# Program Differences in the Development of English Learners in Rural Texas

Schools

by

Rebecca Lisa Hernandez

A dissertation submitted to the Educational Leadership and Policy Studies, College of Education in partial fulfillment of the requirement for the degree of

Doctor of Education

In Professional Leadership for Special Populations

Chair of Committee: Dr. Kristi L. Santi

Committee Member: Dr. Jacqueline Hawkins

Committee Member: Dr. Jie Zhang

Dr. Lynn Gillman-Rich

University of Houston

May 2021

Copyright 2021, Rebecca Lisa Hernandez

#### Dedication

This dissertation is dedicated to my family. The attainment of this degree represents the commitment shared by all of them. First and foremost, to the love of my life, my husband, Rafail Hernandez, for your unconditional love, unwavering support and understanding during the long hours, countless nights, and weekends that I spent writing over the last few years. Your encouragement for me to fulfill my dream and your confidence in my ability to get this done kept me going. I love and appreciate you!

To my wonderful and loving children, Joel, Leslie and Rafael, thank you for being a source of inspiration to me. You believed in me and encouraged me throughout my journey. Joel and Leslie, I admire you as you continue your educational journey in law school. I love you with all my heart and I thank you for motivating me to finish my doctorate.

To my parents, Gilbert and Maria Delgado. Thank you for instilling, at a young age, the importance of education. And, for your continued encouragement and prayers as I worked to complete my work. I appreciate your faith in me. To my Aunt Laura OCañas-Escamilla, for always believing in me and being there for me whenever I needed you. No matter what, you were always there for me. And, to my extended family members for your understanding and for your words of encouragement throughout this process. I love you all!

iii

#### Acknowledgements

It is an honor and privilege to graduate from the University of Houston College of Education Department of Professional Leadership for Special Populations. The program has provided me with a tremendous opportunity to learn and grow. Thank you to all of the program professors who provided high quality coursework, learning experiences and feedback. Your dedication and hard work is greatly appreciated and will lead to improvement of the field of education for years to come.

I am grateful to everyone who helped guide me through my doctoral journey. Thank you to my committee members Dr. Kristi Santi, Dr. Jacqueline Hawkins, Dr. Jie Zhang and Dr. Lynn Gillman-Rich for your expertise, feedback and support throughout this process. I would especially like to thank my chair and advisor, Dr. Kristi Santi. Your encouragement and guidance made the completion of my dissertation possible. I could not have done this without your countless hours of continued assistance and support. I will be forever grateful to you for being there for me day and night.

I would like to thank the school districts that volunteered to be part of my study. I owe you a debt of gratitude for your participation. Thank you to Region 3 Education Service Center for making this journey possible. And to my amazing colleagues and coworkers who supported me throughout this journey, I admire your support and dedication to the students and families we serve.

And, a big thank you to my fabulous Amigas for being my biggest cheerleaders and never doubting that I would finish. I appreciate your checking in on me and being a shoulder to lean on when I needed it. Thank you for believing in me!

iv

#### Abstract

Background: Not all districts required to implement a bilingual education program can employ a sufficient number of bilingual certified teachers in grades PK-5. As a result, rural districts find themselves having to file for a bilingual exception with the Texas Education Agency and instead implement an English only English as a Second Language (ESL) program. Purpose: The purpose of this study is to determine the what is the relationship, if any, between third grade TELPAS, English Learner status, and longitudinal STARR results for Spanish-speaking English Learners (ELs) who are participating in bilingual or English as a Second Language (ESL) second language acquisition programs in grades 3-8. Methods: This is a quantitative study that used a descriptive-comparative design to determine to what relationship, if any, exists between the initial TELPAS status in grade three to the grade eight outcome measure, the STAAR. Additional analyses included examining relationships between TELPAS composite for grade three and STAAR Reading achievement data for grades three through eight for the Limited English Proficient (LEP) and former LEP students and for gender. Results: This study compared longitudinal STAAR Reading results for students in three rural Texas schools. The results showed that there is no relationship between the TELPAS composite at third grade and the level of performance on eighth grade STAAR. In addition, students showed a change in the level of performance on the STAAR between the eighth grade than third grade regardless of the language program in which they were participating. **Conclusion:** This study aimed to examine the relationship third grade TELPAS and longitudinal STAAR data of LEP students as measured by the STAAR Reading test in grades 3-8. The data show that districts have an opportunity to look historically at the

V

STAAR data of their students to ensure that each student is receiving the targeted instruction they need in order to meet the needs of ELs. The results show that most students, regardless of the second language acquisition program, have reached Approached and Meets by the end of eighth grade. What is worth noting is that while this is the case, several students stay at a lower level of performance for two to four years before movement to *Meets Grade Level* performance as defined by the Texas Education Agency. Thus, schools can do more to move students to grade level performance by analyzing data and targeting instruction.

Keywords: bilingual, ESL, STAAR, TELPAS, English Learner

Chapter	Page
I. Introduction	1
Problem of Practice	
Impact of the Work	
National Context	5
State/Regional Context	7
Variables	9
Definition of Terms	
Research Questions	
II. Literature Review	12
Language Instruction Education Program Models in Texas	
Assessments	
Research on program efficacy	
Conclusion	
III Method	19
Research Questions	
Design	
Sampling	
Procedures	
Measures	
Analysis	
IV. Results	27
Campuses A and B	50
Campus C	
Conclusion	59
V. Discussion	60
Research Question 1	
Research Question 2	
Research Question 3	
Limitations	

# **Table of Contents**

Conclusion	66
Recommendations	67
VI. Action Plan	69
Plan-Do-Study-Act	69
Foundational Understanding of SLA	70
Professional Development Planning	
Raising Accountability with Improvement Science	73
Conclusion	74
References	75
Appendix Improvement Science	80

List	of	Ta	bles

TableP	age
1 STAAR Administration	16
2 2018-2019 Texas A cademic Performance Report and Report Card Data	10
3 Camps A: STAAR Reading Results	30
4 Campus A: Longitudinal STAAR Scores at a student level	31
5 Campus A: Longitudinal STAAR Scores by LEP Status in Grade 8	32
6. Campus A: Longitudinal STAAR Scores by Gender	
7. Campus B: STAAR Reading Results	
8. Campus B: Longitudinal STAAR Scores at Student Level	
9. Campus B: Longitudinal STAAR Scores by EL Status in Grade 8	
10. Campus B: Longitudinal STAAR Scores by Gender	39
11. Campus C: STAAR Reading Results	42
12. Campus C: Longitudinal STAAR Scores at Student Level	43
13. Campus C: Longitudinal STAAR Scores by EL Status in Grade 8	45
14. Campus C: Longitudinal STAAR Scores by Gender	47
15. Campuses A and B: TELPAS G3 Score and Grade 8 EL Status	51
16. Campuses A and B: Relation of Grade 3 TELPAS Score to Grade 8 EL Status	52
17. Campus C: Grade 3 TELPAS Score and Grade 8 EL Status Cross Tabulation	53
18. Campus C: Relation of Grade 3 TELPAS Score to Grade 8 EL Status	54
19. Campuses A and B: Grade 3 TELPAS Score and Grade 8 STAAR Score	55
20. Campuses A and B:Relation of Grade 3 TELPAS Score to Grade 8 STAAR Score	56
21. Campus C:Grade 3 TELPAS Score and Grade 8 STAAR Score Cross Tabulation	57
22. Campus C: Relation of Grade 3 TELPAS Score to Grade 8 STAAR Score	

# List of Figures

FigurePa	age
1. Map of English Learner Population in United States	6
2. ELs in Texas by Program	9
3. Trends in District and English Learner Populations	.22
4. Flowchart of Data Retrieval and Analysis Plan	.24
5. STAAR Levels	.27
6. TELPAS Proficiency Levels	.29
7. Campus A: Differences in STAAR Scores Between Grades 3 and 8	.34
8. Campus B: Differences in STAAR Scores Between Grades 3 and 8	.41
9. Campus C: Differences in STAAR Scores Between Grades 3 and 8	.49
10. All Campuses:Comparison of Grade 3 TELPAS and Grade 8 STAAR Performance	59
11. Plan-Do-Study-Act Cycle	.70

# **Chapter I**

# Introduction

The effectiveness of bilingual and English as a Second Language (ESL) programs is an issue facing school districts across the nation. Districts face a shortage of bilingual certified teachers, which poses a problem for urban districts and an even bigger problem for rural districts. They cannot compete with the salaries in larger urban districts (Zalaznick, 2018). The lack of bilingual teachers prevents English Learners (ELs) from receiving instruction in their primary language. ELs receive instruction in an Englishonly environment through an ESL program. This issue will continue to intensify as the number of ELs is estimated to reach 40% of the U.S. student population by the year 2030 (Maxwell & Shah, 2012).

One manner in which districts can resolve this issue is to encourage their bilingual students to enter education as bilingual teachers by providing a future teachers program in their high schools. Another way is to build relationships with their colleges and universities to recruit bilingual teachers. If districts cannot provide instruction in the primary language, they should ensure that English-only teachers receive professional development in sheltering instruction, which will provide strategies to help teachers make the content comprehensible for their ELs. The benefits of providing an effective bilingual or ESL language program are improvements in English language proficiency and increases in academic achievement, which will lead to an increases in accountability ratings, graduation rates, and postsecondary enrollments.

The number of ELs in public schools in the United States is rising (U.S. Department of Education [USDOE], 2018). In 2011 there were about 5.3 million ELs

enrolled in public schools in the United States, which is a significant increase from 3.5 million in 2001 (Flores et al., 2012). Between 1997 and 2007, the overall student population grew 8.5%, whereas the EL population grew by 53%, which is six times faster (Cho, 2012).

The numbers represent challenges to the schools, so schools need to find the best plan of action for educating the students whose first language is not English. The Elementary and Secondary Education Act (ESEA) of 1965, as amended by the Every Student Succeeds Act (ESSA) (USDOE, 2016) instructs states to implement a Language Instructional Educational Program (LIEP), which includes scientifically based effective language instruction. It is up to the states to determine how those programs are structured.

Over the years, researchers have gone back and forth on whether offering bilingual education or an ESL program provides better instruction for ELs (Slavin et al., 2011). They differ on which program provides better instruction for ELs. This is also a topic of discussion among district leaders as they determine if they support bilingual education, do not support bilingual education, or are simply unsure about the problem's nature.

#### **Problem of Practice**

Not all districts required to implement a bilingual education program can employ a sufficient number of bilingual certified teachers in prekindergarten through Grade 5. Part of the bilingual exception application requires that districts make a concerted effort to recruit bilingual teachers. However, there is a shortage of bilingual teachers across Texas. The schools in this study are from rural communities in southeast Texas. These districts do not have the tax base to compete with the larger districts' salaries in urban areas. The larger urban districts can provide significant monetary incentives in stipends and signing bonuses to lure bilingual teachers into their classrooms. Thus, bilingual teachers are willing to drive about an hour each way between a suburban or rural home and an urban school to earn a higher salary. As a result, rural districts find themselves instead having to file a bilingual exception and implement an English-only ESL program.

In some cases, there needs to be a transformation of school district administration and staff's mindset. Bilingual teachers lack the support from their administration in professional development and information about the program (Gallo et al., 2018). According to Brisk (2006), administrators have responsibilities with regards to their bilingual teachers:

All studies on effective schools point to the importance of leadership. . . . Administrators must support the bilingual program, its teachers, and its students. They must understand the conditions for quality bilingual education, foster collaboration among teachers, and gain community support and participation. (p. 121).

Mezirow's Transformational Learning Theory, which appeals to both their instrumental and communicative learning, can be used to hone-in on their beliefs, feelings, and judgments about bilingual education.

#### Impact of the Work

This study looked at three rural school districts that meet the state criteria to implement a bilingual education program. While the immediate impact will be seen at a local level, the national level will be noteworthy as bilingual and ESL programs are offered across the nation. One is fully complying with Texas Administrative Code and implementing the required bilingual program in prekindergarten through Grade 5. The other two school districts are not implementing a bilingual education program and have filed a bilingual exception with the Texas Education Agency (TEA). These districts are implementing an ESL program. This study examined current middle school students who are considered to have limited English proficiency (labeled "Limited English Proficient," or LEP), former LEP students who were in an elementary bilingual program, and other students who were in an ESL environment. Current State of Texas Assessment of Academic Readiness (STAAR) reading results will be compared among these groups of students to determine whether being placed in a bilingual education program improved academic achievement in middle school.

Implementing a bilingual program begins with a commitment from the school district to employ more bilingual certified teachers. This only occurs if the superintendent and campus principal are in agreement regarding moving toward compliance. The campus principal needs to have a "boots-on-the-ground" approach and actively recruit teachers at every opportunity. School districts can consider one option, the TEA Grow Your Own competitive grant, which will provide them with funds to assist their bilingual paraprofessional staff in obtaining a teaching degree. School districts can also begin working with bilingual high school students who can become their future bilingual teachers. They can provide these future teachers with 4 years of Spanish and dual-language Spanish courses at a university and encourage them to return to their hometown as an elementary bilingual teacher.

The implementation of a bilingual program will enrich the cultural awareness of the school district. Providing a bilingual education program may positively affect the school district through increased EL state assessment results (Thomas & Collier, 2002). This increase will have a domino effect as it will increase the district's state and federal accountability ratings for years to come.

# **National Context**

Bilingual education began in the United States many decades ago. Some groundbreaking laws and court cases that have shaped bilingual education in the United States are

- Title VI of the Civil Rights Act of 1964,
- Elementary and Secondary Education Act of 1965 (ESEA),
- Bilingual Education Act of 1968,
- Equal Educational Opportunities Act of 1974,
- Lau v. Nichols 1974, and
- Every Student Succeeds Act of 2015 (ESSA).

These laws helped shape today's bilingual and ESL programs.

The number of ELs is increasing every year. According to the USDOE (2020), there were over 4.9 million (10.1%) ELs enrolled in public schools in the United States (see Figure 1). This percentage is up from 2000 when there were over 3.8 million (8.1%) ELs enrolled in public schools.

# Figure 1



# Map of English Learner Population in the United States

*Note.* Percentage of English language learners in U.S. public schools by state: Fall 2017. Reprinted from *The Condition of Education 2020 (USDOE)* 

According to USDOE (2019), 76.44% of ELs in the United States are Spanish speakers. These numbers indicate that the United States is experiencing an increase in the enrollment of linguistically and culturally diverse students; districts need to employ teachers who are bilingual and ESL teachers. In addition, districts need to determine an appropriate language program for their ELs. Based on Cho (2012), districts need to take caution in determining the program that best fits their students' demographics and teacher certifications. Her research shows that reading scores for non-English language learners decrease when sharing a classroom with current ELs. Teachers who are instructing ELs should differentiate instruction to meet the needs of all students in their classrooms, and one researcher emphasizes that "the growing number of students in which English is a

second language makes it increasingly important to find ways to better meet their academic needs" (Pope, 2016, p. 327).

ESSA mandates that schools improve English language proficiency and academic achievement (USDOE, 2016b). ESSA does not mandate students' enrollment in a bilingual program; however, some states, such as Texas, have chosen to do so. According to the Texas Education Code, a school district must implement a bilingual program if it has 20 or more ELs in prekindergarten through Grade 5 in the same grade level district-wide who speak a language other than English (Commissioner's Rules, 2018).

#### **State/Regional Context**

In Texas, local education agencies (LEAs) provide ELs instruction through either a bilingual program or an ESL program. According to the TEA (Commissioner's Rules, 2018), school districts decide which program to implement based on the total number of ELs enrolled in their elementary grades. The implementation of the required bilingual education program applies to students in in prekindergarten through Grade 5. If ELs do not exit by fifth grade, they will be enrolled in an ESL program in middle school and remain in the program until they meet exit criteria.

School districts required to implement a bilingual education program must make fiscal and personnel commitments to comply with the Texas Administrative Code. If a district cannot employ enough bilingual certified teachers to implement a bilingual program, the district may apply for a bilingual exception with the TEA (Commissioner's Rules, 2018). These districts, in turn, run an all-English ESL program. The law that governs bilingual and ESL instruction falls under Texas Education Code 29.051-29.064 and the Texas Administrative Code 89.1201-89.1265, also known as Chapter 89 of the Commissioner's Rules Concerning State Plan for Educating English Learners (2018). Section 89.1220 mandates that each school district operate a Language Proficiency Assessment Committee (LPAC). The LPAC convenes to make entry, assessment, and exit decisions for every EL in their district. These decisions affect matters including, but not limited to, entry into and discharge from the bilingual or ESL program, instructional accommodations, student assessment, professional development for teachers, reclassification of ELs, and evaluation of the bilingual and ESL programs in the district.

Texas has a required curriculum known as Texas Essential Knowledge and Skills (TEKS), which is created under the direction of the Texas Commissioner of Education and adopted by the Texas State Board of Education. There are TEKS curricula for every content area from kindergarten through 12th grade. Since bilingual education is required in Texas elementary schools, there are TEKS for both English and Spanish reading language arts (RLAs). There are some English and Spanish RLA TEKS that are the same and some that are different. TEA does not mandate a TEKS scope and sequence; it only mandates that schools cover all TEKS during the school year.

The program's evaluation guides the program's improvement plan, which should also be part of the campus and district improvement plans. In addition, districts that are labeled as "improvement required" and "focus" in the A-F accountability system or staged in the Performance-Based Monitoring Analysis System (PBMAS) are required to submit a Targeted Improvement Plan (TIP), which has both short- and long-term goals. Districts are required to involve all stakeholders in the development of the TIP. District bilingual and ESL coordinators need to use all accountability data and reports to enhance their programs (Gates & Lichtenberg, 2005). According to the TEA's Public Education Information Management System (PEIMS) Standard Reports Overview (TEA, n.d.) for 2019, there were 1,055,172 students identified as ELs. Of that number, 545,597 were enrolled in an ESL program, and 464,888 were enrolled in a bilingual program. The breakdown for students enrolled in bilingual and ESL programs in Texas is shown in Figure 2.

# Figure 2

ELs in Texas by Program



*Note:* In 2019, the 1,055,172 ELs in Texas public schools were in English as a Second Language programs (54%) or in bilingual programs (46%). ESL, English as a Second Language. Data from English Learner (EL) Program Reports [Database], by Public Education Information Management System, (n.d.), Texas Education Agency (<u>https://rptsvr1.tea.texas.gov/adhocrpt/adlepcg.html</u>).

#### Variables

This study will attempt to evaluate the relationship between participating in a bilingual education program (independent variable) in elementary school and student academic achievement (dependent variable) when these ELs enroll in middle school. The measures include levels of performance on the STAAR reading assessment in third

through eighth grades, performance on the Texas English Language Proficiency Assessment System Grade 3 (TELPAS G3) composite, gender, and LEP status.

# **Definition of Terms**

The following terms have been defined to aid readers:

- Bilingual and English as a second language education: The bilingual education program and English as a second language program shall be integral parts of the general educational program required under Texas Administrative Code Chapter 74 of Subchapter A. Required Curriculum, to include foundation and enrichment areas, English Language Proficiency Standards (ELPS), and college and career readiness standards. In bilingual education programs, school districts shall purchase instructional materials in both program languages with the district's instructional materials allotment or otherwise acquire instructional materials for bilingual education classes per Texas Education Code requirements, as stated in §31.029(a). Instructional materials for bilingual education programs on the list adopted by the commissioner of education, as provided by the Texas Education Code and recorded in §31.0231, may be used as curriculum tools to enhance the learning process. The school district shall provide ongoing coordination between the bilingual education or English as a second language program and the general education program. The bilingual education and English as a second language programs shall address English learners' affective, linguistic, and cognitive needs (Commissioner's Rules, 2018, particularly 89.1210).
- English learners: For the purpose of this study *English learner* refers to an enrolling elementary or secondary student whose native language is a language

other than English and who is identified as having limited English proficiency. For the full federal definition, see *Non-Regulatory Guidance: English Learners and Title III of the Elementary and Secondary Education Act (ESEA), as Amended by the Every Student Succeeds Act (ESSA),* from USDOE (2016b).

STAAR: The State of Texas Assessment of Academic Readiness program, which was implemented in Spring 2012, includes annual assessments for reading and mathematics at Grades 3–8, writing at Grades 4 and 7, science at Grades 5 and 8, social studies at Grade 8, and end-of-course (EOC) assessments for English I, English II, Algebra I, biology, and U.S history (TEA, n.d.).

# **Research Questions**

This study will focus on the following research questions:

- 1. What, if any, are the patterns of change in the levels of performance on the STAAR by program type, TELPAS level, and gender at the student level?
- 2. What, if any, is the relationship between TELPAS status at Grade 3 and the students' EL status in Grade 8?
  - a. Is the difference in this relationship the same or different based on bilingual or English as a Second Language (ESL) second language acquisition programs?
- 3. What, if any, is the relationship between TELPAS status at Grade 3 and the level of performance on the STAAR at Grade 8?
  - a. Is the difference in this relationship the same or different based on bilingual or English as a Second Language (ESL) second language acquisition programs?

# **Chapter II**

#### Literature Review

According to the 2010 U.S. Census, the Hispanic population increased by 43% between 2000 and 2010, making it the fastest-growing minority group (Ennis et al., 2011). "More than half of the growth in the total population of the United States between 2000 and 2010 was due to the increase in the Hispanic population," according to Ennis et al. (2011), noting that "over half of the Hispanic population resided in just three states: California, Texas, and Florida" (pp. 2, 5).

When looking at the U.S. Census report regarding the foreign-born population, Greico et al. (2012) find that Latin Americans are the largest group (53%) of the foreignborn population in the United States. In addition, 85% of the foreign-born population speaks a first language other than English. This group of foreign-born individuals brings their families with them, thus enrolling their children into U.S. schools. Once they are enrolled, they are assessed, according to ESSA mandates, and identified as having limited proficiency in English, according to ESSA mandates (USDOE, 2016).

The number of students classified as LEP, also referred to as ELs, in the United States., is increasing (USDOE, 2018). According to Sugarman (2016), 10% of the total U.S. student population was identified as ELs in 2016. This increase creates a challenge for school districts who are working to improve student outcomes. According to ESSA (USDOE, 2016), states are required to offer a LIEP. It is up to the states to determine what those programs will be. According to the *English Learner Tool Kit* (USDOE, 2016a), the USDOE "USDOE neither specifies nor endorses any program. Still it is stated that the programs must be based on sound educational theory, be implemented

effectively, and overcome language barriers. *The English Learner Tool Kit* (USDOE, 2016a) offers the following four common educationally sound programs. The first two are taught in English alone usually; the second two, in the EL's primary language along with English. They are ESL, sheltered English immersion, a transitional bilingual education (TBE) early-exit program, and a dual-language program. The dilemma for districts is deciding which one will improve student outcomes. Haynes (2007) suggests that schools think about how qualified the teacher is, what materials are available, what instructional methods are used in the classrooms, and how soon students are promoted from the program. Texas has chosen to divide its LIEP into two options: ESL and bilingual education (Commissioner's Rules, 2018).

#### Language Instruction Education Program Models in Texas

#### English as a Second Language

USDOE (n.d.) defines *ESL* as

a program of techniques, methodology and special curriculum designed to teach ELLs [English language learners] English language skills, which may include listening, speaking, reading, writing, study skills, content vocabulary, and cultural orientation. ESL instruction is usually in English with little use of native language. (p. 1)

Texas offers two different ESL models. They are *pull-out* and *content-based models*. The difference in the two is that in pull-out programs, only the reading and language arts (RLA) teachers are required to be ESL certified, whereas, in content-based programs, all content area teachers are required to be certified in ESL (Commissioner's Rules, 2018). These new definitions were adopted into statute in July of 2018. These program models

require that instruction be appropriate for culturally and linguistically diverse students. The district in this study was implementing a pull-out program.

#### **Bilingual Education Program**

In the United States, bilingual education is provided using English and another language. Two of the most commonly used types are dual-language and transitional programs (Moughamian et al., 2009; OLEA, 2019).

According to USDOE (n.d.), the goal of dual-language programs is "to develop language proficiency in two languages by receiving instruction in English and another language in a classroom that is usually comprised of half native English speakers and half native speakers of the other language" (p. 1). These students can remain in dual-language programs until they graduate from high school. Dual-language programs foster native language development while adding a second language, which is considered an additive program (Moughamian et al., 2009).

USDOE (n.d.) defines *transitional bilingual education*, also known as *late-exit bilingual education*, as a program that utilizes

a student's primary language in instruction. The program maintains and develops skills in the primary language and culture while introducing, maintaining, and developing English skills. The primary purpose of a transitional bilingual education program is to facilitate the ELL's transition to an all-English instructional program while receiving academic subject instruction in the native language to the extent necessary. (p. 1)

Transitional education programs utilize various percentages of the native language and English in their models. Students usually begin their instruction provided in the native language and transition to English instruction over the years. This model is considered to be subtractive as it replaces the native language with English.

Bilingual education models look much the same in Texas. One difference is that bilingual education is required for districts that meet the minimum number of 20 students who have limited language proficiency per grade level. Texas allows districts to operate their programs under the following model options: dual-language one-way program, dual-language two-way program, transitional bilingual early-exit program, and transitional bilingual-late exit program. This study's district implementing a bilingual education program operates a transitional bilingual early-exit program (Commissioners Rules, 2018), which operates under the same definition as the USDOE description of transitional bilingual education.

#### Assessments

#### State of Texas Assessment of Academic Readiness

The STAAR test is a summative assessment given to students in Texas. The first STAAR test was administered in Spring 2012. The STAAR was independently evaluated by the Human Resources Research Organization, which found support for validity and reliability (Human Resources Research Organization, 2016). The STAAR test is administered as follows in Grades 3–8 (Table 1).

#### Table 1

STAAR Administration

Grade	Content			
3	Mathematics, Reading			
4	Mathematics, Reading, Writing			
5	Mathematics, Reading, Science			
6	Mathematics, Reading			
7	Mathematics, Reading, Writing			
8	Mathematics, Reading, Science, Social Studies			

*Note:* Texas Education Agency

Students at high school are administered five STAAR EOC exams. These are for English I, English II, Algebra, Biology, and U.S. History (Texas Assessment Management System, n.d.b). STAAR is given to all students except students with a significant cognitive disability, who take the STAAR ALT. The STAAR does allow accommodations for students who have special learning needs. ELs are among those who are eligible for testing accommodations (Texas Assessment Management System, n.d.a).

# Texas English Language Proficiency Assessment System

ESEA (1965) mandated that English proficiency be assessed for all students who are identified as having limited proficiency (USDOE, 2016). It further stipulates that the assessment should be aligned with English language proficiency standards. The test to measure English proficiency in Texas is the TELPAS. The TELPAS measures a student's level of proficiency in the domains of listening, speaking, reading, and writing. The TELPAS measures these domains through proficiency levels of beginning, intermediate, advanced, and advanced high. The TELPAS works hand in hand with the ELPS, which are standards that are required to be implemented for ELs (TEA, 2019). This research study focused on bilingual and ESL programs' effectiveness as they relate to former LEP students. The number of ELs in the United States is growing, and districts are struggling to employ appropriately certified bilingual teachers. Thus, instead of being able to implement a bilingual program, they must implement an ESL program. The STAAR assessment results will be used to show the impact of bilingual or ESL programs on middle school students.

#### **Research on program efficacy**

As previously noted, there is still a debate about which type of instructional program is best for students who are ELs. Slavin and Cheung (2003) provided a comprehensive overview of the research conducted in this area. They concluded that bilingual programs are more favorable than English only programs.

Rolstad et al. (2005) conducted a meta-analysis of program effectiveness and found that bilingual education programs are effective in reading and math outcomes. They conclude that "bilingual education is superior to English only approaches in increasing measures of students' academic achievement in English and in the native language" (p. 20).

Francis et al. (2006) reported on the implications of bilingual instruction and academic achievement. Their study concluded that bilingual instruction has a positive effect and further that "there is no indication that bilingual instruction impedes academic achievement in either the native language or English" (p. 379).

More recently, Valentino and Reardon (2015) conducted an analysis of four instructional programs for ELs. They found that elementary students in bilingual programs outperform their all-English instruction counterparts. In the long term, they found that students who were in a bilingual elementary program outperformed their English-only program counterparts in middle school.

# Conclusion

Bilingual and ESL instruction is of paramount importance as districts are experiencing a rise in the number of ELs. Rural schools find themselves lacking appropriately certified bilingual teachers to provide bilingual programs in their schools. Further, the literature for LIEPs in rural schools is almost nonexistent as it relates to language proficiency and academic achievement. The studies reviewed show that there are positive outcomes for ELs in bilingual programs. In summary, there is not an overwhelming endorsement of one program being more effective than another in the long term. Instead, the research is still lacking a consensus, and this dilemma is compounded for rural schools where little research has been conducted.

#### Chapter III

# Method

Bilingual education is not a federal requirement. The federal guidelines do not require states to implement a bilingual program; however, states can require it if they so desire. Texas is one of the states that does require districts to implement a bilingual education program from prekindergarten through fifth grade. According to the TEA, the purpose of a bilingual education program is for ELs to be able to listen, speak, read, and write in English and their primary language while mastering English language skills, math, science, and social studies (Commissioner's Rules, 2018). Not all districts required to implement a bilingual program have the staff and resources to sustain a bilingual education program adequately. These districts are required to implement an ESL program. The goal is for ELs to become competent in listening, speaking, reading, and writing in the English language through the integrated use of second-language acquisition methods. The purpose of this study is to examine the long-term effects of elementary bilingual and ESL programs.

#### **Research Questions**

- 1. What, if any, are the patterns of change in the levels of performance on the STAAR by program type, TELPAS level, and gender at the student level?
- 2. What, if any, is the relationship between TELPAS status at Grade 3 and the students' EL status in Grade 8?
  - a. Is the difference in this relationship the same or different based on bilingual or English as a Second Language (ESL) second language acquisition programs?

- 3. What, if any, is the relationship between TELPAS status at Grade 3 and the level of performance on the STAAR at Grade 8?
  - a. Is the difference in this relationship the same or different based on bilingual or English as a Second Language (ESL) second language acquisition programs?

# Design

This is a quantitative study that used a descriptive-comparative design to determine the relationship between participating in a bilingual or ESL education program in elementary grades and student achievement in middle school. Specifically, the study compared student performance from three rural school districts required to implement an elementary bilingual education program. STAAR reading achievement data for Grades 3–8 were collected for students designated as having limited proficiency in English and those formerly designated as LEP students. These STAAR data were compared with third-grade TELPAS scores to determine what, if any, relationship there was between the TELPAS and the program type (elementary bilingual or ESL program). The data were also analyzed to determine what if any relationship existed between the Grade 3 status as defined by the TELPAS and the EL status at Grade 8.

# Sampling

#### **District Selection**

The three school districts included in this study are in rural areas of Southeast Texas. For the purposes of this study, they are referred to as District A, District B, and District C. District A has a population of under 5,000 and is located on an interstate highway roughly 75 miles from a major urban area. There are no major industrial, manufacturing, or commercial businesses located within the school district boundaries. District B has a population of 6,000 and is located 90 miles from the Gulf of Mexico. There is one major agricultural plant located within the school district boundaries. District C has a population of just over 17,000 and is located only 23 miles from the Gulf of Mexico. There are two major industrial plants located adjacent to the school district lines.

Under the current Texas statute, Chapter 89 of the Texas Administrative Code, all three are required to implement a bilingual program as they have 20 or more ELs enrolled in at least one grade level between prekindergarten and Grade 5. These districts will be referred to as "bilingual required." If a district cannot implement a bilingual program, the TEA requires it to submit a bilingual exception application. Both districts in this study meet the bilingual required designation and are required to implement a bilingual program.

District A and District B filed bilingual exception requests with TEA since they met the threshold requiring bilingual education. District A has been unable to secure any bilingual teachers for employment, and District B has only been able to employ only two bilingual teachers. As a result, both districts are implementing ESL programs. As a requirement of being granted a bilingual exception, they must spend 10% of their bilingual allotment on professional development activities for the teachers who fall under this exception. District C has successfully acquired bilingual teachers in prekindergarten through fifth grade and is implementing a transitional bilingual early-exit (TBE) program. They have poured many resources and professional development training activities into the program to help sustain it. According to the 2018–2019 Texas Academic Performance Report (TAPR), all

three districts have a similar percentage of ELs enrolled in their schools (see Table 2).

# Table 2

2018–2019 Texas Academic Performance Report and Report Card Data

District	Student population characteristics		District ratings		
	Total	Hispanic	English	Overall	Closing
		(%)	learner		the Gaps
			(%)		
А	1,528	46.5	13.9	В	С
В	3,600	63.6	15.0	В	С
С	1,611	64.9	16.8	В	С

Note. Data from TEA, 2019

All three districts, they are similar in their enrollment trend. Compared with the 2012-2013 TAPR report, District A lost 131 students, District C had a drop of 50 students, and District B had a drop of just two students. However, all three districts show an increase in their EL enrollment (see Figure 3). This is in line with national data, which show a similar increase of ELs: "The percentage of public-school students in the United States who were English language learners (ELLs) was higher in fall 2015 (9.5 %, or 4.8 million students) than in fall 2000" (USDOE, 2018, p. 70).

# Figure 3

# Trends in District and English Learner Populations



Also of note in the TAPR report, District A did not employ any bilingual/ESL teachers in 2012-2013, nor did it have any in 2018-2019. District B coded 6.7% of its staff under "Bilingual/ESL" in 2012-2013 and 4.7% in 2018-2019. District C coded 5.7% of their staff under "Bilingual/ESL Education" in 2012-2013 and 13.1% in 2018-2019.

#### **Participant Selection: Campuses**

This study was conducted using a convenience sample of the STAAR results of LEP and former LEP students whose scores had been coded for monitoring. LEP students are coded for monitoring when they meet exit criteria. Students who leave the program are monitored for 4 years. This study compared the results of Hispanic students with LEP status whose STAAR reading test results were monitored on campuses A, B, and C. Permission was obtained from district leadership for access to STAAR results and collected demographic data stored in OnDataSuite (see Figure 4). The purpose of the comparison was to determine what effect participating in a bilingual or ESL program had on student achievement on STAAR.

The number of students included in the study was narrowed down using the following PEIMS demographic indicators, and all students selected met the following criteria:

- **grade level:** enrolled in the same school district in third grade in 2014 through eighth grade in 2019
- LEP: coded as LEP from third through eighth grade and enrolled in a bilingual or ESL program
- **monitor:** Students previously classified as LEP to the status of being monitored by the LPAC after meeting criteria for exiting bilingual or ESL education.

- ethnicity: Hispanic
- home language: Spanish
- socioeconomic status: eligible for a lunch that is free or offered at reduced cost

as defined by TEA.

Of a possible 88 students, 63 met the criteria and were selected for this study.

# Figure 4





*Note:* LEP = Limited English Proficient; STAAR = State of Texas Assessment of Academic Readiness. Monitored students are students who no longer meet the requirements for LEP classification, have exited LEP status, and are eligible for discharge from bilingual/ESL education.

# Procedures

# Phase I

After the Institutional Review Board approval was secured from the University of Houston, permission was obtained from each district superintendent to use third- through eighth-grade EL demographic data and STAAR results for the identified campuses for this study.

# Phase II

The data were collected after Institutional Review Board approval and consent from the districts was obtained. Given the data was released by the TEA and made available to the public, STAAR assessment data from 2014 through 2019 were available for analysis, including data from "current" LEP students and students who exited the program. These students were listed as monitored students. The data were deidentified and then exported to an Excel spreadsheet.

# Phase III

The student data were sorted by the number of students who scored in the four categories specified by TEA: "Did Not Meet Grade Level," "Approaches Grade Level," "Meets Grade Level," and "Masters Grade Level" on the STARR. The movement of each student on the STARR from 2014 to 2019 was mapped. After analysis of the data, the level of change of students participating in an ESL or bilingual education program in the elementary grades was mapped as were effects on student achievement in middle school. **Measures** 

The 2014-2019 STAAR results were used to measure the outcome variable, STARR. The results, as presented by TEA, have four categories (named in paragraph above) to help show schools the progress each student was making toward success on the TEKS.

The TELPAS ratings were also used to determine relationships between its ratings and those of the STAAR. The TELPAS has four levels of performance: Beginning—little or no ability to understand spoken English; Intermediate—ability to understand simple expressions frequently used in spoken English; Advanced—ability to understand, with support, grade-appropriate spoken English; Advanced High—ability to understand, with minimal support, grade-appropriate spoken English.

# Analysis

The first research question was answered using a visual analysis of the patterns of data. The remaining two research questions were answered by analyzing relationships student's scores on the STAAR reading assessment using cross-tabulation with chi-square analysis with the SPSS software. Data from students from Campus A and B who participated in an ESL elementary program were compared with data from students who participated in a bilingual elementary program (Campus C) to determine the relationship between the TELPAS, EL status, and STAAR outcomes.
### **Chapter IV**

## Results

This study, a quantitative study using descriptive-comparative design, sought to determine the relationship between bilingual or ESL education programs in elementary grades and student achievement in middle school. Specifically, this study compared the academic performance of students on campuses within three school districts, whose populations required bilingual education, using STAAR reading achievement data for Grades 3 through 8.

Longitudinal STAAR scores were collected for 2018–2019 eighth-grade LEP and

former LEP students on all three campuses to answer the research question regarding

change. The STAAR scores were collected for these students beginning in third grade.

# STAAR Levels

In order to fully understand the analysis of the data below, it is important to review the levels of performance (see Figure 5).

# Figure 5

### STAAR Levels

Masters Grade Level
Shows mastery of the course content
Student is on track for college and career readiness.
Meets Grade Level
Shows strong knowledge of course content
<ul> <li>Student is prepared to progress to the next grade.</li> </ul>
Approaches Grade Level
• Shows some knowledge of course content but may be missing critical elements
<ul> <li>Student may need additional support in the coming year.</li> </ul>
Did Not Meet Grade Level
<ul> <li>Shows a lack of basic understanding of course content</li> </ul>
<ul> <li>Student needs significant support in the coming year.</li> </ul>

According to TEA (2017) *Masters Grade Level* indicates that students are expected to succeed without interventions. *Meets Grade Level* indicates a high likelihood of success in the next grade, but students may still need short-term targeted instruction. *Approaches Grade Level* indicates that students are expected to succeed in the next grade level with targeted academic interventions. Finally, *Did Not Meet Grade Level* indicates that students are unlikely to succeed in the next grade without significant, ongoing academic intervention. Thus, for the students to be considered critical thinkers and apply grade level knowledge and skills in familiar contexts the students need to be functioning at the *Meets Grade Level*. The tables that follow will refer to these levels as follows:

- DM = Did Not Meet Grade Level
- AP = Approaches Grade Level
- ME = Meets Grade Level
- MA = Masters Grade Level

# **EL Status**

An EL is a student who is still in the process of learning English and uses at home a language other than English. These students are also referred to as LEP students because they have limited English proficiency. Students are discharged from the program when they meet reclassification criteria set by TEA. Once they have exited, they are monitored for 4 years. (Commissioner's Rules, 2018):

- LEP—Limited English Proficient
- M1—First year of Monitoring
- M2—Second year of Monitoring

- M3—Third year of Monitoring
- M4—Fourth year of Monitoring

All of these classifications are captured in the A-F Texas accountability system.

# TELPAS

TELPAS measured the domains of listening, speaking, reading, and writing. They

are measured using the proficiency levels of beginning, intermediate, advanced, and

advanced high (Figure 6).

## Figure 6

# TELPAS Proficiency Levels



Note. (TEA, n.d.)

## **Performance by Campuses**

Research Question 1: What, if any, are the patterns of change in the levels of performance on the STAAR by program type, TELPAS level, and gender at the student level?

The data show longitudinal STAAR data for 2018–2019 eighth graders on each campus. The STAAR data were collected for these eighth graders from when they were enrolled in third grade in 2014 through the eighth grade in 2019. Note that none of the

results report data for the Masters Grade Level as no students met that level of performance for any campus.

### Campus A

Nine students (four females and five males) were enrolled at Campus A, an ESL instructional campus (Tables 3–5). These students were all Hispanic Spanish speakers who were identified as being of low socioeconomic status. Table 3 provides the overall results of Campus A by level of performance on the STAAR at each grade level.

### Table 3

Campus A: STAAR Reading Results

Level		Grade										
		3 4 5 6 7										8
	п	%	п	%	п	%	п	%	n	%	п	%
DM	7	78	8	89	4	44	5	56	3	33	0	0
AP	1	11	1	11	5	56	4	44	2	22	6	67
ME	1	11	0	0	0	0	0	0	4	44	3	33

*Note. N*=9. STAAR = State of Texas Assessments of Academic Readiness; DM = Did

Not Meet Grade Level; AP = Approaches Grade Level; ME = Meets Grade Level.

The data show that 78% of students (7/9) were at the Did Not Meet Grade Level as third graders and that no students were at Did Not Meet Grade Level by the time they were finishing eighth grade. This is good data to report to a school board, but, still, 67% of the students (6/9) at eighth grade who passed were still not performing at grade level. The percentages communicate neither details—which students were at what level—nor a complete picture. When the data are compiled as they are in Table 3, movement can be seen, but what is not evident is how that movement impacts individual students on each campus. It also does not display which students are perennially performing on a single level. Obtaining the full picture of a student's academic change requires examining

Campus A: Longitudinal STAAR Scores at Student Level (n=9)

			STAAR stat	tus by grade		
Student	3	4	5	6	7	8
A7	ME	AP	AP	AP	ME	ME
A8	AP	DM	AP	DM	ME	AP
A1	DM	DM	AP	AP	AP	AP
A2	DM	DM	DM	AP	AP	AP
A3	DM	DM	DM	DM	DM	AP
A4	DM	DM	AP	AP	ME	ME
A5	DM	DM	DM	DM	DM	AP
A6	DM	DM	DM	DM	DM	AP
A9	DM	DM	AP	DM	ME	ME

Note. n = 9. DM=Did Not Meet Grade Level, AP=Approaches Grade Level, ME=Meets

# Grade Level

Table 4 data show that the majority of students (7/9) Did Not Meet Grade Level in Grade 3, a number that increased to eight students in Grade 4. By the end of Grade 8, no students received a Did Not Meet Grade Level classification on the STAAR. At a glance this shows students were doing well overall within the 6-year period. However, it is important to notice that one student (A8) went from Did Not Meet Grade Level to Approaches Grade Level and backtracked to Did Not Meet Grade Level before moving up again to Approaches Grade Level. It is also worth noting that three students (A3, A5, and A6) spent five years at the Did Not Meet Grade Level before moving to Approaches Grade Level at the end of eighth. Finally, it is important to discuss with administrators that Approaches Grade Level indicates that these six students were still not performing at grade level, according to the TEA.

Student	Grade 8		S	FAAR stat	tus by grad	le	
	EL status	3	4	5	6	7	8
A8	LEP	AP	DM	AP	DM	ME	AP
A3	LEP	DM	DM	DM	DM	DM	AP
A5	LEP	DM	DM	DM	DM	DM	AP
A6	LEP	DM	DM	DM	DM	DM	AP
A2	M2	DM	DM	DM	AP	AP	AP
A7	M3	ME	AP	AP	AP	ME	ME
A1	M3	DM	DM	AP	AP	AP	AP
A4	M3	DM	DM	AP	AP	ME	ME
A9	M3	DM	DM	AP	DM	ME	ME
Note: $n = 9$ . S	TAAR = State c	of Texas A	Assessment	t of Acade	mic Readi	ness; EL =	= English

Campus A: Longitudinal STAAR Scores by EL Status in Grade 8

learner; G8, Grade 8; LEP = Limited English Proficient; AP = Approaches Grade Level;
DM = Did Not Meet Grade Level; ME = Meets Grade Level; M2 = Year 2 of monitoring;
M3 = Year 3 of monitoring.

Campus A had four students identified as LEP and five in monitoring (Year 2, one; Year 3, four) (See Table 5). Three of the four students with LEP status in Grade 8 had been classified in Grade 3 as Did Not Meet Grade Level and one was Approaches Grade Level. By the end of the eighth grade all of them were classified as Approaches Grade Level. The student classified as M2 had moved from Did Not Meet Grade Level in third grade to Approaches Grade Level in eighth grade. Among the M3 students, three were classified as Did Not Meet Grade Level and one as Meets Grade Level in third grade. By the end of the eighth grade, three students were classified as Meets Grade Level in third between status data, five students moved up one level, two students moved up two levels,

while two maintained their level of performance on the STAAR. It is worth restating that while students did make progress only three students met grade-level expectations.

# Table 6

Studen	t Gender			Gra	de		
		3	4	5	6	7	8
A1	Female	DM	DM	AP	AP	AP	AP
A2	Female	DM	DM	DM	AP	AP	AP
A3	Female	DM	DM	DM	DM	DM	AP
A4	Female	DM	DM	AP	AP	ME	ME
A7	Male	ME	AP	AP	AP	ME	ME
A8	Male	AP	DM	AP	DM	ME	AP
A5	Male	DM	DM	DM	DM	DM	AP
A6	Male	DM	DM	DM	DM	DM	AP
A9	Male	DM	DM	AP	DM	ME	ME
3.7		<b>C</b>			1	11	

Campus A: Longitudinal STAAR Scores by Gender

*Note.* n = 9. STAAR= State of Texas Assessments of Academic Readiness; DM = Did

Not Meet Grade Level; AP=Approaches Grade Level; ME = Meets Grade Level.

There were four female students and five male students on Campus A (Table 6). All female students scored Did Not Meet Grade Level in third grade. Three of the four moved up one level to Approaches Grade Level by eighth grade, and one moved up two levels to Meets Grade Level. One of the five male students scored Meets Grade Level and one scored Approaches Grade Level in third grade. Both students maintained their scores in eighth grade. The remaining three male students scored Did Not Meet Grade Level in third grade. By eighth grade, two of them had moved up one level to Approaches Grade Level, and one moved up two levels to Meets Grade Level. A review of the data show that there is no difference in achievement by gender for Campus A.

Overall, the data, as displayed in pie charts (Figure 7) show that seven of the nine students scored at Did Not Meet Grade Level in third grade, but no students scored at Did Not Meet Grade Level by eighth grade. While students made progress overall, 67% of the students did not meet grade-level expectations.

# Figure 7

Campus A: Differences in STAAR Scores Between Grades 3 and 8



Note. By eighth grade, no child had scored Did Not Meet Grade Level. DM = Did Not Meet Grade Level; AP = Approaches Grade Level; ME =Meets Grade Level.

# Campus B

Campus B had 19 students in an ESL instructional setting. These students were all Hispanic Spanish speakers whose families qualified as low socioeconomic status. There were 19 students (female, 7; male, 12). Three of these eighth-grade students were being monitored after no longer being classified as having limited English proficiency, but 16 of them were still classified in that way (Table 7). Note that there is not a row for the Masters Grade Level as no students met that level.

						Gr	ade					
Level		3		4	:	5		6		7	8	8
	п	%	n	%	n	%	n	%	n	%	n	%
DM	9	47	10	53	10	53	11	58	11	58	5	26
AP	6	3	9	47	7	37	8	42	6	32	12	63
ME	4	21	0	0	2	11	0	0	2	11	2	11

Campus B: STAAR Reading Results

*Note.* n = 19. STAAR = State of Texas Assessment of Academic Readiness; DM = Did

Not Meet Grade Level; AP = Approaches Grade Level; ME = Meets Grade Level.

Student	STAAR status by grade           3         4         5         6         7         8									
	3	4	5	6	7	8				
B6	ME	DM	DM	DM	DM	DM				
B11	ME	AP	AP	DM	DM	AP				
B18	ME	AP	AP	AP	DM	AP				
B19	ME	AP	AP	AP	DM	DM				
B2	AP	DM	DM	DM	AP	AP				
B4	AP	DM	AP	AP	DM	AP				
B7	AP	AP	AP	AP	AP	AP				
B8	AP	DM	AP	DM	AP	AP				
B16	AP	AP	AP	AP	ME	ME				
B17	AP	AP	ME	AP	ME	ME				
B1	DM	AP	ME	AP	AP	AP				
B3	DM	DM	DM	DM	AP	AP				
B5	DM	DM	DM	DM	DM	DM				
B9	DM	AP	DM	DM	AP	AP				
B10	DM	DM	DM	AP	DM	AP				
B12	DM	AP	DM	DM	DM	AP				
B13	DM	DM	DM	DM	DM	AP				
B14	DM	DM	DM	DM	DM	DM				
B15	DM	DM	DM	DM	DM	DM				
Note. $n = 19.$ S	$TAAR = \overline{Sta}$	te of Texas	Assessment	of Academi	c Readiness;	$\mathbf{DM} = \mathbf{Did}$				

Campus B: Longitudinal STAAR Scores at Student Level

Not Meet Grade Level; AP = Approaches Grade Level; ME = Meets Grade Level

The data for Campus B show that 47% of the students (9/19) scored at the Did Not Meet Grade Level in third grade (Table 8). The data also show that by eighth grade that number had dropped to 26% (5/19), with the majority of the students (74%, or 14/19) at the Approaches Grade Level and Meets Grade Level. There are also three students (B5, B15, and B16) who have never passed a STAAR Reading assessment. There is one student (B6) who scored at the Meets Grade Level in third grade and then never passed another assessment. One student (B14) scored Did Not Meet Grade Level for five years before scoring Approaches Grade Level in the eighth grade. Four students (B2, B4, B9, and B12) started off at Approaches Grade Level, regressed to Did Not Meet Grade Level, and then went back up to passing. One student (B19) scored Meets Grade Level in third grade, Approaches Grade Level in fourth through sixth, and then scored Did Not Meet Grade Level in seventh and eighth grade. As with Campus A, it is important to note that while there was improvement, 12 students in eighth grade were still at the Approaches Grade Level, which is not the same as meeting grade-level expectations.

# Table 9

Student	Grade 8	STAAR status by grade								
	EL	3	4	5	6	7	8			
	status									
B6	LEP	ME	DM	DM	DM	DM	DM			
B11	LEP	ME	AP	AP	DM	DM	AP			
B2	LEP	AP	DM	DM	DM	AP	AP			
B4	LEP	AP	DM	AP	AP	DM	AP			
B7	LEP	AP	AP	AP	AP	AP	AP			
B8	LEP	AP	DM	AP	DM	AP	AP			
B16	LEP	AP	AP	AP	AP	ME	ME			
B1	LEP	DM	AP	ME	AP	AP	AP			
B3	LEP	DM	DM	DM	DM	AP	AP			
B5	LEP	DM	DM	DM	DM	DM	DM			
B9	LEP	DM	AP	DM	DM	AP	AP			
B10	LEP	DM	DM	DM	AP	DM	AP			
B12	LEP	DM	AP	DM	DM	DM	AP			
B13	LEP	DM	DM	DM	DM	DM	AP			
B14	LEP	DM	DM	DM	DM	DM	DM			
B15	LEP	DM	DM	DM	DM	DM	DM			
B17	M1	AP	AP	ME	AP	ME	ME			
B18	M3	ME	AP	AP	AP	DM	AP			
B19	M3	ME	AP	AP	AP	DM	DM			

Campus B: Longitudinal STAAR Scores by EL Status in Grade 8

*Note.* n=19 STAAR = State of Texas Assessment of Academic Readiness; **DM** = Did Not

Meet Grade Level; AP = Approaches Grade Level; ME = Meets Grade Level

Campus B had 16 students identified as LEP, one as M1, and two as M3 (Table 9). In terms of percentages within categories, 42% (8/19) of LEP students were at the Did Not Meet Grade Level performance in third grade, and only 16% of students (3/19) were at that same level at the end of eighth grade. One LEP student scored Meets Grade Level in third grade and from fourth to eighth grade was at the Did Not Meet Grade Level of performance. Only one of the LEP students who was Approaches Grade Level in Grade 3 moved to Meets Grade Level by Grade 8. The M1 student also moved from Approaches Grade Level in Grade 2 only; however, in Grade 7 and Grade 8 one was Did Not Meet Grade Level, respectively. Thus, both M3 students declined on the STAAR performance over time.

Student	Gender			Gra	ade		
		3	4	5	6	7	8
B6	Female	ME	DM	DM	DM	DM	DM
B2	Female	AP	DM	DM	DM	AP	AP
B4	Female	AP	DM	AP	AP	DM	AP
B17	Female	AP	AP	ME	AP	ME	ME
B1	Female	DM	AP	ME	AP	AP	AP
B3	Female	DM	DM	DM	DM	AP	AP
B5	Female	DM	DM	DM	DM	DM	DM
B11	Male	ME	AP	AP	DM	DM	AP
B18	Male	ME	AP	AP	AP	DM	AP
B19	Male	ME	AP	AP	AP	DM	DM
B7	Male	AP	AP	AP	AP	AP	AP
<b>B</b> 8	Male	AP	DM	AP	DM	AP	AP
B16	Male	AP	AP	AP	AP	ME	ME
B9	Male	DM	AP	DM	DM	AP	AP
B10	Male	DM	DM	DM	AP	DM	AP
B12	Male	DM	AP	DM	DM	DM	AP
B13	Male	DM	DM	DM	DM	DM	AP
B14	Male	DM	DM	DM	DM	DM	DM
B15	Male	DM	DM	DM	DM	DM	DM

Campus B: Longitudinal STAAR Scores by Gender

*Note.* n=19. STAAR = State of Texas Assessment of Academic Readiness; DM = Did

Not Meet Grade Level; AP = Approaches Grade Level; ME = Meets Grade Level

Campus B had seven female students and 12 male students (Table 10). One female who scored Meets Grade Level in third grade regressed, moving down two levels to Did Not Meet Grade Level in fourth through eighth grade. Three females scored Approaches Grade Level in third grade, with two of them maintaining that level in eighth grade and one rising to Meets Grade Level. Three females scored Did Not Meet Grade Level in third grade, but two of them moved up one level to Approaches Grade Level and one maintained Did Not Meet Grade Level. Of the 12 male students, three of them scored Meets Grade Level in third grade, but by eighth grade two of them moved down one level to Approaches Grade Level and one moved down two levels to Did Not Meet Grade Level. Three male students scored Approaches Grade Level in third grade, with two of them maintaining that score and one moving up one level to Meets Grade Level by eighth grade. Six male students scored Did Not Meet Grade Level in third grade, but by eighth grade, four moved up to Approaches Grade Level and two never progressed beyond Did Not Meet Grade Level. Reviewing the data for differences between males and females reveals one female and two males who did not score above Did Not Meet Grade Level from third through eighth grade. There was no difference in STAAR achievement between genders.

Overall, the data, as displayed in pie charts (Figure 8), indicate that nine students (47%) scored Did Not Meet Grade Level in Grade 3 and that the number dropped to five students (26%) by eighth grade. There were three students who remained at Did Not Meet Grade Level from third through eighth grade. Thus, while there were improvements from Grade 3 to Grade 8 as evidenced by the reduction in the proportion allotted those who Did Not Meet Grade Level, what is important is that the overall percentage of students who were not meeting grade-level expectations increased, growing from 79% in Grade 3 to 89% in Grade 8.

# Figure 8



Campus B: Differences in STAAR Scores Between Grades 3 and 8

*Note.* STAAR, State of Texas Assessment of Academic Readiness; DM = Did Not MeetGrade Level; AP = Approaches Grade Level; ME = Meets Grade Level.

# Campus C

Campus C had 35 students in a bilingual instructional setting (females, 13; males, 22) (See Table 11). These students are all Hispanic Spanish speakers and receive free or low-cost school meals because of low socioeconomic status. Fifteen of these eighth-grade students were being monitored after no longer being classified as having limited English proficiency, and 20 of them were still current LEP students.

Level		Grade										
		3 4 5 6 7 8									8	
	n	%	n	%	n	%	п	%	n	%	п	%
DM	19	54	20	57	17	49	19	54	21	60	10	29
AP	6	17	10	29	10	29	10	29	7	20	19	54
ME	10	29	5	14	8	23	6	17	7	20	6	17

Campus C: STAAR Reading Results

*Note.* n = 35. STAAR = State of Texas Assessment of Academic Readiness; DM = Did

Not Meet Grade Level; AP = Approaches Grade Level; ME = Meets Grade Level.

Student			STAAR sta	tus by grade		
	3	4	5	6	7	8
С9	ME	DM	DM	DM	DM	DM
C10	ME	DM	DM	DM	DM	DM
C14	ME	AP	AP	AP	ME	AP
C22	ME	AP	AP	AP	AP	AP
C31	ME	ME	ME	AP	DM	ME
C35	ME	ME	ME	ME	ME	ME
C33	ME	ME	ME	AP	ME	ME
C27	ME	AP	ME	ME	AP	AP
C26	ME	ME	AP	DM	AP	AP
C25	ME	AP	ME	ME	ME	AP
C2	AP	DM	AP	DM	AP	AP
C1	AP	DM	AP	AP	AP	AP
C5	AP	DM	DM	DM	DM	AP
C34	AP	ME	ME	ME	ME	ME
C32	AP	AP	ME	AP	ME	ME
C29	AP	AP	AP	DM	DM	AP
C7	DM	DM	DM	DM	DM	DM
C8	DM	DM	DM	DM	DM	DM
C16	DM	DM	DM	DM	DM	DM
C17	DM	DM	DM	DM	DM	DM
C18	DM	DM	DM	DM	DM	DM
C19	DM	DM	DM	DM	DM	DM
C20	DM	DM	DM	DM	DM	DM
C15	DM	AP	DM	DM	DM	DM
C3	DM	DM	AP	ME	AP	AP
C6	DM	DM	DM	DM	DM	AP
C12	DM	DM	DM	DM	DM	AP
C13	DM	DM	DM	DM	DM	AP
C11	DM	DM	AP	DM	DM	AP
C4	DM	DM	DM	AP	DM	AP
C21	DM	DM	ME	ME	ME	ME
C23	DM	AP	DM	AP	AP	AP
C30	DM	DM	DM	DM	DM	AP
C24	DM	AP	AP	AP	DM	AP
C28	DM	AP	AP	AP	DM	AP

Campus C: Longitudinal STAAR Scores at Student Level

*Note.* n=35. STAAR = State of Texas Assessment of Academic Readiness; DM = Did Not Meet Grade Level; AP = Approaches Grade Level; ME = Meets Grade Level

A majority of the students (54%, or 19/35) were at the Did Not Meet Grade Level in third grade, but by eighth grade that number dropped to 10 students (31%) (Table 12). The data also show that two students, C9 and C10, scored at the Meets Grade Level in third grade and never passed another assessment. Seven students (C7, C8, C16, C17, C19, C20) have never passed a STAAR Reading test. Four students (C6, C12, C13, and C30) spent five years at Did Not Meet Grade Level before finally reaching Approaches Grade Level in eighth grade. Three students (C1, C2, and C23) passed at the Approaches level and regressed to Did Not Meet before reaching Approaches again. These are valuable data for the middle school staff to see that they have students entering into sixth grade never having passed a STAAR Reading assessment. This is an opportunity for them to step in to provide support to the students.

Student	EL Status		ST	AAR stat	tus by grad	de	
	in G8	3	4	5	6	7	8
С9	LEP	ME	DM	DM	DM	DM	DM
C10	LEP	ME	DM	DM	DM	DM	DM
C14	LEP	ME	AP	AP	AP	ME	AP
C2	LEP	AP	DM	AP	DM	AP	AP
C1	LEP	AP	DM	AP	AP	AP	AP
C5	LEP	AP	DM	DM	DM	DM	AP
C7	LEP	DM	DM	DM	DM	DM	DM
C8	LEP	DM	DM	DM	DM	DM	DM
C16	LEP	DM	DM	DM	DM	DM	DM
C17	LEP	DM	DM	DM	DM	DM	DM
C18	LEP	DM	DM	DM	DM	DM	DM
C19	LEP	DM	DM	DM	DM	DM	DM
C20	LEP	DM	DM	DM	DM	DM	DM
C15	LEP	DM	AP	DM	DM	DM	DM
C3	LEP	DM	DM	AP	ME	AP	AP
C6	LEP	DM	DM	DM	DM	DM	AP
C12	LEP	DM	DM	DM	DM	DM	AP
C13	LEP	DM	DM	DM	DM	DM	AP
C11	LEP	DM	DM	AP	DM	DM	AP
C4	LEP	DM	DM	DM	AP	DM	AP
C21	M2	DM	DM	ME	ME	ME	ME
C22	M3	ME	AP	AP	AP	AP	AP
C23	M3	DM	AP	DM	AP	AP	AP
C31	M4	ME	ME	ME	AP	DM	ME
C35	M4	ME	ME	ME	ME	ME	ME
C33	M4	ME	ME	ME	AP	ME	ME
C27	M4	ME	AP	ME	ME	AP	AP
C26	M4	ME	ME	AP	DM	AP	AP
C25	M4	ME	AP	ME	ME	ME	AP
C34	M4	AP	ME	ME	ME	ME	ME
C32	M4	AP	AP	ME	AP	ME	ME
C29	M4	AP	AP	AP	DM	DM	AP
C30	M4	DM	DM	DM	DM	DM	AP
C24	M4	DM	AP	AP	AP	DM	AP
C28	M4	DM	AP	AP	AP	DM	AP

Campus C: Longitudinal STAAR Scores by EL Status in Grade 8

*Note.* n = 35. STAAR = State of Texas Assessment of Academic Readiness; EL, English learner; LEP = Limited English Proficient; **DM** = Did Not Meet Grade Level; **ME** = Meets Grade Level; **AP** = Approaches Grade Level; M2 = Year 2 of monitoring; M3 = Year 3 of monitoring; M4 = Year 4 of monitoring.

Campus C had 20 students identified as LEP and 15 as students undergoing monitoring (M2, 1; M3, 2; M4, 12) (See Table 13). Fourteen LEP students scored at Did Not Meet Grade Level in third grade, and by eighth grade, six of them had moved up to Approaches Grade Level. Three LEP students were at Approaches Grade Level in third grade, and regressed but regained that level by eighth grade. There were three LEP students at the Meets Grade Level in third grade. While one of them moved down one level to Approaches Grade Level, two of them received Did Not Meet Grade Level in fourth grade and remained there through eighth grade. There was only one M2 student, and this student started at Did Not Meet Grade Level in third grade and moved up two levels to Meets Grade Level by eighth grade. Of the two M3 students in third grade, one was at Meets Grade Level and the other was at Did Not Meet Grade Level. Both students progressed to Approaches Grade Level in eighth grade. Twelve students were in their fourth year of monitoring. In third grade, six of them scored Meets Grade Level: three of them maintained that same score in eighth grade, and three of them dropped to Approaches Grade Level. Three M4 students scored at Approaches Grade Level in third grade, and two of them moved up to Meets Grade Level while one maintained Approaches Grade Level. The remaining three M4 students scored at Did Not Meet Grade Level in third grade but progressed to Approaches Grade Level by eighth grade.

Student	Gender	GRADE					
		3	4	5	6	7	8
С9	Female	ME	DM	DM	DM	DM	DM
C10	Female	ME	DM	DM	DM	DM	DM
C25	Female	ME	AP	ME	ME	ME	AP
C2	Female	AP	DM	AP	DM	AP	AP
C1	Female	AP	DM	AP	AP	AP	AP
C5	Female	AP	DM	DM	DM	DM	AP
C7	Female	DM	DM	DM	DM	DM	DM
C8	Female	DM	DM	DM	DM	DM	DM
C3	Female	DM	DM	AP	ME	AP	AP
C6	Female	DM	DM	DM	DM	DM	AP
C4	Female	DM	DM	DM	AP	DM	AP
C21	Female	DM	DM	ME	ME	ME	ME
C24	Female	DM	AP	AP	AP	DM	AP
C14	Male	ME	AP	AP	AP	ME	AP
C22	Male	ME	AP	AP	AP	AP	AP
C31	Male	ME	ME	ME	AP	DM	ME
C35	Male	ME	ME	ME	ME	ME	ME
C33	Male	ME	ME	ME	AP	ME	ME
C27	Male	ME	AP	ME	ME	AP	AP
C26	Male	ME	ME	AP	DM	AP	AP
C34	Male	AP	ME	ME	ME	ME	ME
C32	Male	AP	AP	ME	AP	ME	ME
C29	Male	AP	AP	AP	DM	DM	AP
C16	Male	DM	DM	DM	DM	DM	DM
C17	Male	DM	DM	DM	DM	DM	DM
C18	Male	DM	DM	DM	DM	DM	DM
C19	Male	DM	DM	DM	DM	DM	DM
C20	Male	DM	DM	DM	DM	DM	DM
C15	Male	DM	AP	DM	DM	DM	DM
C12	Male	DM	DM	DM	DM	DM	AP
C13	Male	DM	DM	DM	DM	DM	AP
C11	Male	DM	DM	AP	DM	DM	AP
C23	Male	DM	AP	DM	AP	AP	AP
C30	Male	DM	DM	DM	DM	DM	AP
C28	Male	DM	AP	AP	AP	DM	AP

Campus C: Longitudinal STAAR Scores by Gender

*Note.* n=35. STAAR = State of Texas Assessment of Academic Readiness; DM = Did Not Meet Grade Level; AP = Approaches Grade Level; ME = Meets Grade Level

Thirteen female and 22 male students studied on Campus C (Table 14). Three of the female students scored Meets Grade Level in third grade. One of them went down one level to Approaches Grade Level in eighth grade, and two of them moved down to Did Not Meet Grade Level in fourth grade and stayed at Did Not Meet Grade Level through eighth grade. Three female students scored at Approaches Grade Level in third grade and maintained that score by eighth grade. Seven female students scored at Did Not Meet Grade Level in third grade. One moved up two levels to Meets Grade Level, four moved up one level to Approaches Grade Level, and two did not progress from that level. In eighth grade, fewer female students scored at Did Not Meet Grade Level (31%, or 4/13) than scored at that level in third grade (54%, or 7/13).

Of 22 males on Campus C, seven of them scored at Meets Grade Level in third grade, with three regressing then regaining that score and four moving down one level to Approaches Grade Level by eighth grade. Three male students scored at Approaches Grade Level in third grade, with one maintaining that score and two moving up to Meets Grade Level. Twelve male students scored at Did Not Meet Grade Level in third grade, with six of them moving up one level to Approaches Grade Level and six remaining at Did Not Meet Grade Level in eighth grade. Five male students remained at Did Not Meet Grade Level from third through eighth grade. Overall, more males (50%, or 6/12) scored at the Did Not Meet Grade Level in third and eighth grade than did females (29%, or 2/7). The overall data as displayed in Campus C pie charts (Figure 9) indicate that 19 students (54%, or 19/35) were at the Did Not Meet Grade Level in third grade and 10 (29%, or 10/35) were at that level in eighth grade. Seven of these had remained at Did Not Meet Grade Level throughout six grades without variation. In third grade, there were 10 students at Meets Grade Level: at eighth grade, three of them retained Meets Grade Level, five moved down to Approaches Grade Level, and two dropped to Did Not Meet Grade Level in fourth grade where they remained through eighth grade. Six students stared at Approaches Grade Level in third grade, with four of them maintaining Approaches Grade Level and two moving up to Meets Grade Level at eighth. Figure 9 shows the two grade levels broken down into percentages for Campus C. Thus, while there were improvements from Grade 3 to grade 8, as evidenced by the shrinking of the Did Not Meet Grade Level (DM) segment, the overall percentage of students who are not meeting grade level expectations increased (from 71% to 83%, respectively).

### Figure 9





*Note*. STARR = State of Texas Assessment of Academic Readiness; DM = Did Not Meet Grade Level; AP = Approaches Grade Level; ME = Meets Grade Level.

### **Between Program Comparison**

Given the low sample sizes inherent in a rural school setting, data were collapsed to assist with the comparison of the programs. Campuses A and B, where ESL was the educational approach, were combined into one unit and compared with Campus C, where bilingual education was the educational approach. A cross tabulation was utilized to provide a basic overview of how the two variables inter-related. Thus, it is first step in determining if the data are reported as expected at a general level. The goal was to answer Research Question 2: What, if any, is the relationship between TELPAS status at Grade 3 and the students' EL status in Grade 8? Is the difference in this relationship the same or different based on bilingual or ESL second-language acquisition programs?

### Campuses A and B

Answering the research question required using the chi-square test, a nonparametric statistic, for testing the significance of the cross tabulation, which is categorial count data. The purpose is to ascertain whether or not the two variables are independent. Thus, a cross tabulation with a chi-square was used to analyze the data for Campuses A and B on the relationship between TELPAS status at Grade 3 and EL status in Grade 8. The TELPAS data have four levels, but the basic level, Beginning, was not present.

Grade 3	Grade 8 EL status			
TELPAS	Limited English Proficient	Monitored	Total	
Intermediate	6	0	6	
Advanced	10	4	14	
Advanced High	3	4	7	
Total	19	8	27	

Campuses A and B: TELPAS G3 Score and Grade 8 EL Status

*Note.* TELPAS = Texas English Language Proficiency Assessment System; EL, English learner.

Students who were classified as Intermediate on the TELPAS in Grade 3 remained at the LEP status through Grade 8 (Table 15). Students classified as Advanced were split, with 10 students remaining at LEP status while four were transitioned to monitoring. The students at Advanced High were also split, with three remaining at LEP and four transitioning to monitoring.

Table 16 reports findings regarding the relation of students' TELPAS Grade 3 score to Grade 8 English learner status to determine if it is statistically significant. Because of the small sample (83% of cells had counts less than five) and the asymptotic value was at risk of being invalid, a Fisher's exact test was performed.

Test statistic	df	Value	р
Chi-square	2	5.0752	.0791
Pearson's chi-square test	2	5.0752	.0791 <sup>a</sup> .0972 <sup>b</sup> ≤ .0799 <sup>c</sup>
Likelihood ratio chi-square test	2	6.5032	.0387
Mantel-Haenszel chi-square test	1	4.8872	.0271
Phi coefficient		0.4336	
Contingency coefficient		0.3978	
Cramér's V		0.4336	

Campuses A and B: Relation of Grade 3 TELPAS Score to Grade 8 EL Status

*Note*. Eighty-three percent of the cells had expected counts < 5. Asymptotic chi-square may not be a valid test. TELPAS, Texas English Language Proficiency Assessment System; EL, English learner.

<sup>a</sup> Asymptotic probability. <sup>b</sup> Exact test. <sup>c</sup> Fisher's exact test (table probability, 0.0158).

Thus, there is not enough evidence to infer that there is a statistically significant

relationship between the TELPAS level in third grade and EL status in eighth grade ( $\chi^2 =$ 

5.0752; df = 2; Fisher's exact test,  $p \le .079$ ).

# Campus C

Table 17 reports the cross tabulation of scores on TELPAS G3 for Campus C students in relation to their EL status.

Grade 3	EL status at Grade 8				
TELPAS	Limited English Proficient	Monitoring	Total		
Beginner	2	0	2		
Intermediate	11	1	12		
Advanced	6	10	16		
Advanced High	1	4	5		
Total	20	15	35		

Campus C: Grade 3 TELPAS Score and Grade 8 EL Status Cross Tabulation

Note: n = 35. TELPAS = Texas English Language Proficiency Assessment System; EL, English learner.

Two students who were ranked in the Beginning classification on TELPAS in Grade 3 remained at LEP status through Grade 8. All but one of the students classified as Intermediate in Grade 3 remained at LEP status. Of the 16 ranked Advanced in Grade 3, six remained in LEP status but 10 moved to monitoring status. Of the five students ranked at Advanced High in Grade 3, one remained classified as LEP and four had transitioned to monitoring status by Grade 8.

In Table 18 are findings from Campus C regarding the relation of students' TELPAS Grade 3 score to Grade 8 English learner status to determine if it is statistically significant. Given the small sample (50% of cells had counts less than five) and the asymptotic value was at risk of being invalid, a Fisher's exact test was performed ( $\chi^2$  = 12.6778; *df* = 3; Fisher's exact test, *p* ≤ .0024).

Test statistic	df	Value	р
Chi-square test	3	12.6778	.0054
Pearson's chi-square test	3	12.6778	.0054 ° .0029 <sup>b</sup> ≤ .0024 <sup>c</sup>
Likelihood ratio chi-square test	3	14.7455	.0020
Mantel-Haenszel chi-square test	1	10.9576	.0009
Phi coefficient		0.6018	
Contingency coefficient		0.5157	
Cramér's V		0.6018	

Campus C: Relation of Grade 3 TELPAS Score to Grade 8 EL Status

*Note.* Fifty percent of the cells had expected counts < 5. Asymptotic chi-square may not be a valid test. TELPAS, Texas English Language Proficiency Assessment System; EL, English learner.

<sup>a</sup> Asymptotic probability. <sup>b</sup> Exact test. <sup>c</sup> Fisher's exact test (table probability, .0001). Thus, there is evidence to infer that there is a statistically significant relationship between the TELPAS level in Grade 3 and EL status in Grade 8 on Campus C.

### Program Comparison: Grade 3 TELPAS Status and Grade 8 STAAR Performance

The goal in performing this comparison of programs was to answer Research Question 3: What, if any, is the relationship between TELPAS status at Grade 3 and the level of performance on the STAAR at Grade 8? Is the difference in this relationship the same or different based on bilingual or ESL second-language acquisition programs?

The next two tables (Tables 19 and 20) report the cross tabulation for Campuses A and B on the Grade 3 TELPAS to the Grade 8 STAAR. The TELPAS scoring has four levels, but the basic level—Beginning—was not present in the data.

Grade 3 TELPAS	Grade 8 STAAR			
-	DM	AP	ME	Total
Intermediate	3	3	0	6
Advanced	0	11	3	14
High Advanced	2	3	2	7
Total	5	17	5	27

Campuses A and B: Grade 3 TELPAS Score and Grade 8 STAAR Score

STAAR = State of Texas Assessment of Academic Readiness; DM = Did Not Meet Grade Level; AP = Approaches Grade Level; ME = Meets Grade Level.

*Note.* n = 27. TELPAS = Texas English Language Proficiency Assessment System;

The TELPAS data in third grade are split between Did Not Meet Grade Level and Approaches Grade Level by eighth grade, with none achieving at the Meets Grade Level. Of the 14 students who in Grade 3 scored at the Advanced level on TELPAS, 11 were in Grade 8 at the Approaches Grade Level, with only the remaining three reaching Meets Grade Level. Of the seven students who at Grade 3 achieved the Advanced High TELPAS level, in Grade 8 two were at Did Not Meet Grade Level, three were at Approaches Grade Level, and only two reached Meets Grade Level.

Data from Campuses A and B were also analyzed to determine the relation of students' TELPAS Grade 3 score to another benchmark—this time, the Grade 8 STAAR Reading score (Table 20). Given the small sample (89% of cells had counts less than five) and the asymptotic value was at risk of being invalid, a Fisher's exact test was performed ( $\chi^2 = 8.8941$ ; df = 4;  $p \le 0.0398$ ).

Test statistic	df	Value	р
Chi-square test	4	8.8941	.0638
Pearson's chi-square test	4	8.8941	.0638 ° .0646 <sup>b</sup> ≤ .0398 °
Likelihood ratio chi-square test	4	8.8941	.0216
Mantel-Haenszel chi-square test	1	1.9314	.1646
Phi coefficient		0.5739	
Contingency coefficient		0.4978	
Cramér's V		0.4058	

Campuses A and B: Relation of Grade 3 TELPAS Score to Grade 8 STAAR Score

*Note*. Eighty-nine percent of the cells had expected counts < 5. TELPAS, Texas English Language Proficiency Assessment System; STAAR = State of Texas Assessment of Academic Readiness.

<sup>a</sup> Asymptotic probability. <sup>b</sup> Exact test. <sup>c</sup> Fisher's exact test (table probability, .0007).

Thus, there is evidence to infer that there is a statistically significant relationship between the TELPAS G3 level in third grade and the outcome results on the STAAR in eighth grade.

The next two tables (Tables 21 and 22) include a cross tabulation and analysis of Campus C results on the Grade 3 TELPAS with the Grade 8 STAAR outcome in reading.

Grade 3	Grade 8 STAAR			
TELPAS	DM	AP	ME	Total
Beginning	2	0	0	2
Intermediate	7	5	0	12
Advanced	1	11	4	16
High Advanced	0	3	2	5
Total	10	19	6	35

Campus C: Grade 3 TELPAS Score and Grade 8 STAAR Score Cross Tabulation

*Note. n* = 35. TELPAS = Texas English Language Proficiency Assessment System;

STAAR = State of Texas Assessment of Academic Readiness; DM = Did Not Meet Grade Level; AP = Approaches Grade Level; ME = Meets Grade Level.

Two students who scored at Beginning on the TELPAS in third grade were still scoring Did Not Meet Grade Level on STAAR in eighth grade. Of the 12 students scoring in Grade 3 at the TELPAS Intermediate level, seven were at the STAAR Did Not Meet Grade Level and five were at Approaches Grade Level, with no students reaching Meets Grade Level. Of those 14 scoring at Beginning and Intermediate levels, none was at Grade 8 performing on grade level. Of the 16 students who scored in Grade 3 at the Advanced level, in Grade 8 one was at Did Not Meet Grade, 11 were at Approaches Grade Level, and only four reached grade-level performance, scoring Meets Grade Level. Five students scored Advanced High on the TELPAS in Grade 3, and at Grade 8 they were split on the STAAR, three scoring Approaches Grade Level and two scoring Meets Grade Level. Overall, six of the 35 students were performing on grade level in eighth grade. Campus C data were also analyzed to determine if the relation of students'

TELPAS Grade 3 rank to the Grade 8 STAAR Reading rank was statistically significant.

As before, the sample was small (83% of cells had counts less than five) and the

asymptotic value was at risk of being invalid; therefore, a Fisher's exact test was

performed ( $\chi^2 = 18.0948$ ; df = 4;  $p \le .0023$ ).

# Table 22

Test statistic	df	Value	р
Chi-square test	6	18.0948	.0060
Pearson's chi-square test	6	18.0948	.0060 <sup>a</sup> .0040 <sup>b</sup> ≤ .0023 <sup>c</sup>
Likelihood ratio chi-square test	6	21.5233	.0015
Mantel-Haenszel chi-square test	1	11.3762	.0007
Phi coefficient		0.7190	
Contingency coefficient		0.5838	
Cramér's V		0.5084	

Campus C: Relation of Grade 3 TELPAS Score to Grade 8 STAAR Score

*Note*. Eighty-three percent of the cells had expected counts < 5. TELPAS, Texas English Language Proficiency Assessment System; STAAR = State of Texas Assessment of Academic Readiness.

<sup>a</sup> Asymptotic probability. <sup>b</sup> Exact test. <sup>c</sup> Fisher's exact test (table probability, < .0001).

Thus, there is evidence to infer that there is a statistically significant relationship between the TELPAS level in third grade and reading outcome results on the STAAR in eighth grade.

Side-by-side comparison of simple percentages do not tell the entire story.

Districts need to take a deeper look into the STAAR scores for their students. The data

their students to ensure that each and every student is supported. As shown in Figure 10, most students, regardless of the second-language acquisition program, have reached Approached Grade Level or Meets Grade Level by the end of eighth grade. However, as evidenced by the data, 83% of the students are still not at Meets Grade Level. Only 17% of the students are on grade level, scoring Meets Grade Level.

# Figure 10

All Campuses: Comparison of Grade 3 TELPAS and Grade 8 STAAR Performance



*Note.* N = 63. *DM* = *Did Not Meet Grade Level;* AP = Approaches Grade

*Level; ME* = *Meets Grade Level.* 

# Conclusion

The purpose of this study was to examine the relationship between TELPAS and STAAR. The data in this chapter show that districts cannot solely look at these in isolation, nor can one be a predictor of the other. Districts need to take a deeper dive into the data to be able to provide interventions for their students in the early grades.

### **Chapter V**

### Discussion

Three bilingual rural school districts in Texas that had been required by law to provide bilingual or ESL education were part of this study. The data for Campus A show that 78% of students in second-language acquisition programs scored Did Not Meet Grade Level as third graders, but in eighth grade, none of them scored Did Not Meet Grade Level. All of these students passed the STAAR, 67% scoring at Approaches Grade Level and 33% at Meets Grade Level. For Campus B, 47% of the students scored at Did Not Meet Grade Level as third graders and 26% of them scored at Did Not Meet Grade Level as eighth graders, with 74% of them passing, 63% at Approaches Grade Level and 11% of them at Meets Grade Level. None of the districts had any students score at the Masters Grade Level. For Campus C, 54% of the students scored Did Not Meet Grade Level as third graders, but by eighth grade 29% were still at Did Not Meet Grade Level; however, 71% of the students passed, 54% with scores at Approaches Grade Level and 17% at Meets Grade Level. Although these are passing scores, many of these students are not performing on grade level and are still in need of interventions to be on grade level. These results indicate that a majority of the students achieved the passing level at the Approaches Grade Level on STAAR reading by the end of eighth grade, regardless of whether bilingual education or an ESL program was being implemented. However, only 17% of the students in this sample were performing on grade level at Meets Grade Level and were prepared for grade-level instruction without interventions.

In addition, this study also examined third grade TELPAS performance as a predictor of STAAR reading scores for LEP students and those who were being

monitored. These results were examined by pulling Campus A and B, which were ESL programs, into one data set and comparing that combined group with Campus C, which was a bilingual program. After examining the results, TELPAS cannot be used as an indicator for students scoring at the Meets Grade Level for STAAR Reading. This indicates that other factors could be contributing to these results.

### **Research Question 1**

The first research question in this study examined the patterns of performance on the STAAR assessment at the individual level across the grades. The visual analysis of findings of this study indicate that the TELPAS composite score is not a strong indicator of STAAR performance in eighth grade. Both the ESL and bilingual instructional formats have twenty students at the LEP classification according to the TELPAS in third grade. Both instructional formats have the majority of students at the Approaches Grade Level status on the eighth grade STAAR (18 and 19, respectively). This indicates there are gaps in the instruction and academic achievement of these ELs.

Given the results, it appears that local campuses are not reviewing the data to address the fluctuation in the performance levels throughout the grades. In order to support students, it would be recommended that districts disaggregate STAAR data for each EL to see what content objectives are not being mastered. In addition, districts should examine their curriculum to ensure that the English Language Proficiency Standards (ELPS) are being implemented with fidelity in their teachers' lessons. The data suggests that further investigation is warranted at an individual student level to determine where the gaps are which are preventing more of these students to score at the Meets or Masters performance level on the STAAR. Currently, published research to show that this type of data analyses has not been conducted in either rural or urban settings. Finally, for the question of gender, the analyses of the data by program type did not find discernable differences between instructional formats among males and females. Overall, there was more of a cluster for males in the ESL instructional format in the Approaches category whereas there was more of a bell curve distribution for bilingual instructional format. However, for the females, there was more of a cluster around Approaches regardless of instructional format. This would indicate that districts need to dig into the data for their female students to move them from Approaches to Meet and provide interventions for their male students and investigate to see if there are other factors at play.

### **Research Question 2**

The second question considered the relationship between the third-grade TELPAS composite score and the status of ELs designated as LEP or consigned to monitoring in subsequent grades. The majority of the students are still at LEP status in eighth grade regardless of the educational program in which they were enrolled. For campuses A and B, which used an ESL program, there were still 20 students (74%, or 20/27) identified as LEP and 15 (56%, or 15/27) as monitored students in eighth grade. Eleven students who were at the Intermediate level on TELPAS in third grade were still in the program. On Campus C, most students were still identified as LEP even though the school system had been able to provide native language support to the students. What these data reveal is that districts in rural areas with early-exit TBE should take advantage of the data that they have available to them and look at students at an individual level.
Valentino and Reardon (2015) found that the more time that students spend in native language instruction, the longer it will take them to develop English language proficiency. In Texas, TELPAS is used to reclassify students as proficient in English, allowing them to move from LEP to monitoring status, a practice that would support why students in bilingual programs stay in those programs longer. However, it does not answer why students in English-only programs are not moving into monitoring. The students who remain in the program through middle school are known as long-term ELs. Using data, as presented in this study, affords districts an opportunity to evaluate each student to determine if additional interventions are needed to move the student from LEP status to monitoring. Further research is needed in the area of language proficiency and LEP status as it relates to bilingual and ESL programs. Such continual evaluation of individual students and additional research will help districts to improve language proficiency and academic achievement in order to be able to reclassify their ELs into monitoring and thus become academically successful.

#### **Research Question 3**

Answering the third question required examining relationships in the STAAR level of performance based on type of instructional program. The results of this study do not indicate that program plays an integral role in STAAR results. For the ESL programs (Campuses A and B) there was a passing rate of 82% for their Grade 8 ELs, but these campuses had only 18% of their students who successfully achieved Meets Grade Level at Grade 8. In fact, the majority of their students (64%) scored at Approaches Grade Level, which, while better than the rank of Does Not Meet Grade Level, still means the student is not meeting grade-level expectations. Campus B still had students who had not reached Approaches Grade Level.

Campus C also had a majority of the ELs passing the STAAR. However, they had a few students who had not passed the STAAR test in 6 years. This information provided insights as to why rural districts, in particular, should look at the performance levels of their ELs on the state outcome measure. Texas, like many states, uses an outcome measure that links to the state standards. Thus, after testing, if teachers and administrators examine test performance closely, particularly the areas that students are not mastering on the STAAR assessment, they can plan in a targeted way on an individual basis for summer school and the upcoming school year.

Unfortunately, research in rural districts around ELs is scarce, while several studies of large urban areas have been published over the years. The urban research focuses on whether or not one instructional program produced better academic outcomes than another (e.g., English only v. bilingual). One study by Thomas and Collier (2002) found that students in bilingual programs outperform students in ESL program as measured by the state assessment. Other researchers have found no substantial discernible differences between long-term outcomes of students instructed in bilingual formats or structured English programs (c.f., Francis et al., 2006; Rolstad & Glass, 2005; Slavin & Cheung, 2003; Valentino & Reardon, 2015).

More studies in rural school districts are needed in order to identify a research base on how to best serve ELs with limited native language support. This is a critical need as schools teaching ELs without native-language support are still held to the same standards as schools who are able to provide native-language support. Further, bilingual districts in rural areas able to provide native-language instruction need more information on how to increase the academic achievement of their bilingual students within a TBE program. Performance on the STAAR is readily available to districts and provides them with valuable information able to drive instruction and move students from Approaches Grade Level to Masters Grade Level, as that is the measure used in the closing-the-gaps domain of the A–F accountability system used in Texas. Rural districts, whether running an ESL or a bilingual program, should evaluate their programs to look for ways to improve the instruction of the ELs. This will lead to improved outcomes for their ELs and provide a solid foundation for them to succeed in high school and beyond.

### Limitations

There are several limitations in this study. The small sample, retrieved from rural Texas, may generate conclusions, but its size prevents it from being generalizable to other parts of the state or nation. The scope of this study included only STAAR Reading test results without results from other STAAR assessments. Students were not compared to general education students in their school. Grades, behavior, and attendance were also not addressed in this study. These could be contributing factors to academic achievement of the students. Other special program participation was also not included in the demographic information of this study. Such participation could also contribute to the student's ability levels. TELPAS and language proficiency were not addressed in this study. Another limitation to the study is that there was not a narrative regarding the program implementation and fidelity on the campuses, nor was there information on current professional development opportunities or on strategies already implemented in the classroom. Understanding these factors requires further research.

## Conclusion

Overall, the visual analyses of findings of this study indicate that the TELPAS composite score is not a strong indicator of STAAR performance in eighth grade. The majority of the students in the bilingual and ESL programs studied met the passing rate of Approaches Grade Level on STAAR; however, a very small percentage of them were at Meets Grade Level. None was at Masters Grade Level. This indicates there are gaps in the instruction and academic achievement of these ELs.

Though this study examined findings for a relationship between Grade 3 TELPAS rank and Grade 8 EL status, results were insufficient to infer that there was a relationship between them in ESL programs. However, there was evidence to infer that there was in bilingual programs such a relationship between the TELPAS level in third grade and EL status in eighth grade. Results also show there is evidence to infer that there is a relationship between the TELPAS performance level in third grade and the outcome results on the STAAR in eighth grade for both ESL and bilingual programs. However, the chi-square results need to be interpreted with caution due to the small sample size.

In Texas specifically, districts struggle to hire bilingual teachers because there has been a critical shortage of bilingual teachers for the last 25 years (Arroyo-Romano, 2016). This shortage is making it difficult for districts to hire a sufficient number of certified bilingual teachers, and they are having to apply for a bilingual exception with the TEA. These districts instead have teachers in second-language acquisition classrooms without bilingual certification instructing ELs. This also has a fiscal impact on the district, because once they receive an exception, they are required to spend 10% of their bilingual allotment on professional development for the teachers who fall under the exception (Commissioner's Rules, 2018). The positive outcome is that the results show that rural school districts operating under a bilingual exception can still provide a language program in which students can experience the same level of success as those districts offering a bilingual program.

#### Recommendations

Districts that fall under a bilingual exception should ensure that teachers under the exception are implementing second-language acquisition strategies and have the support of their administrative team. Districts operating under the bilingual exception and struggling with the academic achievement of their ELs should research similar schools in Texas (see https://txschools.gov) and make contact with those experiencing success with their ELs.

More research is needed. What education professionals need includes data from classrooms identified with the certifications held by the teachers of ELs, data on the scope of professional development opportunities for teachers of ELs, descriptions of implementation of professional development in classroom instruction, and information about the fidelity of alternative language programs to recognized standard programs. In addition, future studies should include more information about the effectiveness of bilingual and ESL programs; vital demographic factors, including such EL student demographics as years in U.S. schools; identification of participation by ELs in special programs, such as special education and gifted-and-talented educational offerings; and the number of parent denials annually processed by schools. More research is also needed to identify and understand other indicators that may be contributing to the low percentage of ELs reaching Meets Grade Level on STARR. These factors could include poverty, years in U.S. schools, household composition, and trauma. Further research is also needed in the area of language programs in rural school across the nation in order to improve the instruction of ELs in rural schools.

## **Chapter VI**

## **Action Plan**

Improving the achievement of ELs in rural areas is important to all stakeholders from the USDOE to TEA to Texas Regional Education Service Centers to local education agencies. The needs of rural schools are unique, and they are not always at the forefront of decision makers' minds at the national and state level. The first step in improving EL achievement is ensuring that the teachers have an understanding of how to instruct students using second-language acquisition (SLA) practices. This begins with providing teachers and administrators with professional learning opportunities in SLA theories and practices. Administrators should consider Improvement Science, a ordered, continually operative approach to enhancing learning and quality improvement, to discover ways to enhance the instruction of their ELs and improve academic achievement in the classroom and on the state assessment.

#### **Plan-Do-Study-Act**

Rural school districts may not have the resources necessary to hire highly qualified bilingual instructors for the classroom. However, the schools do have access to the outcome data on which the state grades them each year. Using a Plan-Do-Study-Act (PDSA) cycle of professional development (Figure 11), teachers and administrators can review the data of the students in the rural schools and use this data to guide instruction and plan for professional development.

## Figure 11

## Plan-Do-Study-Act Cycle



## Foundational Understanding of SLA

The first step in understanding of SLA is exposing administrators and teachers to SLA theories and practices. This exposure can be provided through multiple media. They can start with reading this study, reading peer-reviewed journals, participating in webinars or attending state and national bilingual education and ESL conferences. They can also attend professional development through their regional service centers or other professional providers.

## **Professional Development Planning**

## Focus Group

The first step for a provider to take in creating a professional development plan for SLA is to start with a focus group. This focus group comprises key stakeholders, such as superintendents; Title III, Part A, LEP and bilingual/ESL program directors; campus administrators; teachers of ELs in bilingual and ESL programs; and paraprofessional staff who work with ELs. These participants should be brought together in a safe neutral environment. It is important that it be a risk-free environment.

#### Moderator

The moderator will provide an overview of the topic of SLA pedagogy and review EL STAAR and TELPAS results and trends over the last 5 years. The moderator will present these in a format that is easily understood by all levels of proficiency in accountability. The moderator will check for understanding and provide time to answer any questions regarding these data. The moderator will then explain that the purpose of this focus group is to gain a better understanding of the need for and type of SLA professional development that districts are requesting. The moderator will thank them for taking the time to be part of this focus group.

The moderator will then provide ground rules for the focus group, explaining that the development presentation is a safe space and that there is no right or wrong answer. The moderator will disclose that the responses are being recorded by the assistant moderator as well as via an audio recording of the session to ensure responses taken down during the meeting have been accurately recorded. The moderator will assure participants that their specific responses will be collected but that responses will not be linked to names in the report.

#### Protocol

Here is an example of the questions for the focus group:

- What experience do you have in working with ELs? (Explore with group in Round Robin method.)
- 2. What SLA strategies training have you received?

- 3. Think back to a time when you saw the implementation of an SLA strategy. What went well or what did not?
- 4. What is the expectation of staff when they attend professional development classes or workshops?
- 5. How can the staff of this training help teachers with the implementation of the professional development that they attend?
- 6. What do you see as the most significant need with regard to professional development for teachers of ELs?
- 7. What else can be done to help you improve your EL program?

The moderator will compile these results into a report that will guide the direction of the professional development.

## Development of Professional Training or Workshops in SLA Strategies

The trainer should use the results of the focus group to guide the development of this training. The trainer, using SLA strategies throughout the session, should make the training interactive. Some topics to consider covering in the session are listed below:

- SLA theories
- comprehensible focus group input
- basic interpersonal conversational skills/cognitive academic language proficiency
- English language proficiency measures, including in Texas the English language proficiency standards
- state assessments, including in Texas the STAAR and TELPAS
- SLA strategies

## Evaluation

The professional development session should include an anonymous evaluation of what the participants learned and to what extent they feel comfortable implementing their new learning. This evaluation can be done through incorporating opportunities for spontaneous responses (open-ended questions/responses) or for responses on a Likert scale. Participants should also have an opportunity to provide constructive feedback to trainers. This evaluation should provide for open-ended responses.

#### Follow-up

The trainer should have a job-embedded element that allows for a follow-up classroom visit and should plan a second professional development training based on observations in classrooms.

### **Raising Accountability with Improvement Science**

In the accountability system for Texas, EL student outcomes is one of the indicators that factors into the Closing-the-Gaps domain. The domain provides districts with the opportunity to look at the data and discover which students are in need of assistance. Once a district narrows the scope of challenges, administrators and teachers need to find a way to improve their EL outcomes. They need to dig down to the root of the problem and brainstorm ways to correct errors and make improvements. One tool they can use from Improvement Science is the fishbone diagram. This tool will help districts analyze the problem, and allow staff and administrators to self-reflect on what might be contributing to it, and work together to devise solutions. (See Appendix.)

The district starts with the problem in the left square, and then enters key factors to the problem in the major bones (rectangles). Then the smaller bones are used to obtain details that lead to the key factors.

## Conclusion

As the number of ELs continues to grow, districts in rural areas need to find ways to provide instruction that will increase the academic achievement of their students. Districts need to provide their teachers with the tools to provide instruction that will make the content comprehensible to their students. Using SLA strategies will meet the affective, linguistic, and cognitive needs of students. In Texas, the performance of ELs is captured through the state assessment (STAAR), which is part of the state and federal accountability systems. It takes everyone in the school system to increase the academic achievement of the ELs they serve. As this document has shown, tracing student achievement through STAAR reading results can make teachers attentive to their students' language progress or problems, and professional development opportunities and the Plan-Do-Study-Act cycle provide means for improving and sustaining their service to students in the bilingual or ESL classroom.

#### References

- Arroyo-Romano, J. (2016). Bilingual education candidates' challenges meeting the Spanish language/bilingual certification exam and the impact on teacher shortages in the state of Texas, USA. *Journal of Latinos and Education*, 15(4), 275–286. https://doi.org/10.1080/15348431.2015.1134539
- Brisk, M. E. (2006). *Bilingual education: From compensatory to quality schooling* (2nd ed.). ProQuest E Book Central.
- Bryk, A.S., Gomez, L.M., Grunow, A., & LeMahieu, P.G. (2016). *Learning to improve. How America's schools can get better at getting better*. Harvard Education Press.
- Chin, A., Dysal, N. M., & Imberman, S. A. (2013). Impact of bilingual education programs on limited English proficient students and their peers: Regression discontinuity evidence from Texas. *Journal of Public Economics*, 107, 63–78. http://dx.doi.org/10.1016/j.jpubeco.2013.08.008
- Cho, R. M. (2012). Are there peer effects associated with having English language learner (ELL) classmates? Evidence from the Early Childhood Longitudinal Study Kindergarten Cohort (ECLS-K). *Economics of Education Review*, 31 (5), 629–643. https://doi.org/10.1016/j.econedurev.2012.04.006
- Commissioner's Rules Concerning State Plan for Educating English Learners, 19 Tex. Admin. Code § 89.1201 *et seq.* (2018).

http://ritter.tea.state.tx.us/rules/tac/chapter089/ch089bb.html

Ennis, S. R., Rios-Vargas, M., & Albert, N. G. (2011). *The Hispanic population: 2010*.2010 Census Briefs. U.S. Census Bureau.

https://www.census.gov/prod/cen2010/briefs/c2010br-04.pdf

- Flores, S. M., Batalova, J., & Fix, M. (2012). *The educational trajectories of English language learners in Texas.* Washington, DC: Migration Policy Institute.
- Francis, D.J., Lesaux, N. & August, D. (2006). Language of instruction. Developing literacy in second language learners: Report of the National Literacy Panel on Language Minority Children and Youth. 365-414.
- Gallo, Y., Garcia, M., Pinuelas, L., & Young, I. (208). Crisis in the Southwest: Bilingual education program inconsistencies. *Multicultural Education*, *16*, 10–16.
- Gates, G. S., & Lichtenberg, K. (2005). Accountability data and decision making in Texas bilingual programs. *Journal of Latinos and Education*, *4*, 271–282.
- Greico, E. M., Acosta, Y. D., De la Cruz, G., Gambino, C., Gryn, T., Larsen, L. J., ...Walters, N. P. (2012). The foreign-born population in the United States: 2010.American Community Survey Reports. U.S. Census Bureau.

https://www.census.gov/library/publications/2012/acs/acs-19.html

- Haynes, J. (2007). *Getting started with English language learners: How educators can meet the challenge*. https://ebookcentral.proquest.com
- Human Resources Research Organization. (2016). Independent evaluation of the validity and reliability of the STAAR grades 3–8 assessment scores: Part 1. <u>https://tea.texas.gov/student.assessment/reports/</u>
- Maxwell, L., & Shah, N. (2012). Evaluating ELLs for special needs a challenge. *Education Week*, 32(2), 1, 12. <u>https://www.edweek.org/policy-politics/evaluating-ells-for-special-needs-a-challenge/2012/08</u>
- Moughamian, A. C., Rivera, M. O., & Francis, D. J. (2009). *Instructional models and strategies for teaching English language learners*. Center for Instruction, RMC

Research Corporation, and the U.S. Department of Education.

https://files.eric.ed.gov/fulltext/ED517794.pdf

- Performance Reporting Division. (2019). 2018-19 *Texas Academic Performance Report*. https://rptsyr1.tea.texas.gov/adhocrpt/adlepgm.html
- Pope, N. G. (2016). The marginal effect of K–12 English language development programs: Evidence from Los Angeles Schools. *Economics of Education Review*, 53, 311–328. <u>https://doi.org/10.1016/j.econedurev.2016.04.009</u>
- PEIMS Reporting Unit. (n.d.). EL students by category and grade [Chart of PEIMS data 2018–2019]. English Learner Student Reports by Category and Grade, Texas Education Agency. https://rptsvr1.tea.texas.gov/adhocrpt/adlepcg.htmlTexas Assessment Management System. (n.d.). <u>https://texasassessment.com/uploads/ets-004-what-is-staar-transcript032919.pdf</u>
- Rolstad, K., Mahoney, K., & Glass, G. V. (2005). The big picture: A meta-analysis of program effectiveness research on English language learners. *Educational Policy*, 19(4), 572–594. <u>https://doi.org/10.1177/0895904805278067</u>.
- Slavin, R. E., & Cheung, A. (2005). A synthesis of research on language of reading instruction for English language learners. *Review of Educational Research*, 75(2), 247–284. <u>https://doi.org/10.3102/00346543075002247</u>

 Slavin, R. E., Madden, N., Calderon, M., Chamberlain, A., & Hennessy, M. (2011).
Reading and language outcomes of a multiyear randomized evaluation of transitional bilingual education. *Educational Evaluation and Policy Analysis*, 33(1) 47–58. <u>https://doi.org/10.3102/0162373711398127</u> Student Assessment Division. (2019). Educator guide: Texas English Language Proficiency Assessment System. Texas Education Agency. <u>https://tea.texas.gov/sites/default/files/2019\_TELPAS\_Educator\_Guide\_FORWE</u> <u>B.pdf</u>

Sugarman, J. (2016). Funding an equitable education for English learners in the United States. Migration Policy Institute:

https://www.migrationpolicy.org/sites/default/files/publications/US-Funding-FINAL.pdf

- Texas Assessment Management System. (n.d.a). *Testing accommodations: Tools, features, and supports for students with special learning needs*. Texas Education Agency. https://texasassessment.com/uploads/ets-testing-accommodations-pdfv5.pdf
- Texas Assessment Management System. (n.d.b). *What is the STAAR test?: An overview* of STAAR and its purpose. Texas Education Agency.

https://texasassessment.com/uploads/ets-004-what-is-staar-transcript032919.pdf

Texas Assessment Management System. (2019). TXschools.gov [Database]. Texas

Education Agency. https://TXschools.gov.

Texas Education Agency. (n.d.) TELPAS FAQ.

Thomas, W., & Collier, V. (2002). A national study of school effectiveness for language minority students' long-term academic achievement. Santa Cruz, CA and Washington, DC: Center for Research on Education, Diversity & Excellence. <u>http://www.crede.ucsc.edu/research/llaa/1.1\_final.html</u> U.S. Department of Education. (n.d.). *Developing programs for English language learners: Glossary*. Office for Civil Rights.

https://www2.ed.gov/about/offices/list/ocr/ell/glossary.html

- U.S. Department of Education. (2016a). *English Learner Tool Kit*. Office of English Language Acquisition. https://www2.ed.gov/about/offices/list/oela/english-learner-toolkit/index.html
- U.S. Department of Education. (2016b). Non-regulatory guidance: English learners and Title III of the Elementary and Secondary Education Act (ESEA), as amended by the Every Student Succeeds Act (ESSA).

https://www2.ed.gov/policy/elsec/leg/essa/essatitleiiiguidenglishlearners92016.pd f

- U. S. Department of Education. (2020). *The condition of education 2020* (NCES 2020-144).
- Valentino, R. A., & Reardon, S. F. (2015). Effectiveness of four instructional programs designed to serve English learners: Variation by ethnicity and initial English proficiency. Educational Evaluation and Policy Analysis, 37(4), 612–637. <u>https://doi.org/10.3102/0162373715573310</u>

Zalaznick, M. (2018). Districts confront bilingual teaching shortage: "Grow your own" models funnel paraprofessionals, high school grads into education. *District Administration*, 54(1), 18+. Retrieved from <u>https://link-gale.com.ezproxy.lib.uh.edu/apps/doc/A522208653/OVIC?u=txshracd2588&sid=OVIC&xid=da1e1703</u>

# Appendix

## **Improvement Science**

# Example of a Fishbone Diagram



