from <https://www2.ed.gov/policy/elsec/leg/blueprint/blueprint.pdf>

- U.S. Department of Education. (2015a). *English learners (ELs) and college and career readiness*. Retrieved from <http://www2.ed.gov/about/offices/list/oela/fast-facts/index.html>
- U.S. Department of Education. (2015b). *Every Student Succeeds Act (ESSA)*. Retrieved from <https://www.ed.gov/ESSA>
- U.S. Department of Education. (2015c). *U.S. high school graduation rate hits new record high*. Retrieved from <http://www.ed.gov/news/press-releases/us-high-school-graduation-rate-hits-new-record-high>
- Welton, A., & Williams, M. (2015). Accountability strain, college readiness drain: Sociopolitical tensions involved in maintaining a college-going culture in a high "minority", high poverty, Texas high school. *The High School Journal*, 98(2), 181-204. doi:10.1353/hsj.2015.0001
- Yeakey, C. C. (2012). *Living on the boundaries: Urban marginality in national and international contexts*. Bingley, UK: Emerald Book Serials and Monographs.
- Zhao, Y. (2009). Comments on the Common Core Standards Initiative. *AASA Journal of Scholarship & Practice*, 6(3), 46-54.
- Zhao, Y. (2013). U-turn to prosperity. *Educational Leadership*, 70(5), 57-59.

APPENDIX



Institutional Review Board
Office of Research and Sponsored Programs
 903 Bowers Blvd, Huntsville, TX 77341-2448
 Phone: 936.294.4875
 Fax: 936.294.3622
irb@shsu.edu
www.shsu.edu/~rgs_www/irb/

DATE: July 20, 2017

TO: Clare Resilla [Faculty Sponsor: Dr. John Slate]

FROM: Sam Houston State University (SHSU) IRB

PROJECT TITLE: *Differences in the College-Readiness Rates of English Language Learners by Gender, Economic Status, and Ethnicity/Race: A Texas Statewide, Multiyear Investigation [T/D]*

PROTOCOL #: 2017-06-35413

SUBMISSION TYPE: INITIAL REVIEW

ACTION: DETERMINATION OF EXEMPT STATUS

DECISION DATE: July 20, 2017

REVIEW CATEGORY: Category 4—research involving existing, publicly available data usually has little, if any, associated risk, particularly if subject identifiers are removed from the data or specimens.

Thank you for your submission of Initial Review materials for this project. The Sam Houston State University (SHSU) IRB has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

We will retain a copy of this correspondence within our records.

*** What should investigators do when considering changes to an exempt study that could make it nonexempt?**

It is the PI's responsibility to consult with the IRB whenever questions arise about whether planned changes to an exempt study might make that study nonexempt human subjects research. In this case, please make available sufficient information to the IRB so it can make a correct determination.

If you have any questions, please contact the IRB Office at 936-294-4875 or irb@shsu.edu. Please include your project title and protocol number in all correspondence with this committee.

Sincerely,

Donna Desforjes
 IRB Chair, PHSC

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Sam Houston State University IRB's records

VITA

Clare A. Resilla

EDUCATIONAL HISTORY

Doctorate of Education – Educational Leadership, December 2017

Sam Houston State University, Huntsville, TX

Dissertation: Differences in the College-Readiness Rates of English Language Learners by Gender, Economic Status, and Ethnicity/Race: A Texas Statewide, Multiyear Investigation

Master of Education in Administration, EC-12, December 2014

Lamar University, Beaumont, TX

Bachelor of Elementary Education, May 2003

St. Theresa's College, Cebu, Philippines

Bachelor of Arts in Mass Communication, March 1998

St. Theresa's College, Philippines

PROFESSIONAL EXPERIENCES

Assistant Principal, Aldine ISD, 2016-2017

Secondary, District Specialist, Houston ISD, 2015 - 2016

ESL Programs Coordinator, Spring ISD, 2014-2015

Intermediate Language Instructional Specialist, Klein ISD, 2013-2014

Teacher, English Language Arts, Aldine ISD, 2006-2013

RECOGNITIONS

Scholar, Barbara L. Jackson Scholarship Program, Charlottesville, VA, 2016-2018

Recipient, Jackie Merchant Memorial Leadership Award, Sam Houston State University, Huntsville, TX, 2016

Finalist Teacher of the Year, Rayford Intermediate School, Humble, TX, 2011

KBP Award, St. Theresa's College, Cebu City, Philippines, March 1998

Recognition for Academic Awards, St. Theresa's College, Philippines, March 1998

Recognition for Outstanding Research, St. Theresa's College, Philippines, March 1998

Academic Scholar, City of Mandaue, Philippines, June 1994 – March 1998

Inner Wheel Leadership Award, St. Joseph's Academy, Philippines March 1994

PRESENTATIONS

Resilla, C. (2017). *Becoming the voice of the voiceless: Aspiring women superintendents from the traditionally marginalized minoritized group*. Paper presentation at the 40th annual meeting of the Southwest Educational Research Association, San Antonio, TX.

Resilla, C., & Slate, J. R. (2017, January). *Difference in college-readiness rates between two consecutive school years for English language learners*. Poster presentation at the 1st Conference of Academic Research in Education, Las Vegas, NV.

Resilla, C. (2016, September). *Difference in college-readiness rates between two consecutive school years for English language learners*. Round table discussion presented at the 11th Annual TCPEA Graduate Research Exchange, Houston, TX.

PROFESSIONAL AFFILIATIONS

University Council for Educational Administration