FRAMING BILINGUAL EDUCATION POLICY: ARTICULATION AND IMPLEMENTATION IN TEXAS

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Language education policy and its implementation have been controversial and ongoing issues throughout the United States, especially in the border state of Texas, with its large population of students who are learning English. This dissertation reports two studies, the first of which was a frame analysis of problems and solutions as represented by the five bills amending the Texas Education Code with regard to bilingual education and English as a second language programs. These laws, passed in 1969, 1973, 1975, 1981, and 2001, have been enacted since 1968, the year the Bilingual Education Act (BEA) was passed. The problem framed consistently by these state policy documents was inadequate instruction for children who come to school speaking languages other than English. More variability was seen in the framing of solutions, with approaches changing from the authorization of instruction in languages other than English, to the establishment of mandated bilingual programs, to the extension of special language programs, and to the establishment of dual language immersion programs. The primary ideology influencing the policy documents was the monolingual English ideology; however, alternative ideologies are apparent in the policies that allow for dual language immersion programs.

Geographic information systems (GIS) analysis was used in the second study to investigate the geographic locations of particular programs and the demographics of students they served. Choropleth maps showed variability in program distribution across the state with distinct patterns apparent in only two programs. The maps indicated that districts with high
percentages of student enrollment in one-way dual language programs tended to be located in and near the major metropolitan areas, whereas many districts offering early exit transitional bilingual programs tended to be located along the Texas-Mexico border. Despite the literature on bilingual/ESL program effectiveness, the predominant program in the border region of Texas is among those considered least beneficial to students learning English. This pair of studies illustrates the influence of monolingual English ideology on educational practice and policy through the implementation of programs by districts as well as the framing of bilingual education in legislation.
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INTRODUCTION TO THE DISSERTATION

For decades, debate and controversy surrounding language education policy have been common throughout the United States, especially the border states, including Texas. Texas has a complex history as the home to numerous ethnic groups each with their own cultures and languages. Included in this history is an on-and-off relationship with bilingual education and a variety of programs for students who speak languages other than English. An established body of research has focused on issues of language, particularly what to do regarding students who are not fluent in English in the United States (e.g., Barker et al., 2001; Crawford, 2000; Ricento, 1995; Wiley & Lukes, 1996). Included in this body of research are analyses of specific policies related to the education of English language learners (ELLs) at both the federal (e.g., Crawford, 2002; Evans & Hornberger, 2005; Stewner-Manzanares, 1988) and state level (e.g., Flores & Murillo, 2001; Johnson, 2005). Other studies have focused on policy implementation. The research concentrating on Texas has consisted mainly of case studies at single school sites focusing on such issues as the challenges and successes of implementation of programs (e.g., Alanís & Rodríguez, 2008; Ray, 2009), the impact of high stakes testing policies on bilingual programs (Black, 2006; Palmer & Snodgrass Rangel, 2011), and the influence of policy on teaching practices (e.g., López & Fránquiz, 2009).

My two-pronged dissertation investigated both policy framing and policy implementation with respect to bilingual education in Texas. This dissertation, which includes two research articles based on two studies, is intended to contribute to research in bilingual education. The first article presents an analysis of five policies that originated as House and Senate bills in Texas and were proposed and passed over three decades, from 1969 to 2001. All
came after the installation in 1968 of Title VII, which was an amendment to the federal law, the Elementary and Secondary Education Act (ESEA) of 1965. The second article, based on an analysis of current policy implementation in Texas, employed geographic information systems (GIS) to investigate the locales and other factors associated with, particular kinds of bilingual programs and English as a second language (ESL) programs. In this brief introduction I provide some relevant background for the research, then summaries of both studies, and, finally, some statements regarding contributions made by the two interrelated studies.

Background to the Study

The percentage of ELLs in Texas (currently 17%) has historically been greater than the national average. Texas follows only California in terms of numbers of ELLs; currently 865,000 of the over 5 million students in Texas are considered ELLs (TEA, 2014). This is a 37.2% increase over the past ten years (TEA, 2014). Also, while the home language of the majority of ELLs in Texas is Spanish, approximately 130 languages are represented in Texas schools (TEA, 2014). The establishment of federal bilingual education policy placed a greater emphasis on state bilingual education policy development in Texas. Over the past five decades, bills specific to bilingual education have altered the Texas Education Code numerous times. The current policy authorizes two ESL program models and four bilingual program models for instructing ELLs. These program options include pull-out ESL, content-based ESL, early exit transitional bilingual, late exit transitional bilingual, one-way dual language, and two-way dual language programs.

The current policy, Chapter 29 of the Texas Education Code, allows for variation in implementation across the state as the 1200-plus school districts are given local control over
deciding which program(s) to offer for instructing ELLs. School districts meeting the criterion for mandating bilingual programs (a minimum of 20 children of the same language group in a particular grade) have four program options from which to select for implementation and many districts, for various reasons, opt to implement more than one program type.

Questions Guiding the Studies

This dissertation focused on framing of bilingual education in Texas education policy documents and the implementation of the current policy. The following questions guided the studies:

1. During the modern era of bilingual education, how has bilingual education in Texas education policy been framed by policymakers?
   a. What are the claims made in the policy discourse?
   b. How has the policy discourse changed over time?
   c. How is the bilingual education policy in Texas related to other policies or documents?

2. How is the current Texas bilingual education policy interpreted at the district level in the form of program implementation?
   a. How are programs for English Language Learners (ELLs) geographically distributed across the state?
   b. Is there a relationship between one-way dual language and early-exit transitional bilingual education program implementation and the breakdown of the ethnicity of the students in the district?
   c. Is there a relationship between one-way dual language and early-exit transitional bilingual education program implementation and the percentage of economically disadvantaged students in the district?

In seeking to answer these interrelated questions, I approached this study using two distinct methods to investigate issues associated with bilingual education in Texas. For addressing the first set of questions, the approach was a frame analysis of bills passed through
Texas legislation regarding bilingual education programs. This form of discourse analysis focused on the representation of problems and solutions. For addressing the second set of research questions, the approach was geographic information system (GIS) analysis, which provided a means of spatially mapping program implementation across Texas using quantitative school district data. Whereas the data analysis for the first study was primarily qualitative, the second study required quantitative methods including multiple regression analyses.

Framing Bilingual Education Policy: Articulation in Texas

For analyzing bilingual education policy in Texas, my attention was on Texas bilingual education policy documents that became law during the modern era of bilingual education. These policies included the five bills passed in Texas that related to programmatic changes in bilingual education following the enactment of Title VII of the ESEA in 1968, which initiated the revitalization of bilingual education. Of those examined, the first was in 1969, and the last was in 2001. The approach to the study was framing analysis (cf. Benford & Snow, 2000; Entman, 1993; Verloo, 2005). With respect to policy, frames have been described as “organizing principles” in which problems are presented and solutions are offered (Verloo, 2005).

My procedures followed Benford and Snow’s (2000) and Verloo’s (2005) ideas on diagnostic framing and prognostic framing. Diagnostic framing seeks to identify the problem and to place blame, and prognostic framing includes assigning a solution to the problem and determining all the people, actions, and means necessary for accomplishing the goal of solving the problem. Also relevant to the analyses was Bernstein’s (1990) concept of recontextualization and Wodak and Fairclough’s (2010) extension, referring to the delocation and relocation of social practices and texts associated with them into new contexts and the
changes that occur during this process. In this investigation, my attention was on explicit frames, cued explicitly by the language of the policy, as well as implicit frames, which tend to represent hidden values or agendas.

Diagnostic framing across the policy documents consistently presented the problem as inadequate instruction for English language learners, with major descriptors including unsuccessful English-only instruction, unequal educational opportunities, and unrecognized educational needs. More variability was found in the prognostic framing of solutions. Although the solution presented from the earliest bill (H.B. 103) is the establishment of bilingual education, particular approaches changed from the authorization of instruction in languages other than English, to the establishment of mandated bilingual programs, to the extension of special language programs, and to the establishment of dual language immersion programs. Each subsequent policy builds upon what constitutes the bilingual and special language programs, but maintains the emphasis on transitioning students to mainstream English classrooms, with the exception of the dual language immersion programs. Evidence of recontextualization was apparent in words, ideas, and phrases from federal policies and other related documents. The borrowing of ideas and wording from other documents was selective in that the authors of the bills chose elements that projected a particular view.

Most notable in the frame analysis was the predominance of a monolingual English ideology over the years, which was apparent in such references to English as “the basic language of instruction” in all of the bills, the expressed responsibility of the state to “insure the mastery of English” in H.B. 103, and references to languages and cultures of ELLs as different from the language and culture of the United States in S.B. 121. This particular belief system
equates English acquisition with Americanization and encourages the abandonment of home languages and cultures tied to them for the more dominant and desirable English language (e.g., Macedo, Dendrinos, & Gounari, 2000; Wiley & Lukes, 1996). However, some evidences of alternative ideologies were apparent in the policy authorizing dual language immersion programs as possible approaches.

Implementation of Bilingual and ESL Education Policy at the District Level in Texas: Geographic and Ethnic Variation

With the frame analysis providing an historical context, my intention with the second study was to investigate policy implementation with respect to Chapter 29 of the current Texas Education Code regarding bilingual and ESL education, which contains elements from S.B. 477 and S.B. 467. The approach was based on GIS, which is a new tool for studying policy implementation (e.g., Cobb & Glass, 1999; Goldring, Cohen-Vogel, Smrekar, & Taylor, 2006; Siegal-Hawley, 2013) and is a technology designed to capture, manage, and analyze geographic data (Tomlinson, 1998). Using this approach, I investigated patterns of program implementation statewide, with particular focus on early exit transitional bilingual and one-way dual language programs.

Texas allows school districts to operate six different programs, and districts are somewhat variable in which ones they offer their students. Of most interest in this study GIS technology was the implementation of early exit transitional bilingual programs, which are bilingual programs in which ELLs are provided instruction in both Spanish and English with the goal of transitioning students to English-only instruction as quickly as possible, and also one-way dual language programs, which are biliteracy programs in which only ELLs are enrolled with the goal of students developing literacy in both English and Spanish. Attention was also given
to relationships between enrollment in a particular kind of program and variables such as
district type, student ethnicity, and percentage of economically disadvantaged students in the
district.

Choropleth maps showed the geographic distribution of bilingual and ESL programs in
Texas. Implementation of pull-out ESL and content-based ESL programs is widespread and the
most common, whereas two-way dual language programs are sporadically implemented across
the state. Late exit transitional programs are the least common found in Texas. Obvious
patterns found in the maps indicated that districts with high percentages of student enrollment
in one-way dual language programs tend to be located in and near the major metropolitan
areas, whereas many of the school districts along the Texas-Mexico border tend to offer early
exit transitional bilingual programs. Maps also indicated that districts with high percentages of
enrollment in one-way dual language programs tend to be more ethnically diverse than the
districts at the border, which have higher percentages of Hispanic students and tend to offer
early exit transitional bilingual programs.

Despite the growing literature on bilingual/ESL program effectiveness, the most
commonly implemented program in the border region of Texas, where large populations of
Spanish-speaking students reside, has been identified as one of the least beneficial programs
for ELLs (e.g., Lindholm-Leary, 2001; Ramírez, 1992; Thomas & Collier, 2002). This is a region
that was implementing the majority of the two-way dual language programs in Texas just over a
decade ago. Also, many districts across the state offer both dual language and transitional
bilingual programs—a decision that projects contradictory ideological and pedagogical views of
bilingual education.
Contributions of the Two Studies

Research on language policy has been conducted through various methods, including ethnographic studies (e.g., Hornberger & Johnson, 2007; Ricento & Hornberger, 1996), discourse analyses (e.g., Johnson, 2005), psycho-social analyses (e.g., Barker et al, 2001; King & DeFina, 2010), and policy evaluations (e.g., Hanna, 2011). Frame analysis is an analytic tool that has been used in a wide variety of policy studies (e.g. Lombardo, 2008; Meier & Lombardo, 2008). This approach is particularly suited for studying policies of a controversial nature, like bilingual education, due to the importance placed on the wording used in the documents and the values associated with such wording. The use of GIS is an emerging trend in education research, in general, and education policy research, in particular (e.g., Cobb & Glass, 1999; Goldring, Cohen-Vogel, Smrekar, & Taylor, 2006; Siegal-Hawley, 2013). GIS analysis provides an effective means of exploring spatial patterns and the ways in which variables interrelate statistically. Although these two approaches are very different, they can be viewed as complementary. The two studies included in my dissertation are complementary as well: one focused on the articulation of policy by policymakers and the other focused on the implementation of policy by school districts.

This framing analysis provided insights into the ways in which problems and solutions represented by lawmakers can ultimately affect the type of instruction students receive at the local level. Although “solutions” offered by the policies expanded over time, districts were given great leeway in the approaches to instructing ELLs. The GIS study, which focused on the actual implementation of policy, provided information regarding the options that districts chose for their students. It showed some obvious patterns that would not be so apparent without the
spatial mapping. Through this analysis, GIS served as a tool for uncovering discrepancies in the implementation of the state policy at the local level statewide. The GIS policy-implementation study also raises questions about why programs that devalue students’ home languages and tend to result in less successful academic outcomes continue to be included in the state policy and implemented at the local level.
Language education policy has been a controversial and ongoing issue throughout the United States, especially in the border state of Texas. This article reports on a frame analysis of the problems and solutions as represented by the five bills that have amended the Texas Education Code (TEC) to implement or expand the delivery of bilingual education and English as a second language (ESL) programs. These laws, passed in 1969, 1973, 1975, 1981, and 2001, have been enacted since 1968, when the Bilingual Education Act (BEA) was passed. The problem presented by these state policy documents was consistently framed over time as inadequate instruction for children who come to school speaking languages other than English. More variability was seen in the prognostic framing of solutions with approaches changing from the authorization of instruction in languages other than English, to the establishment of mandated bilingual programs, to the extension of special language programs, and to the establishment of dual language immersion programs. The primary ideology influencing the policy documents was the monolingual English ideology; however, alternative ideologies are apparent in the policies that allow for dual language immersion programs.

Language education policy has been a controversial and ongoing issue throughout the United States and especially in the border states, including Texas. As home to numerous ethnic groups with different cultures and languages, Texas has been a battleground for arguments regarding how to teach students who speak languages other than English (e.g., Blanton, 2004; Ovando, 2003). Statewide policies have been developed to help solve educational problems regarding bilingual education, and policymakers have framed the language issue in various
ways. As argued by Entman (2007), framing of policy entails “problem definition, causal analysis, moral judgment, and remedy promotion” (p. 164). Frames, according to Gitlin (1980) are “principles of selection, emphasis, and presentation composed of little tacit theories about what exists, what happens, and what matters” (p. 6).

This article reports an analysis of the framing of five policies that have amended the Texas Education Code (TEC) to implement or expand the delivery of bilingual education and English as a second language (ESL) education programs. It is intended to contribute to a growing body of work focused on bilingual education policy in the United States, which includes analyses of specific policies related to the education of English language learners (ELLs) at both the federal level (e.g., Crawford, 2002; Evans & Hornberger, 2005; Stewner-Manzanares, 1988) and the state level (e.g., Flores & Murillo, 2001; Johnson, 2005). All five of these policies, now in the Texas Education Code (TEC), originated as House and Senate bills in Texas, and all came after the installation in 1968 of Title VII, which was an amendment to the federal law, the Elementary and Secondary Education Act (ESEA) of 1965. The major question guiding the study is as follows: During the modern era of bilingual education, how has bilingual education in Texas education policy been framed by policymakers? Sub-questions are (a) What are the claims made in the policy discourse? (b) How has the policy discourse changed over time? and (c) How is the bilingual education policy in Texas related to other policies or documents?

Rationale for the Study

In the midst of the Civil Rights movement in the 1960s, President Lyndon B. Johnson waged the “War on Poverty” and proposed the Elementary and Secondary Education Act (ESEA) as his major education reform effort. With the passing of the ESEA in 1964, funds were allotted
specifically for supplemental literacy instruction for economically disadvantaged children through Title I, with the stated intent of “catching up” children living in poverty to the literacy levels of their peers. More formally articulated, the purpose of Title I was “to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education” (Sec. 1001., 20 U.S.C. § 6301, 1965).

Subsequently, efforts to revitalize bilingual education led to the passing in 1968 of the Bilingual Education Act (BEA), an amendment to ESEA as Title VII. Through Title VII, funding was provided for programs that were designed to benefit students with limited English proficiency. Title VII, as noted by Wright (2005), was vaguely written, such that native language instruction was not prohibited, but was also not encouraged. Many politicians viewed both the ESEA and BEA as initiatives for providing equal opportunities for all children (See discussions in Spring, 2001; Tyack & Cuban, 1995). However, some, including Ruiz (1984) and Galindo (1997), have provided an alternative interpretation. From their perspective, the BEA was a way for those in power to remediate what they saw as a “problem”: the growing number of immigrant children who did not speak English. According to Ruiz’s (1984) critical analysis, because the BEA was included in the ESEA, and at one time poverty was a requirement for inclusion in bilingual programs, the BEA can be considered an attempt to determine how best to teach the “poor kids.” Thus bilingual education has continued to be interpreted by some as a program for the disadvantaged.

Regardless of the intent, the establishment of federal policy placed a greater emphasis on state bilingual education policy development in Texas than had existed previously, marking what is considered the modern era of bilingual education in the state (cf. Blanton, 2004).
Proponents of bilingual education felt the urgency of passing bilingual education at the state level, especially considering the role of Texas politicians, particularly U.S. Senator Ralph Yarborough, in the passage of Title VII (Vega, 1983). Additionally, there was growing awareness within the educational community that bilingualism had an additive effect on intelligence, and this knowledge served as another warrant that bilingual advocates could use in pushing for legislation in Texas (Blanton, 2004).

The five bills that became law have had the greatest impact on bilingual education programs in Texas and have altered the TEC numerous times. McCarty (2011) has underscored the “language-regulatory power” of language policies: “the ways in which they express normative claims about legitimate and illegitimate language forms and uses, thereby governing language statuses and uses” (p. 8). During the years of their debate and eventual enactment, education in the United States and in Texas went through a number of changes, including those associated with the “rights” legislation period, concerns about global competitiveness eventually expressed in “A Nation at Risk,” increased funding for educational research, and initiation of the accountability movement.

The Legislation Analyzed

For the study, attention was on those five Texas House and Senate Bills relating to programmatic changes in bilingual education that were passed into law since Title VII of the ESEA in 1968:

- Texas H.B. 103 “A Bill to Be Entitled an Act Requiring that English Shall Be the Basic Language of Instruction in All Grade Schools” (1969) – 61st session
- Texas S.B. 121 “A Bill to Be Entitled an Act Relating to Bilingual Education Programs in the Public Schools” (1973) – 63rd session
• Texas H.B. 1126 “A Bill to Be Entitled an Act Relating to the Financing of Public School Education; Making an Appropriation” (1975) – 64th session

• Texas S.B. 477 “A Bill to Be Entitled an Act Relating to Bilingual Education and English as a Second Language and Other Special Language Programs in Schools” (1981) – 67th session

• Texas S.B. 467 “A Bill to Be Entitled an Act Relating to Dual Language Immersion Programs in Certain Public Schools and to the Review of Existing Rules of the State Board of Education Affecting Such Programs” (2001) – 77th session

Full-text versions of the bills, as introduced and as enrolled, are available on the Legislative Reference Library of Texas online and are included in Appendix A. In addition to the full-text versions of the bills, accompanying documents, such as House and Senate reports, are often available online, and for this study, were accessed when needed to provide context for the policy texts. Archived full-text versions of Title VII of the ESEA as well as amendments and reauthorizations to the act are also available online through the federal government at www.ed.gov. The following are brief summaries of the content and background of each of the five bills.

House Bill 103

Texas’s 61st Legislature convened in January, 1969, less than a year after the Bilingual Education Act (Title VII) had been passed at the federal level. Two identical bills, Senate Bill 46 and House Bill 103, were introduced during the regular legislative session. Both called for the repeal of the penal code that prohibited the use of languages other than English for instruction in Texas schools and allowed bilingual education at the discretion of the local school districts. The House Bill moved more quickly than the Senate version and, with some Senate amendments, was passed on May 7, 1969. A relatively short bill at just over two pages, House Bill 103, consisted of only five sections, which (a) established English as the language of
instruction in Texas schools; (b) outlined the parameters of bilingual instruction; (c) delineated the exemptions; (d) repealed the aforementioned penal code; and (e) expressed the importance of learning a second language. The relatively smooth passage of H.B. 103 has been attributed to the “harmless” nature of the legislation in that the authors did not seek funding and bilingual instruction was not mandated (Vega, 1983).

*Senate Bill 121*

Efforts during the 62nd legislative session to pass legislation expanding bilingual education and providing state funding for bilingual programs proved unsuccessful, but shortly after the 63rd Texas Legislature began in January, 1973, new legislation was brought forward. Senate Bill 121, introduced by Senator Chet Brooks, differed from the proposed House bills in that it mandated bilingual education in districts with 20 or more students in a grade level of the same language classification and provided program funding. As Vega (1983) has pointed out, Brooks’s sponsorship of the most detailed and comprehensive bilingual education bill in Texas’ history at that point was key to its passage because, with an Anglo sponsor, it was less likely to be labeled a “Mexican bill.” After considerable negotiation and some objection, S.B. 121 was passed on May 23, 1973. With the passage of S.B. 121, Chapter 21 of the Texas Education Code was amended and Subchapter L was added. Subchapter L, with its ten sections, outlined the new requirements for mandating bilingual education, and also provided definitions, program content information, and other district and financial information. Districts meeting the criterion specified in S.B. 121 were required to offer bilingual education for first through sixth grades. Students considered of “limited English-speaking ability” would be able to participate in bilingual education for three years or until they were considered able to transition to English-
only instruction. The State Board of Education was also charged with developing regulations for certifying qualified bilingual teachers.

*House Bill 1126*

After the 64th Texas Legislature convened in January of 1975, four bills on bilingual education were introduced. The only bill to receive support from TEA was Senate Bill 96 because of its emphasis on the establishment of bilingual kindergarten and bilingual education service centers. In an effort to get S.B. 96 passed, an amended version was attached to House Bill 1126, a public finance bill, which was passed on June 1, 1975. The portion of H.B. 1126 that pertained to bilingual education (only one paragraph) mandated bilingual education programs for kindergarten through second grades for the upcoming school year, and expanded bilingual education to third grade for the following school year. However, the bill also made bilingual instruction optional for fourth and fifth grades—a move that many bilingual education advocates considered to be a step backward from the previous legislation (e.g., San Miguel, 1987). In addition to this change, the bill placed the responsibility of funding bilingual education beyond fifth grade on the school districts.

*Senate Bill 477*

In January of 1981, Federal District Judge William Justice issued his memorandum opinion for the *United States v. State of Texas* case, in which he declared that the state had violated the constitutional rights of Mexican-American students with respect to the Fourteenth Amendment and Equal Educational Opportunity Act (1974) because Texas, through its policy, had failed to take the necessary measures to ensure discriminatory practices were eliminated in its public schools. Texas was charged with developing a comprehensive plan to remedy the
situation by addressing four key issues: (a) program coverage and content, (b) identification of limited English proficient students, (c) program exit criteria, and (d) program monitoring and enforcement of the policy (U.S. v. Texas, 1981).

Legislation was drafted to meet Judge Justice’s guidelines and the governor-appointed Task Force on Bilingual Education’s recommendations (San Miguel, 1987; Vega, 1983). S.B. 477, which was passed on June 1, 1981, after considerable debate and negotiation, expanded mandated bilingual education to fifth grade and provided choices of bilingual or ESL programs for language support for sixth through twelfth grades. This extensive bill, at just over 18 pages, amended Chapter 21, Subchapter L of the Texas Education Code, by updating terms and definitions, and expanding and clarifying program content and requirements.

More specifically, S.B. 477 required the State Board of Education to establish criteria for the identification, classification, and assessment of students considered “limited English proficient (LEP).” Also, up to 40% of the students in the bilingual program could be non-LEP students. Recruitment and preparation of certified bilingual teachers were addressed in the bill, which also mandated measures for monitoring program implementation. School districts were also required when seeking exemptions from the law to provide documentation of an inability to hire qualified certified bilingual teachers.

*Senate Bill 467*

During the 77th Legislative session in 2001, Senate Bill 467 was introduced and passed. Unlike the other bills in this study, which amended the TEC under what is now Chapter 29 for Educational Programs, this bill was designed to amend Chapter 28 of the TEC, pertaining to Courses of Study. S.B. 467 authorized the adoption of dual language immersion programs,
which are programs in which students in elementary school grades, regardless of home language, receive instruction in both English and another language for the purpose of gaining mastery of the curriculum in both languages (Cloud, Genesee, & Hamayan, 2000; Lindholm-Leary, 2001; Ramirez, 1992; Thomas & Collier, 2002). The bill, passed on May 23, 2001, charged the Commissioner of Education with determining requirements for district implementation of dual language immersion programs and standards for evaluating the programs and recognizing successful programs.

**Approach to the Study: Frame Analysis**

My approach to the study was frame analysis, in which I attended to the representations of the problems and solutions as represented by the five bills. Particularly relevant to my study is Entman’s (1993) claim that frames define problems and proposed solutions, and at the level of policy-making, framing is important because the way the problem is framed determines which solutions are included and which are excluded. Policy documents, as Entman (1993) has argued, are communicated “in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described” (p. 52). Expanding on Entman’s definition, Verloo (2005), whose research has influenced my study, has defined a policy frame as “an organizing principle that transforms fragmentary or incidental information into a structured and meaningful policy problem, in which a solution is implicitly or explicitly enclosed” (p. 20). This type of analysis should include attention on explicit frames, cued explicitly by the language of the policy, as well as implicit frames, which tend to represent hidden values or agendas because, as pointed out by Yanow (2000), “that which is highlighted or included is often that which the framing group
values.” The work of these scholars is based on Goffman’s (1974) concept of frames as interpretive constructs of reality—a notion that is central to the study, as is Wodak’s (2006) claim that frames are complex, socially, ideologically, and even cognitively embedded.

Benford and Snow (2000) have identified two key aspects of policy framing: diagnostic framing, which identifies the problem and, in doing so focuses on some aspects of the problem while ignoring others, and prognostic framing, which includes offering a solution to the problem and determining all the people, actions, and means necessary for problem-solving. Verloo (2005), who built on the work of Benford and Snow, developed a template that includes the following elements: diagnosis of the policy problem, prognosis of the policy problem, roles attributed to various actors, and ideology, or voice, associated with the actors.

Following Verloo’s framework for comparative analysis, I attended to the representations projected, both explicitly and implicitly, of the problems surrounding the issue of language of instruction and the solutions offered as a means of illuminating the claims made in the policy discourse and discerning the ways in which the policy discourse has changed over time. My attention was thus on diagnostic and prognostic framing. For Verloo’s category labeled voice, I employed the label ideology because her description of voice as representative of a collective perspective of an “institution,” often in power, closely resembled the concept of ideology. Especially important to the latter were Gramsci’s (1975/1996) ideas on hegemony as I considered my approach to the concept of ideology in the policy documents. Because those who author and vote on legislation are in a position of authority, Gramsci’s notion of ideological hegemony, or the dominant worldview perpetuated by those in power and accepted by the rest
of society, is particularly relevant. His thoughts on hegemony relate to the extent to which ideologies found in policies permeate society. Gramsci explained that

ideologies come into contact and confrontation with one another, until only one of them—or at least, a single combination of them—tends to prevail, to dominate, to spread across the entire field, bringing about, in addition to economic and political unity, intellectual and moral unity, not on a corporate but on a universal level: the hegemony of a fundamental social group over the subordinate groups. (p. 180)

Tollefson (2013) has made this point: that policy and ideology have “crucial connections” that must be explored (p. 3). Also important to this inquiry was a look into the relationship between these policy documents and other discourses and/or policies.

Analyses of the five policies were followed by a comparative analysis. This comparative analysis across policies relates to Bernstein’s (1990) concept of recontextualization, which refers to the delocation and relocation of social practices and texts associated with them into new contexts and the changes that occur during this process. Also relevant is Wodak and Fairclough’s (2010) extension of Bernstein’s work as they study recontextualization as the practice of adopting language (in the form of words, phrases, or even style) from one text and incorporating it into a new, related text. Fairclough (1992) has pointed to intertextuality as the way in which texts are linguistically and contextually connected to other texts. A policy is intertextually related to other policies (cf. Bakhtin, 1981).

In sequential order, each bill was compared to the bills previously passed to see how framing changed over time. Special attention went to language “carried over” from one policy document to another, since, in accordance with my interest in recontextualization, I wanted to see which wording was retained over time and which wording changed as new bills were introduced. Additionally, I consulted relevant federal policies, such as the ESEA and its various
reauthorized versions, for evidence of recontextualization through repeated words and phrases. I also accessed the National Education Association (NEA) Recommendations and Texas Education Agency (TEA) Legislative Recommendations documents for this portion of the study. Following Van Leeuwen’s (2008) ideas on recontextualization chains, I looked at ways in which the discourse surrounding bilingual education, manifested in a variety of texts, both policy and other related documents, influenced the development of the bills I analyzed. Keeping Van Leeuwen’s types of transformations in mind, I noted substitutions, deletions, additions, and rearrangements that took place during the recontextualization process.

Policy Frames on Bilingual Education in Texas

For the discussion of framing in the selected policy documents regarding bilingual education in Texas, I first present my analysis of each individual bill. Attention is then given to comparisons across the policy documents as well as evidence of recontextualization.

*House Bill 103*

Diagnostic Framing

For House Bill 103, a problem is not explicitly stated. In this bill, passed in 1969, emphasis is placed on the prognosis, with no explicit attention given to the diagnosis. A “problem” is, however, implied by its very title of the legislation: “an Act Requiring that English Shall Be the Basic Language of Instruction in All Grade Schools.” The implication, of course, is that English is not currently the “basic language of instruction” in all grade school contexts. In a sense also the problem is implied by the solution presented: to use bilingual education to move non-English speakers to English. This emphasis on solutions with scant attention to the problem addressed is not unusual for legislation because policy documents tend to focus on articulation
of the proposed actions. Discussion of the problem and the need for legislative action takes place in a variety of forums amongst groups who support the efforts prior to the presentation of the bill. Although diagnostic statements do exist in some policy documents, the lack of an explicitly stated problem in H.B. 103 is characteristic of most legislation.

Prognostic Framing

Bilingual instruction is the stated solution for helping students who are not proficient in English to master the language, which is the ultimate goal, and to help students learn because “the use of language the child understands makes learning easier” [§5. (1969)]. It is important to note extensive hedging: that bilingual instruction is permitted, not mandated, and is limited solely to situations in which it is “educationally advantageous” to the students. Hedging is a rhetorical device often used to avoid commitment or to be purposely vague, especially when dealing with controversial topics (e.g., Van Dijk, 2000). There is no mention of bilingual education for the sake of developing biliteracy or maintaining the home language. Proponents of bilingual education were treading lightly with this bill—using “baby steps,” in a sense—by first repealing the penal code and permitting bilingual instruction, but not trying to mandate bilingual education.

Power is given to the governing board to “determine when, in which grades and under what circumstances instruction may be given bilingually” [Sec. 1.(1969)]. However, districts are restricted to offering bilingual instruction through the fifth grade and no funding from the state is allotted from the passing of this bill for districts that choose to implement bilingual programs. Without funding for programs, school districts have no incentive for providing bilingual instruction.
Ideology

“English shall be the basic language of instruction in all schools” [§1. (1969)] and it is “the policy of this state to insure the mastery of English” [§2. (1969)]. These quotations from the introductory paragraphs of the bill clearly signal the monolingual English ideology that has been much discussed and critiqued (e.g., Ricento, 1995; Schmidt, 2006; Wiley & Lukes, 1996), and sometimes referred to as “English-only.” A monolingual English ideology in a society like the U.S., in which there are people who speak other languages besides English, is manifested in policies that promote rapid transition to English monolingualism and the abandonment of the home language (Wiley & Lukes, 1996). This has been the dominant political ideology in the U.S. since the inception of World War I, when widespread xenophobia influenced a shift from a multilingual to a monolingual society through various language policy initiatives (e.g., Crawford, 1992; Spolsky, 2004). The statements from H.B. 103 support the perspective of English as the preferred language in Texas and in Texas schools.

A major ideological contradiction is apparent within the text of the bill. The majority of the wording projects a monolingual ideology with the solution of bilingual instruction serving the purpose of facilitating the mastery of English (a priority), which is stated as the “basic language of instruction.” However, the final section of the bill hints at linguistic and cultural pluralism with claims that “knowledge of languages and understandings of other peoples and where in this hemisphere Spanish is spoken by as many people as speak English, a second language becomes vitally important” [§5. (1969)]. After reading this section of the bill, one’s reaction might be: A second language for whom? Are the authors saying that it is only “vitally important” for Spanish-speaking students to know a second language (English) or are they...
suggesting that English-speaking students should also learn Spanish? The type of bilingual instruction proposed by the bill, in which the home language is used for the purpose of assimilating to English-only instruction, is in direct conflict with a pluralistic idea of gaining an understanding of other people and languages. On the other hand, the final section, through this counter-hegemonic language, suggests a more pluralistic view.

*Senate Bill 121*

Diagnostic Framing

Senate Bill 121, passed in 1973, presents the problem that “public school classes in which instruction is given only in English are inadequate” because “there are large numbers of children in the state who come from environments where the primary language is other than English” (§21.451.). This statement of the “problem” implies that English-only monolingualism is considered the norm in the U.S., and there is cause for concern that such a large number of students deviate from the norm (cf. Wiley & Lukes, 1996).

Prognostic Framing

The solution to this problem is seen as the establishment and funding of mandated bilingual education programs that can facilitate students’ transition into the “regular school curriculum.” This phrase, “regular school curriculum,” refers to the English mainstream classroom curriculum, which is considered the norm. Priority is given to the mastery of English as quickly as possible through the use of home language. Although not explicitly stated in the policy, this was the birth of early exit transitional bilingual programs in Texas because they were the programs most often supported by funding from Title VII (cf. Baker, 2011). These programs are designed to provide some initial literacy and content instruction in Spanish with the
purpose of transitioning to English-only instruction as quickly as possible (e.g., Rennie, 1993). S.B. 121 does mention the inclusion of instruction “in the comprehension, speaking, reading, and writing of the native language of the children of limited English-speaking ability who are enrolled in the program” [§21.454.(a)(2)(1973)] in addition to literacy instruction in English. Early exit transitional bilingual programs are considered subtractive because the ultimate goal is English monolingualism (Ovando, Collier, & Combs, 2002; Snow & Hakuta, 1992).

However, concessions are made for the continuation of bilingual instruction after three years with approval from district and parents if students are “still handicapped by an inadequate command of English” [§21.455.(c)(1973)]. This use of the word *handicapped*, along with references to transitioning to “regular curriculum” and students’ “limited ability,” are examples of deficit language and point to ways in which bilingual education is framed as a form of remedial education. Learning English is seen as good and the ultimate goal. “Ordinary classwork” and “regular curriculum” refer to mainstream English classroom pedagogies, which are considered the norm, whereas bilingual education and pedagogies associated with it deviate from the norm. Heath and Mangiola (1991) have opposed this type of reductive thinking that can result from focusing on cultural and linguistic differences. They argued that, instead of thinking just in terms of differences, educators should view children of diverse backgrounds as “offering classroom 'expansions' of background knowledge and ways of using language” (p. 17).

**Ideology**

With respect to “the educational needs of children of limited English-speaking ability,” the bill mentions “equal opportunity to education for every child”—a phrase that implies that
bilingual education is a civil rights issue. A friction exists here with respect to rights because the languages Texas children bring to school are seen as not equal: knowing Spanish is viewed as a deficit, not as an asset, in accordance with the ideology undergirding prior legislation. The use of deficit labels like “children of limited English-speaking ability” in policies focuses on what children lack in the second language and disregards the proficiency they have in the first language (e.g., Macedo, Dendrinos, & Gounari, 2000; Macías, 1994; Wiley & Lukes, 1996). Entering a bilingual program is considered a means of correcting a problem by using the “inferior” language to learn the desirable language, which is another example of the monolingual English ideology. As Baker (2011) has commented, the home language is simply used as a vehicle to achieve English proficiency. In other words, the home language is used for instructional purposes long enough to transition to English with no effort to maintain literacy skills in the language that connects these children to their culture and identity (e.g., Macedo, Dendrinos, & Gounari, 2000).

An aspect of the bilingual program content section of the bill includes instruction of the “history and culture associated with the native language of the children of limited English-speaking ability who are enrolled in the program, and in the history and culture of the United States” [§21.454.(a)(3)(1973)]. The assumption here is that the culture of the native language and the culture of the U.S. are mutually exclusive. As Wiley and Lukes (1996) have contended, within a monolingual ideology “language diversity is viewed as imported” (p. 519) and English acquisition is equated with Americanization and patriotism.
Diagnostic Framing

Due to the scant attention given to bilingual education in House Bill 1126, articulation of framing is limited. The “problem” suggested in the first sentence of item b, points to the fact that not all school districts offer bilingual education when there are numbers of students who do not speak English. Included would be “each school district which has an enrollment of 20 or more children of limited English-speaking ability in any language classification in the same grade level during the preceding scholastic year, and which does not have a program of bilingual instruction which accomplishes the state policy of facilitating integration into the regular school curriculum” [§21.453.(b)(1975)].

Prognostic Framing

The portion of this bill pertaining to bilingual education amends the education code, particularly with respect to prognosis. With the addition of this bill, passed in 1975, the solution involves the mandated inclusion of bilingual education in kindergarten, but makes fourth and fifth grades optional. Bilingual education in the later years is again viewed as a remedial education option for students who “have not progressed sufficiently to participate in the regular school curriculum” [§21.453.(b)(1975)]. Encouragement for acquisition of English in the early grades even has a financial incentive. Expense for any programs beyond the fifth grade would have to be covered by the school district itself.

Ideology

The changes with H.B. 1126 result in a shift from mandating bilingual education in first through sixth grades to mandating bilingual education in grades kindergarten through third.
During this legislative session, four bills relating to bilingual education were introduced, two of which were innovative initiatives mandating bilingual education for kindergarten through sixth grade. These bills, based on a more pluralistic ideology, promoted literacy in both English and Spanish for English proficient student participation along with English language learners. However, neither bill made it out of the subcommittee, and one of the bills with monolingual English ideology that restricted bilingual education to third grade advanced instead (Vega, 1983). This is another attempt at pluralism that was overcome by the more dominant monolingual English ideology.

Senate Bill 477

Diagnostic Framing

The diagnostic statement in S.B. 477 (1981), that “public school classes in which instruction is given only in English are often inadequate” [§21.451. (1981)] for students who come to school speaking a language other than English, is retained from S.B. 121. However, children who were previously referred to as having “limited English-speaking ability” in S.B. 121, are now considered “limited English proficient” in S.B. 477. This change is important because, legally, this is a label still used today to classify students who are enrolled in bilingual programs or other language support programs.

Prognostic Framing

Senate Bill 477 mandates bilingual education and special language programs for kindergarten through fifth grades. These programs are seen as the solution to the problem of inadequate English-only instruction because they will “facilitate [the] integration into the regular school curriculum” and meet the state education goals of effectively participating in
school, which requires “the mastery of basic English language skills” [§21.451.(1981)]. These priorities in goals remain intact with S.B. 477. All mention of reading, writing, speaking, and comprehending in the primary language is removed with this bill and replaced with the words “basic skills” which indicates a lack of focus on literacy development or maintenance in the primary language.

Heavy focus is placed on attribution of roles. Due to the federal intervention, power shifts from local school districts to state entities are apparent. The state legislature, as the main governing body, directs the State Board of Education to adopt standardized criteria for districts to identify and classify students eligible for bilingual education and authorizes the establishment of campus committees for the placement and monitoring of students in such programs. TEA is charged with overall program monitoring to ensure school districts’ compliance with the law, although authority is given to local school districts to implement limited pilot programs to examine “alternative methods of instruction in bilingual education” [§21.454.(f)(1981)]. While not fully explicit, this wording opened the door for dual language immersion programs.

Ideology

The monolingual English ideology is retained with the opening statement that “English is the basic language of the State of Texas” [§21.451. (1981)]. However, there is a difference: This differs from previous bills as it expands beyond the classroom to the entire state. One should note that English is being projected not only as the language of instruction, but the language of Texas. In terms of language policy, there is no official language at the federal level in the United States, nor at the state level in Texas, although there have been numerous legislative
initiatives to make English the official language at both levels. These initiatives are known as the “English Only” movement (cf. Crawford, 2000). In a sense, the wording in S.B. 477 is the closest Texas has to an official state language.

With the inclusion of the provision for pilot programs, space is created to explore “alternative methods of instruction in bilingual education” [§21.454.(f) (1981)]. This addition signals the emergence of another ideology of a pluralist view of language, with the possibility for the development of dual language immersion programs, which are considered additive (Cloud, Genesee, & Hamayan, 2000; Lindholm-Leary, 2001; Ramírez, 1992; Thomas & Collier, 2002).

*Senate Bill 467*

Diagnostic Framing

Senate Bill 467 amends a different chapter of the TEC than the other selected bills. By allowing pilot programs, S.B. 477 opened the door for dual language programs. The problem implied by the bill title is that the existing rules need to be reviewed and specified in order to “produce” students with mastery in English and another language.

Prognostic Framing

The solution presented is the authorization for districts to “adopt a dual language immersion program for students enrolled in elementary school grades” [§28.005.(c) (2001)]. Much like H.B. 103 in 1969, this bill gives permission for dual language immersion programs but does not mandate them. Along with transitional bilingual programs, dual language immersion programs are among the types of bilingual programs districts may select to implement once they meet the criteria that require them to offer bilingual education. Although the title suggests
a review of the rules, which were laid out on the version of the bill that was introduced to the Senate, the enrolled version of the bill focuses on attribution of roles. Authority is placed on the Commissioner of Education to adopt requirements for dual language immersion programs as well as standards for evaluating the programs. The Commissioner is also authorized to adopt standards for “recognizing schools that offer exceptional dual language immersion programs” [§28.0051.(b)(2)(A) (2001)] and “students who successfully complete a dual language immersion program” [§28.0051.(b)(2)(B) (2001)] but no indication is given as to what is meant by “exceptional” or “successfully.” This legislation makes frequent use of collocated evaluative terms like standards, performance, mastery, exceptional, and success.

Ideology

A friction exists in the introductory subsection of the bill in which the reader is reminded that English is still the “basic language of instruction” except within the confines of dual language immersion programs, which, according to the bill, are designed for the “mastery, in both English and one other language, of the regular curriculum” [§28.0051.(a) (2001)]. Overall, a monolingual ideology is still projected despite allowing for spaces in which bilingualism and biliteracy may be fostered.

Within this small space, however, an alternative ideology is emerging. Proponents of dual language immersion programs aim for pluralism in the educational system and society as a whole (e.g., Baker, 2011). This is evident in the promotion of an additive view of bilingual education through the development of biliteracy and bilingual skills for all students involved regardless of home language (cf. Baker, 2011; Cloud, Genesee, & Hamayan, 2000; Lindholm-Leary, 2001; Ramírez, 1992; Thomas & Collier, 2002). This cross-cultural component (sometimes
called enrichment bilingual education), emphasizes intercultural understanding and respect through collaborative learning environments, thereby positioning all children as language models and second language learners and communicating a pluralistic view (Lindholm-Leary, 2001).

Comparisons

Each individual policy document provides insights into the framing of bilingual education at a particular point in Texas’s recent history. However, a comparative analysis of the policies offers a different perspective, the opportunity to consider what these policies collectively represent and how changing times and circumstances affected their wording and the messages of the policies.

Diagnostic framing across all documents presented the problem as inadequate instruction for English language learners (ELLs). Major descriptors in this framing included inadequate English-only instruction, unequal educational opportunities, and unrecognized educational needs. Also consistently projected in all documents is a monolingual English ideology. Statements such as “English is the basic language of instruction in Texas schools” and that it is the “policy of the state to insure the mastery of English” support a perspective of English as the preferred language in Texas and Texas schools. With the wording change in S.B. 477 to “English is the basic language of Texas,” the bill assumes a language policy that does not officially exist in Texas. Almost all of the policy documents make reference to the cause underlying the problem of inadequate instruction for ELLs. This problem is connected to a growing population of students who come from homes where languages other than English are dominant. This point was most strongly made in S.B. 121 and S.B. 477. An ongoing debate
among political scientists is the extent to which state ideology remains consistent over time (e.g., Berry, Ringquist, Fording, & Hanson, 1998; Brace, Arceneaux, Johnson, & Ulbig, 2004; Erikson, Wright, & McIver, 1993; Wright, Erikson, & McIver, 1985). It seems that, with respect to language ideology, there has been much consistency from 1969 to 2001.

More variability can be seen in the prognostic framing of solutions particularly when bills are viewed over time. The earliest bill (H.B. 103) established bilingual education, with a focus on transitioning students to English-only instruction, or what is referred to as “regular curriculum.” Subsequent bills changed from the authorization of instruction in languages other than English to the establishment of mandated bilingual programs, to the extension of special language programs, and to the establishment of dual language immersion programs. Each subsequent policy, with one exception, builds upon what constitutes the bilingual and special language programs, but maintains the emphasis on transitioning students to mainstream English classrooms. The exceptions, of course, are the dual language immersion programs, which were permitted through S.B. 467.

Another change through prognostic framing has to do with authorization of roles. In the early bills, particularly H.B. 103 and S.B. 121, authority is given to the local school districts for determining how many students are considered ELLs and if bilingual education is warranted. Increased state presence (State Board of Educators and TEA) for classification of students, the determination of program needs, teacher preparation and certification, and program monitoring is evident with the passage of S.B. 477, which was the result of pressure to comply with the federal laws. A notable shift in power occurs as the state takes more decision-making control from the local districts. This power shift coincided with state entities gaining more
control from local school districts in other areas of education in the 1980s (e.g., Hodgkinson, 1986).

The learning of English and participation in the “regular curriculum” are viewed as the ultimate goal across all policy documents, given the prominence of the monolingual English ideology. Proficient English-speaking students are considered the norm, and students coming to school with knowledge of another language are considered to be in need of educational programs that will assist them in assimilating to that norm. However, ideological conflict was manifested in claims regarding the status of English relative to other languages. Policy documents included recontextualized claims that English should continue as the basic language of Texas and of instruction in all Texas schools. At odds with that claim was the statement regarding the vital importance of knowing another language in an increasingly connected world. Then, later bills, (S.B. 121 and S.B. 477) give great emphasis to equality when they mention equal educational opportunity for ELLs. The reference to equality does not extend to languages because not all languages are viewed as equal; throughout legislation, English is privileged. Bourdieu (1977) has claimed that “linguists are right in saying that all languages are linguistically equal; they are wrong in thinking they are socially equal” (p. 652). It would appear that languages are not politically equal either. The TEC states that English is the basic language of instruction and suggests that bilingual education, with the exception of dual language immersion programs, is a means of using a less desirable language to gain mastery of the desirable language. Moreover, even S.B. 467, which authorizes dual language immersion programs, begins with a statement proclaiming English as the basic language of instruction with the exception of the programs designed to develop bilingualism and biliteracy.
Changes in Wording

Evidence of wording that changed over time in the policy documents includes the shift from the use of “children of limited English-speaking ability” to “students of limited English proficiency.” The phrase “native tongue” was replaced with “primary language” and “children” were later referred to as “students.” These changes coincided with changes in such labels that were occurring at the national level in various policies. The changes in the wording of S.B.477, for instance, mimicked the word changes that occurred in the reauthorization of Title VII of the ESEA. Power dynamics are apparent in wording, particularly with respect to deficit views of language, such as referring to English language learners as being “handicapped by an inadequate command of English” (§21.455.c, 1973). The labels and other descriptive phrases used in the policy texts have evolved over time from offensive (“children of limited English-speaking ability”) to slightly less offensive (“students who are limited English proficient”), yet still focus on what the students lack in English rather than the proficiency in the other language(s) they bring to school. According to Escamilla and Hopewell (2011), even the most “politically correct” term, English language learner, suggests a privileging of English: “children are routinely labeled ELL as if learning English is their single most (or only) defining characteristic. It communicates an assimilationist outlook and the desire to mask the[ir] vast linguistic, cultural, and national diversity” (p.18).

Although several word and phrasing changes occurred as new bills were introduced, one key phrase was retained over time. The introductory phrase in H.B. 103 stating that “English shall be the basic language of instruction in all schools” (§1., 1969) has been retained with very little variation since 1969, despite the passage of S.B. 467 authorizing dual language immersion
programs. With the retention of this wording, the monolingual English ideology has remained firmly in place.

Recontextualizations

In this section, I present the recontextualization of ideas, words, and phrases from various policy and other related documents to the bills analyzed in this study. The highlighted documents are not the only texts that impacted the development of the bills, but I chose to focus on these important documents because they are among the most influential (Blanton, 2004; San Miguel, 2004; Vega, 1983).

**NEA – Tucson Recommendations (1966)**

The National Education Association published a report in 1966 addressing the negative impact of traditional school policy and practices on Mexican-American students and challenging some of the prevailing views on why these students were struggling in the education system (e.g., San Miguel, 2004). That same year, planning conferences were held throughout the southwest, where educators, policymakers, and researchers came together to discuss solutions to the problems. Senator Yarborough from Texas, one of the key legislators of the BEA, attended this conference and began authoring the bill shortly thereafter. Recommendations from the survey committees at each conference were included in the final report.

This document influenced the development of not only Title VII of the ESEA but also of two Texas bills, H.B. 103 (1969) and S.B. 121 (1973). Its effect on the development of H.B. 103, however, was rather limited. Its ninth recommendation was to repeal any laws “which specify English as the language of instruction” and any laws that “outlaw the speaking of Spanish except in Spanish classes should be repealed,” (p. 178). H.B. 103 did follow the latter part of
the recommendation by repealing the penal code, which prohibited the use of languages other than English for instructional purposes, but did not follow the first. In this way, the recommendation to repeal all laws projecting monolingual ideologies was substituted with a statement in the bill that simply repealed the law prohibiting the use of languages other than English.

Evidences of three of the NEA Tucson Survey Committee’s recommendations are present in Senate Bill 121. Hints of the first recommendation, that “instruction in pre-school and throughout the early grades should be in both Spanish and English” are found in S.B. 121, which mandates offering bilingual instruction in first through sixth grades even though the policy states students should only receive bilingual instruction for three years. The second Tucson recommendation, advising that “English should be taught as a second language” (p. 177), is a stated priority in S.B. 121. Finally, the eighth recommendation is for school districts to “look to the possibility of financing [bilingual programs] under new federal programs and in some cases state compensatory education programs” (p. 178) is followed in S.B. 121, which allocated funds for the establishment of bilingual programs.

Here it seems that ideas on bilingual education were recontextualized from a document on program recommendations offered by a national education organization to a state bill. Although many of the recommendations in the NEA document were excluded from the policy text and would thus be considered deletions in the recontextualization process, a few ideas were carried over with some modifications.

*Title VII (1968)*

As previously mentioned, Title VII of the ESEA was the catalyst for state bilingual
The influence of Title VII (1968) is most apparent in S.B. 121 (1973), particularly with word choice. References to “children of limited English-speaking ability” are made in both policy documents. In Title VII (1968), “children of limited English-speaking ability” are defined as “children who come from environments where the dominant language is other than English” (20 U.S.C. §702). Although the reference group of children is defined differently in S.B. 121, a similar phrase is found in the opening statement of the state bill which reads: “The legislature finds that there are large numbers of children in the state who come from environments where the primary language is other than English” (§21.451, 1973).

Title VII (1968) includes a list of educational programs that qualify for grant funding, one being programs “designed to impart to students a knowledge of the history and culture associated with their languages” (20 U.S.C. 881-886 §704, c, 2). The authors of S.B. 121 incorporated this element into the program content section of the bill by establishing that one aspect of the bilingual education program includes instruction of the “history and culture associated with the native language of the children of limited English-speaking ability who are enrolled in the program, and in the history and culture of the United States” (§21.454.a.3, 1973). The inclusion of the U.S. history and culture component is an example of what Van Leeuwen (2008) refers to as an addition in the recontextualization process. In this case, recontextualization takes place between two texts of the same genre, but because one policy document, Title VII is at the federal level and the other, S.B. 121, is at the state level, they have very different contexts.

*TEA Recommendations (1968)*

Prior to the development of state bilingual education policy, TEA submitted formal
recommendations for legislative consideration. Recontextualization of the TEA recommendation document to H.B. 103 (1969) is a key example of how the *deletion* and *rearrangement* of ideas can lead to an end product that differs from the original intent. Prior to outlining the formal recommendations, the TEA document’s introduction summarizes the agency’s stance on bilingual education. Of this introduction, there are two sections in which partial statements are carried over into H.B. 103. The first section states that “instruction in the earlier years which includes the use of the language the child understands makes learning easier. As the basic skills are mastered in Spanish, the teaching of English can proceed, and true bilingualism can develop” (p.39). Only the first sentence is included in H.B. 103 and no mention is made of the development of true bilingualism.

The following section of the TEA document reads:

In this highly technical and scientific world where transportation and communication have literally reduced the size of the world, knowledge of languages and understandings of other peoples are very important. With Spanish as the language spoken in this Hemisphere by as many people as speak English, a second language becomes vitally important. Texas has an opportunity to see that every child has this second language—English for the Spanish speaker; Spanish for the English speaker. (p. 39)

This section is copied verbatim into H.B. 103, with the exception of the final sentence, which proposes bilingualism for all students. This omission is very significant. TEA is sending one message, and the legislature is sending another by leaving off that one sentence.

The formal TEA legislative recommendations include a statement making English the basic language of instruction and giving authority for bilingual program decision-making to local school district governing boards. The final recommendation pertains to the policy of the state in ensuring the “mastery of English by all pupils” and providing bilingual instruction when “educationally advantageous” and when it does “not interfere with the systematic, sequential,
and regular instruction of all pupils in the English language” (p. 39). All of the formal recommendations were adopted into H.B. 103, with little to no variation. Certain statements were selected from the TEA recommendations document and recontextualized in H.B. 103, resulting in two documents with similarly embedded statements but with very different messages.

*Title VII (1978)*

The 1978 reauthorized version of Title VII brought many changes to bilingual education programs and, in turn, influenced policy at the state level in Texas. One notable change, which was discussed earlier, was the shift from referring to children with “limited English-speaking ability” to “students with limited English proficiency.” This change in terminology was carried over to S.B. 477 (1981), which extensively amended the TEC. In addition to the wording change, Title VII (1978) influenced S.B. 477 in other ways. The federal policy expanded its emphasis on English proficiency beyond verbal skills to include “the development of reading, writing, and speaking skills, in the English language and the language of their parents or grandparents” (20 U.S.C. 3261 §751, 1, A). This influence is seen in the wording of S.B. 477, which states: “Public schools are responsible for full opportunity for all students to become competent in speaking, reading, writing, and comprehending the English language” (§21.451, 1981), but reference to literacy development in the home language is omitted.

Title VII (1978) also allows for the inclusion of English proficient students in bilingual programs, which, for the first time, is a provision in state legislation in S.B. 477. The state bill mirrors the exact percentage (no more than 40%) allowed by the federal law for English proficient students in a bilingual program.
Conclusion

The most central elements in frame analysis are diagnostic and prognostic frames. As maintained by Entman (1993), the way in which problems are framed determines which solutions are considered and which are excluded from consideration. The problem presented by the bills in this study was consistently framed over time as inadequate instruction for children who come to school speaking languages other than English. One can also infer the implicit “problem”: that there are children in the schools who speak languages other than English. For solving the problem of how best to educate these students, slight variations in prognostic framing were evident, but as Yanow (2000) has claimed, what is included in the framing of policy is what is valued. What is valued in these policies is a rapid transition to English.

Even though a more enlightened view hinting at pluralism was expressed in H.B. 103, that statement was excluded from subsequent policy statements and has essentially dissipated. And although space has been created for alternative solutions through the adoption of dual language immersion programs, the overarching monolingual English ideology, with an emphasis on transitional programs, is presented in the policies with little variation. This is reminiscent of other discussions, mentioned earlier, about changes in state political ideology over time and whether these changes are significant or simply “noise” (Brace, Arceneaux, Johnson, & Ulbig, 2004). As Tollefson (2006) reminds us, “policies often create and sustain various forms of social inequality” and “policy-makers usually promote the interests of dominant social groups” (p. 42).

Through the framing of bilingual education in the policy texts, a major claim was made. Many children in Texas come to school with languages other than English, but the priority in
school is for them to become fully proficient and literate in English, whether or not they maintain these skills in the home language. Bilingual education, with the exception of dual language immersion programs, is seen as a remedial program designed to fix the problem of students coming to school without the language skills needed to effectively participate in the educational system. This claim projects a deficit view of languages other than English as well as a deficit view of those people who speak languages other than English, and it presents bilingualism and bilingual education as means of remediating the deficit (Wright, 2005). Labels and phrases used throughout the policy documents in reference to students who speak languages other than English reinforce this deficit view. Language is being used to make distinctions among social groups, and the distinctions help perpetuate the hegemony of the dominant group.

The primary ideology influencing the policy documents was the monolingual English ideology. Macedo and colleagues (2000), influenced by the ideas of Gramsci (1975/1996), pointed to the interlacing of language and culture and argued that, despite the various debates over bilingual education and Official English laws, language policy in the U.S. is a manifestation of linguistic and cultural hegemony. Also drawing on Gramsci, Apple (2004) has discussed the role of the education system in perpetuating a certain ideology by promoting “legitimate knowledge” that is associated with particular groups that have political and economic power. Furthermore, it has been argued that as a process of standardization, English assimilation ideologies and policies in schools marginalize and devalue students of minority languages (Lippi-Green, 1997; Macedo, Dendrinos, Gounari, 2000). González (2000), when speaking of the official language movement, made an important point relevant to these policies: that, through
emphasizing integration and unity, they offer a “quasi-respectable” ideology that gives legitimacy to discrimination against minorities.

However, there is space for alternative ideologies and this is evident in the policies that allow for dual language immersion programs. The beginning of this article situated Texas within the context of other states in the southwest U.S. Although the programs in Texas are not as extreme as the English-only programs found in California and Arizona, they are not as progressive as New Mexico with its biliteracy and heritage language maintenance programs. Texas has options for further developments in the field.

This study, with its attention on the framing of bilingual education policy in Texas, provides insights into how the perceived problems and proposed solutions (and their guiding ideologies) regarding bilingual education affect the type of instruction provided to students at the local level. Additionally, addressing the contradictions within and across the policy documents is important for continuing the dialogue about the value placed on languages spoken by students.

References


http://www.lrl.state.tx.us/legis/BillSearch/text.cfm?legSession=61-0&billTypeDetail=HB&billNumberDetail=103&billSuffixDetail=&startRow=1&IDlist=&unClicklist=&number=100.

Texas H. Bill 1126, Session 64, (1975) (enacted).
http://www.lrl.state.tx.us/legis/BillSearch/BillDetails.cfm?legSession=64-0&billTypeDetail=HB&billNumberDetail=1126&submitButton=Search+by+bill.

Texas S. Bill 121, Session 63, (1973) (enacted).
http://www.lrl.state.tx.us/legis/BillSearch/BillDetails.cfm?legSession=63-0&billTypeDetail=SB&billNumberDetail=121&submitButton=Search+by+bill.

http://www.lrl.state.tx.us/legis/BillSearch/BillDetails.cfm?legSession=67-0&billTypeDetail=SB&billNumberDetail=477&submitButton=Search+by+bill.

http://www.lrl.state.tx.us/legis/BillSearch/BillDetails.cfm?legSession=77-0&billTypeDetail=SB&billNumberDetail=467&submitButton=Search+by+bill.


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IMPLEMENTATION OF BILINGUAL AND ESL EDUCATION POLICY AT THE DISTRICT LEVEL IN TEXAS: GEOGRAPHIC AND ETHNIC VARIATION

Abstract

Texas education law provides school districts six options for approaching the education of its numerous students who are learning English. These include early exit transitional, late exit transitional, one-way dual language, two-way dual language, as well as two English as a second language (ESL) programs. The study reported here employed geographic information systems (GIS) analysis to investigate the geographic locations of particular programs and the demographics of students served by each. Choropleth maps showed the geographic distribution of bilingual and ESL programs in Texas, with patterns indicating that districts with high percentages of student enrollment in one-way dual language programs tend to be located in and near the major metropolitan areas, whereas many of the school districts along the Texas-Mexico border tend to offer early exit transitional bilingual programs. Despite the literature on bilingual/ESL program effectiveness, the most predominant program in the border region of Texas is among the least beneficial to English language learners (ELLs).

Introduction

Texas presents an interesting case for a study of language policy implementation. Of all states in the United States, Texas offers the greatest variety of pedagogical options for its students who are English language learners (ELLs). They include early exit and late exit transitional bilingual education, one-way and two-way dual language immersion, and English as a second language (ESL) programs. Many districts offer only one form, although some offer more than one and a few offer all. In Texas, which has large numbers of students who are not
fluent in English, language of instruction policy has seen a number of shifts as state administrators, policymakers, and educators have debated how, and in what language(s), ELLs should be taught. Currently, as of 2014, over 17% of the nation’s ELL population reside in Texas (865,000 out of over 5 million), and projections are for these numbers to increase (TEA, 2014). Texas follows only California in terms of numbers; and, over the past ten years, the state has seen rapid growth in numbers of ELLs, from just over 630,000 to nearly 865,000, a 37.2% increase (TEA, 2014). Also, while the home language of the majority of ELLs in Texas is Spanish, approximately 130 languages are represented in Texas schools (TEA, 2014).

Texas stands in contrast to the three other states—California, Nevada, and New Mexico—that have higher ratios of ELLs to nonELLs, but whose language policies for ELLs are not as varied ideologically and pedagogically. Since the 1998 passing of Proposition 227 in California, sheltered English immersion (SEI) has been the primary program implemented across the state, with nearly all forms of bilingual education eliminated. Currently, Nevada's education policy simply states that their programs for ELLs shall teach English and that an “English Mastery Council” will be appointed to assess and improve upon the quality of programs for ELLs. On the contrary, in New Mexico, all bilingual programs except one have the goal of developing biliteracy skills for the students enrolled. It is important to mention the situation in Arizona, too. Although both the number and percentage of ELLs in Arizona reported to the U.S. Department of Education are lower than in Texas, the state’s controversial education policy should be noted. Like California, a proposition, in this case, Proposition 103, effectively eliminated bilingual education and replaced it with SEI programs in 2000.
Over the past several decades, Texas policymakers have amended the education code to expand the types of programs available for instructing ELLs to include various forms of ESL, transitional bilingual, and dual language immersion programs. In this way, Texas situates itself programmatically and ideologically in the middle of the spectrum: between the extremes of English-only instruction and full embracing of bilingual and biliteracy instruction (cf. Dixon, 2014). The current education code, with the multiple program options mentioned above, allows for differences in implementation across the state as the 1200-plus school districts are given local control over this decision-making process. Depending on the geographic, economic, political, and other community circumstances, districts may select certain programs over others. With almost 865,000 students affected by the wide variations in program options allowed by the policy, Texas presents a compelling case of the complexities of this issue.

The present study was designed to investigate the interpretation of bilingual education in Texas by studying patterns of program implementation statewide. This was accomplished by using geographic information system (GIS), a technology designed to capture, manage, and analyze geographic data (Tomlinson, 1998). ArcGIS (10.1) software, developed by Environmental Systems Research Institute (ESRI), is a commercial mapping platform that is widely used in GIS and is available in computer software, internet, and mobile application formats (http://www.arcgis.com/features/index.html). In addition to mapping capabilities, ArcGIS provides spatial analytics to identify patterns and test the statistical significance of those patterns.

Although its potential as an analytical tool is great, GIS has been used very little in education policy analysis and implementation research. (See, however, Goldring, Cohen-Vogel,
This article describes major patterns discovered in program implementation across Texas based on the current bilingual/ESL education policy and also raises critical questions about programmatic choices made by school districts.

**Background of Texas Bilingual/ESL Education Policy**

Under the current Texas Education Code, the six programs mentioned above are authorized for instructing ELLs, and they include four bilingual program models and two ESL program models. Early exit transitional bilingual programs are bilingual programs in which ELLs are provided instruction in both Spanish and English with the goal of transitioning students to English-only instruction as quickly as possible, but in Texas this does not occur earlier than two years after being enrolled in school. Late exit transitional bilingual programs are also bilingual programs that offer instruction to ELLs in both Spanish and English with the goal of transitioning students to English-only instruction; however, the transition is more gradual and occurs usually after six or seven years upon enrollment in school (by the end of 5th grade). With both types of transitional bilingual programs, the home language serves as a vehicle for English language development and biliteracy development is not emphasized (Baker, 2011).

One-way dual language immersion programs are biliteracy programs in which only ELLs are enrolled, and for a minimum of six to seven years. Two-way dual language immersion programs include students proficient in English as well as students whose home language is another language (typically Spanish in Texas). Dual language program models are usually designated as 50/50 or 90/10, depending on the ratio of instructional designated to each language (Lindholm-Leary, 2001). In 50/50 program models instruction is provided in each
language 50% of the time, whereas in 90/10 models 90% of instruction is in the minority language (Spanish) in the early years and gradually decreases each year until the ratio is 50/50. Although many dual language immersion program models exist, the goal of dual language instruction is for all students to develop literacy in both languages (e.g., Cloud, Genesee, & Hamayan, 2000; Lindholm-Leary, 2001; Thomas & Collier, 2002) and to develop cross-cultural understanding (e.g., Lindholm, 1994; Lindholm-Leary, 2001).

The two ESL program models include content-based ESL programs and pull-out ESL programs and are designed to meet the needs of school districts with students who come from diverse language backgrounds (Rennie, 1993). In both program models, instruction is provided exclusively in English. Content-based ESL serves ELLs by providing a full-time teacher certified in supporting their language needs across all content areas, which allows the students to remain in a classroom with their peers throughout the school day. Pull-out ESL programs serve ELLs by providing specialized language arts support in small group settings outside of the mainstream classroom for a portion of the day.

Table 1 outlines the characteristics provided by the Texas Education Agency (TEA) for each of the six programs offered in Texas (For a more detailed discussion of these programs, see Lara-Alecio, Galloway, Irby, Rodríguez, & Gómez, 2004.) It is important to note that districts report types of programs to TEA and that there is likely some variability, district to district, and even school to school, in categories reported.
### Table 1

**Types of Bilingual and ESL Programs**

<table>
<thead>
<tr>
<th>Program Type</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitional Bilingual Education – Early Exit</td>
<td>Bilingual program designed for students classified as limited English Proficient (LEP); instruction in both English and Spanish; purpose is to transition students to English-only instruction not before two years and no later than five years after enrollment in school</td>
</tr>
<tr>
<td>Transitional Bilingual Education – Late Exit</td>
<td>Bilingual program designed for students classified as limited English Proficient (LEP); instruction in both English and Spanish; purpose is to transition students to English-only instruction not before six years and no later than seven years after enrollment in school</td>
</tr>
<tr>
<td>Dual Language Immersion – One-way</td>
<td>Biliteracy program designed for students classified as limited English Proficient (LEP); instruction in both English and Spanish; may transition to English-only instruction not before six years and no later than seven years after enrollment in school</td>
</tr>
<tr>
<td>Dual Language Immersion – Two-way</td>
<td>Biliteracy program designed for students proficient in English and students classified as limited English Proficient (LEP); instruction in both English and Spanish; students identified as LEP may transition to English-only instruction not before six years and no later than seven years after enrollment in school</td>
</tr>
<tr>
<td>Content-based ESL Instruction</td>
<td>English program designed for students classified as limited English Proficient (LEP); English-only instruction provided by a full-time English as a Second Language (ESL) certified teacher who provides supplementary instruction for all content area instruction</td>
</tr>
<tr>
<td>Pull-out ESL Instruction</td>
<td>English program designed for students classified as limited English Proficient (LEP); English-only instruction provided by a part-time English as a Second Language (ESL) certified teacher who provides English Language Arts instruction outside of the mainstream classroom where all other content area instruction is received</td>
</tr>
</tbody>
</table>


The current inclusion of the six program options for ELLs is the result of several hotly debated amendments to the Texas Education Code over the past several decades (cf. Dixon, 2014). From 1919 to 1968, English was the only language allowed in instructional settings with the exception of foreign language classes. However, in 1969, following passing of the Bilingual Education Act (1968) at the federal level, proponents of bilingual education supported state legislation (H.B. 103) that reversed a Texas penal code forbidding the use of Spanish in
instructional settings. After years of debate and compromise, transitional bilingual programs were first authorized in 1973, and legislation was passed that mandated bilingual education in some form (Vega, 1983). Multiple amendments resulted in additional programmatic changes until a 2001 amendment (S.B. 467) approved the adoption of dual language immersion programs. School districts meeting the criteria for mandating bilingual programs (a minimum of 20 children of the same language group in a particular grade) would have four program types from which to select for implementation and many districts, for various reasons, opt to implement more than one program type.

Although the current education code allows for these six distinct programs, differences in program goals, pedagogy, and effectiveness exist among them. Pull-out ESL programs are decontextualized because the language skills (e.g., reading, vocabulary, grammar) taught during these small group sessions take place outside of the content area instruction that occurs in the mainstream classroom and have been found to be the least effective model for instructing ELLs (Thomas & Collier, 1997). According to Thomas and Collier (2002), the content-based ESL program model can be effective in closing the achievement gap between ELLs and native English speaking students but only when these programs are implemented well, with ELLs integrated with native English speakers, and when sustained over a minimum of five to six years.

Both early exit and late exit transitional bilingual programs are considered subtractive because, despite the initial use of the home language for literacy and other instructional purposes, the ultimate goal is a transition to English monolingualism (Ovando, Collier, & Combs, 2002; Snow & Hakuta, 1992). On the contrary, the focus of one-way and two-way dual
language immersion programs is the development of biliteracy and bilingual skills for all students involved regardless of home language, and thus these programs are considered to promote an additive view of bilingual education (Cloud, Genesee, & Hamayan, 2000; Lindholm-Leary, 2001; Ramirez, 1992; Thomas & Collier, 2002). The latter programs also include a cross-cultural component, which emphasizes intercultural understanding and respect through collaborative learning environments in which all children are language models and second language learners (Lindholm-Leary, 2001).

Researchers interested in the long-term effectiveness of bilingual and ESL programs have found that, while students enrolled in early exit transitional bilingual programs tend to have more academic success than students in ESL programs, their long-term academic achievement is not as high as students enrolled in dual language programs (e.g., Ramírez, 1992; Thomas & Collier, 1997; Thomas & Collier, 2002).

Focus of the Study

My focus was the entire state of Texas as I mapped the variability in program implementation and identified patterns. In examining patterns, I was particularly interested in the districts that implement one-way dual language and/or early exit transitional bilingual education programs. Although both of these bilingual programs include instruction in both Spanish and English and involve only one language group, there are distinct differences between the two, as noted by Lara-Alecio and colleagues (2004). As previously mentioned, the goal of early exit transitional bilingual programs is to move students to mainstream English classrooms as quickly as possible; and, while instruction is provided in Spanish initially, development of literacy skills in the home language is not emphasized. These transitional
programs are deeply established in policy and practice in Texas, whereas one-way dual
language programs, with the goal of biliteracy, are relatively new to the wording of the Texas
Education Code (2001). These two programs—one-way dual language and early exit
transitional—are also worth examining due to the differences in long-term outcomes for
students enrolled in each program. An increasing body of research (e.g., Gómez, Freeman, &
Freeman, 2005; Lindholm-Leary, 2001; Marian, Shook, & Schroeder, 2013; Thomas & Collier,
1997; Thomas & Collier, 2002) has concluded that, of all types of bilingual programs, students
enrolled in dual language programs experience better overall academic achievement and
English language proficiency. This research has also shown that, on the contrary, early exit
transitional bilingual programs are the least effective of the four types of bilingual programs for
long-term achievement outcomes.

Because of my interest in the kinds of districts that implement each type of program, my
research questions centered around district descriptors, including geographic location, district
type, proportion of economically disadvantaged students, and ethnicity distribution of
students. Attention went to possible relationships between enrollment in one-way dual
language and early exit transitional bilingual education programs and the percentage of
economically disadvantaged students in the district. Additionally, my investigation explored a
possible relationship between enrollments in one-way dual language and early exit transitional
bilingual education programs and the distribution of ethnicities of the students in the district.

Data Sources

Student and district data from the 2012-2013 school year came from the Texas
Education Agency’s (TEA) Public Education Information Management System (PEIMS), and the
Texas Legislative Council (TLC) provided geographic information systems (GIS) of Texas school district boundaries. The PEIMS data provided by TEA included the following:

1. Total student enrollment in each of the districts’ bilingual and ESL programs
2. Student demographics (ethnicity and designation as economically disadvantaged)
3. Various types of districts and their classifications (major urban, major suburban, other central city suburban, other central city, independent town, non-metropolitan: fast growing, non-metropolitan: stable, rural, charter schools)

The GIS of Texas school districts from the 2012-2013 school year outlined the boundaries between the 1026 public school districts (not including charter schools and the five magnet schools that comprise South Texas Independent School District). For the initial inquiry into the geographic distribution of bilingual and ESL programs across the state, 1026 Texas public school districts were included. Once I narrowed my focus to those districts that implement one-way dual language and/or early-exit transitional bilingual education programs, the next phase of the study included 282 school districts.

Student enrollment in bilingual and ESL programs is reported as actual student numbers. Due to Federal Educational Rights and Privacy Act (FERPA) regulations, low student enrollment numbers in bilingual/ESL programs are masked in public reports for confidentiality purposes. Of the total data set for all 282 school districts included in the study, 30 values were protected (approximately 1%) and were, therefore, considered missing data.

TEA reports on student ethnicity using actual numbers of students in each category per district. According to PEIMS reports, student ethnicity is reported using the following seven categories: Black or African American; America Indian or Alaska Native; Asian; Hispanic; Native Hawaiian, other, or Pacific Islander; two or more races; White.
Table 2

Classification by District Type

<table>
<thead>
<tr>
<th>District Type</th>
<th>Description</th>
<th>Number of Districts in Category (2011-2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Urban</td>
<td>Located in a county with population of at least 850,000; district enrollment is largest in county or at least 75% of largest enrollment in county; at least 35% of enrolled students are economically disadvantaged</td>
<td>10</td>
</tr>
<tr>
<td>Major Suburban</td>
<td>Does not meet criteria for major urban; contiguous to a major urban district; enrollment is at least 3% of contiguous major urban district or enrollment is at least 4500;</td>
<td>79</td>
</tr>
<tr>
<td>Other Central City</td>
<td>Does not meet criteria for major urban or major suburban; not contiguous to major urban district; located in a county of population 100,000-824,999; district enrollment is largest in county or at least 75% of largest enrollment in county</td>
<td>40</td>
</tr>
<tr>
<td>Other Central City Suburban</td>
<td>Does not meet criteria for previous categories; located in a county of population 100,000-824,999; enrollment is at least 15% of the largest district enrollment in the county</td>
<td>161</td>
</tr>
<tr>
<td>Independent Town</td>
<td>Does not meet criteria for previous categories; located in a county of population 25,000-99,999; district enrollment is largest in county or at least 75% of largest enrollment in county</td>
<td>70</td>
</tr>
<tr>
<td>Non-Metropolitan:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fast Growing</td>
<td>Does not meet criteria for previous categories; enrollment of at least 300 students; increase of 20% in enrollment over past 5 years</td>
<td>29</td>
</tr>
<tr>
<td>Non-Metropolitan: Stable</td>
<td>Does not meet criteria for previous categories; enrollment exceeds median district enrollment for state (n=807)</td>
<td>192</td>
</tr>
<tr>
<td>Rural</td>
<td>Does not meet criteria for previous categories; enrollment between 300 and 807 students and enrollment growth of &gt;20% over last 5 years; OR enrollment of less than 300 students</td>
<td>448</td>
</tr>
<tr>
<td>Charter School Districts</td>
<td>Open-enrollment districts chartered by the State Board of Education</td>
<td>198</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1227</td>
</tr>
</tbody>
</table>


To determine the distribution of student ethnicity in each district, I converted the quantities to percentages per category. Therefore, all students in the district are represented in the ethnicity percentages. A student is considered economically disadvantaged if he or she is eligible for free or reduced-price lunch or “other public assistance” (TEA, 2013). I calculated the percentage of economically disadvantaged students in each district, which makes up the economically
disadvantaged population of the school district. As noted above, TEA classifies school districts in one of the following nine categories: major urban; major suburban; other central city; other central city suburban; independent town; non-metropolitan: fast growing; non-metropolitan: stable; rural; and charter school districts. These categories are based on indicators such as population density of the district and surrounding county, proximity to major cities, district enrollment growth, and percentage of economically disadvantaged students. Table 2 provides the descriptors used by TEA and the most current available number of districts falling under each category.

Overview of GIS Analysis

To map program implementation through GIS, my first step was to create choropleth maps for the geographic distribution of bilingual and ESL programs in Texas. Choropleth maps are thematic maps that use colors or shading to show value ranges (GIS Dictionary, 2014). Initial maps showed student enrollment for each of the six programs, and a chi square test of independence tested the relationship between the kind of program and district type.

The next step was to generate choropleth maps depicting the percentage of students identifying as Hispanic in each district as well as programs implemented by district. An explanation of the use of Hispanic as the variable of choice is provided in the section on Ethnicity and Program Type. A stepwise multiple regression analysis tested ethnicity as a predictor variable for student enrollment in the different program types, and a standard multiple regression analysis tested percentage of students considered economically disadvantaged as a predictor variable for student enrollment in the various kinds of programs.
The third, and last, step was to conduct a hierarchical multiple regression analysis to test the interaction of all study variables to determine the relative strength of each in predicting student enrollment in the various program types.

Geographic Distribution of Programs

This section reports on the analyses and results for the investigation into how programs for ELLs are geographically distributed across the state.

Procedure for Analysis

Variations in student populations from district to district required conversion of the number of students in each program to a percentage prior to generating the maps in order to compare student enrollment in each bilingual and ESL program. To find the percentage of students in the district enrolled in each program, I used as the denominator, the total number of students enrolled in all six programs combined and as the numerator used the number of students in each particular program. This percentage represents a sub-set of the total student population of the district, those participating in bilingual or ESL programs.

The data collected from TEA are organized by school district, which was the primary level of analysis for this study. Some of the district data needed for this study were already contained in the GIS files, such as district names and district numbers. I entered additional data, which included percentage of student enrollment in each bilingual/ESL program type, percentage of students for each ethnicity, percentage of economically disadvantaged students, and district type into a spreadsheet and joined this master data set with the existing GIS files, so that all necessary data were located in the attribute tables in ArcGIS.
ArcMap, a component of ArcGIS (10.1) software, provided the means for mapping the districts that offer bilingual and/or ESL programs by the following six categories: early exit transitional bilingual education, late exit transitional bilingual education, one-way dual language, two-way dual language, content-based ESL, and pull-out ESL.

**Results for Geographic Distribution**

The maps in Figures 1, 2, and 3 depict the percentage of student enrollment in each of the four bilingual and two ESL programs across Texas. Of the maps generated for all six of the bilingual and ESL programs implemented across Texas, geographic patterns are obvious for two programs: early exit transitional bilingual and one-way dual language programs. Visually, many of the districts with high percentages of student enrollment in one-way dual language programs are located in and near the Dallas/Ft. Worth, Austin, and Houston metro areas, as portrayed in Figure 1. However, many of the districts with high percentages of student enrollment in early exit transitional programs are found along the Texas-Mexico border, as shown in Figure 2.

To explore the relationship between the kind of program and the type of district, I conducted a chi square test of independence. Districts were coded as 1 if they implement a given program and as 2 if they do not. The chi square test of independence showed a statistically significant relationship between implementation of early exit transitional bilingual programs and district types, \( \chi^2 (1, N = 282) = 23.73, p < .05, \) Cramer’s \( V = .29 \). Table 3 shows the frequencies and percentages of district types where early exit transitional bilingual programs have been implemented. **Non-metropolitan stable** is the district type category that has the highest percentage of early exit transitional bilingual programs, with 93% of the districts in that category implementing the program model.
Figure 1. Student enrollment in one-way dual language programs.

Figure 2. Student enrollment in early exit transitional bilingual programs
Also important to note is where early exit transitional bilingual programs are not implemented, specifically in districts categorized as major urban and major suburban, where 44.4% and 44.8% of the districts in those categories do not offer the program.

For one-way dual language programs, the chi square test of independence showed a statistically significant relationship between the implementation of the program and district types, $\chi^2 (1, N = 282) = 29.34, p < .05$, Cramer’s $V = .32$. Table 4 shows the frequencies and percentages of districts types where one-way dual language programs are implemented. Major urban is the district type with the highest percentage of districts (66.7%) that have chosen to implement one-way dual language programs, and it is followed closely by major suburban with 62.7%. Again, important to note is where one-way dual language programs are least common. Districts categorized as non-metropolitan stable and rural had higher percentages of districts that do not implement one-way dual language programs with 79.1% and 77.8% respectively.
Table 4

One-way Dual Language Programs and District Types

<table>
<thead>
<tr>
<th>OWDL</th>
<th>MU</th>
<th>MS</th>
<th>OCCS</th>
<th>IT</th>
<th>N-M FG</th>
<th>N-MS</th>
<th>R</th>
<th>OCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>6</td>
<td>42</td>
<td>26</td>
<td>14</td>
<td>1</td>
<td>9</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>% of Total</td>
<td>66.7%</td>
<td>62.7%</td>
<td>35.6%</td>
<td>32.6%</td>
<td>33.3%</td>
<td>20.9%</td>
<td>22.0%</td>
<td>57.1%</td>
</tr>
<tr>
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<td>3</td>
<td>25</td>
<td>47</td>
<td>29</td>
<td>2</td>
<td>34</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>% of Total</td>
<td>33.3%</td>
<td>37.3%</td>
<td>64.4%</td>
<td>67.4%</td>
<td>66.7%</td>
<td>79.1%</td>
<td>77.8%</td>
<td>42.9%</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>67</td>
<td>73</td>
<td>43</td>
<td>3</td>
<td>43</td>
<td>9</td>
<td>35</td>
</tr>
<tr>
<td>% of Total</td>
<td>33.3%</td>
<td>62.0%</td>
<td>51.0%</td>
<td>51.0%</td>
<td>39.7%</td>
<td>50.9%</td>
<td>71.9%</td>
<td>42.9%</td>
</tr>
</tbody>
</table>

Note. MU= Major Urban; MS= Major Suburban; OCCS= Other Central City Suburban; IT= Independent Town; N-M FG= Non-Metropolitan Fast Growing; N-MS= Non-Metropolitan Stable; R= Rural; OCC= Other Central City

Although distinct geographic patterns were not discovered for the other two bilingual programs (late exit bilingual and two-way dual language) and the two ESL programs (ESL pull-out and content-based ESL), some interesting findings, illustrated in Figure 3, should be noted. For instance, the widespread implementation of ESL programs across the state is a reflection of the extensive dispersal of students who come to school with a language other than English, as there are now approximately 130 languages spoken by Texas schoolchildren. Conversely, two-way dual language programs, which are biliteracy programs including both children whose home language is Spanish and children with English as a home language, are still sporadically implemented. Late exit transitional bilingual programs, which have existed in Texas since the early 1980s are now rather limited in scope.

In summary, the findings indicate that districts with high percentages of student enrollment in one-way dual language programs visually tend to be located in and near the Dallas/Ft. Worth, Austin, and Houston metro areas. These results were supported by a chi square test of independence showing the majority of major urban and major suburban districts.
implementing the program. Spatially, districts with high percentages of student enrollment in early exit transitional bilingual programs tend to be located along the Texas-Mexico border. A chi square test of independence showed the vast majority of non-metropolitan stable districts implementing this program.

Ethnicity and Economically Disadvantaged Populations

This section provides detail for analyses and results relevant to my research questions focused on the relationships between student ethnicity and enrollment in a bilingual program type and the percentage of economically disadvantaged students and enrollment in a bilingual program type.

Procedure for Analysis

The previous maps showed the overall patterns of geographic distribution of student enrollment in each of the four bilingual and two ESL programs, but also of interest was a possible relationship between student ethnicity distribution and the kind of program implemented in the district. Based on the patterns found in the first set of maps, my focus in this analysis was on the districts that implement early exit transitional bilingual and/or one-way dual language programs. Because both are bilingual programs and the vast majority of bilingual programs in Texas include instruction in Spanish and English, basing the ethnicity maps on the population identifying as Hispanic made the most sense.

A map depicted the percentage of students identified as having Hispanic ethnicity in the districts that implement early exit transitional bilingual and/or one-way dual language programs, as shown in Figure 4.
Figure 3. Student enrollment in other bilingual and ESL programs.
To accompany this map, a stepwise multiple regression analysis explored whether the student ethnicity distribution of a school district can predict student enrollment in early exit transitional bilingual or one-way dual language programs, as well as relative contributions to variation in program type. All ethnicity variables, in the form of percentages, served as predictors and the percentage of student enrollment for each of the two programs (early exit transitional bilingual and one-way dual language) were the outcome variables. Standard multiple regression analysis was used to determine if the percentage of economically disadvantaged students in a district can predict student enrollment in early exit transitional bilingual or one-way dual language programs.

**Results for Ethnicity and Economically Disadvantaged Populations**

**Ethnicity**

The maps in Figure 4 show that early exit transitional bilingual programs tend to be dominant in districts with predominantly Hispanic students and in districts along the Texas-Mexico border, whereas the one-way dual language programs tend to be offered in more ethnically diverse districts. A stepwise multiple regression analysis tested a relationship between the ethnicity distribution of the district and enrollment in early exit transitional bilingual programs, as shown in Table 5. The $R^2$ for model 1, which includes the predictor variable, % Hispanic ethnicity, accounts for 24.2% of the total variance in student enrollment in early exit transitional bilingual programs. This finding is statistically significant, $F (1, 280) = 89.207, p < .001$. Model 2 adds the variable, % Two or more races, and, by adding this variable, the combination of the two account for 26% of the variance in student enrollment in early exit transitional bilingual programs.
Figure 4. Percentage Hispanic students and program type.

Table 5

Ethnicity and Early Exit Transitional Bilingual Programs

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.492&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.242</td>
<td>.242</td>
<td>89.207</td>
<td>.000</td>
</tr>
<tr>
<td>2</td>
<td>.510&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.260</td>
<td>.018</td>
<td>6.838</td>
<td>.090</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), % Hispanic
b. Predictors: (Constant), % Hispanic, % Two or More Races

The addition of this predictor resulted in a 1.8% change in variance over and above the variance accounted for by the percentage of Hispanic ethnicity. This change in variance is statistically
significant, $F (1, 279) = 6.838, p < .05$. The other predictor variables were excluded from the model.

Another stepwise multiple regression analysis tested if the ethnicity makeup of a district can predict student enrollment in one-way dual language programs. The $R^2$ for model 1, shown in Table 6, includes the predictor variable, % Black/African American, which accounts for 2.1% of the total variance in student enrollment in one-way dual language programs.

Table 6

**Ethnicity and One-way Dual Language Programs**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
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<td>2</td>
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<td>4.069</td>
<td>.045</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), % Black  
b. Predictors: (Constant), % Black, % Two or More Races

This finding is statistically significant, $F (1, 280) = 6.073, p < .05$. Model 2 adds the predictor variable, % Two or More Races, and the results indicate that the two variables combined account for 2.8% of the total variance in student enrollment in one-way dual language programs. The additional contribution of the two or more races variable shows a 1.4% change in the variance in student enrollment in one-way dual language programs over and above the variance accounted for by %Black/African American ethnicity. This additional variance is statistically significant, $F (1, 279) = 4.069, p < .05$. The remaining predictor variables were excluded from the model.

Taking this together, these findings show that the more diverse the district, the higher the student enrollment in one-way dual language programs. Conversely, the districts with less
diversity and higher percentages of Hispanic students tend to have higher enrollment in early exit transitional bilingual programs.

Economically Disadvantaged Populations

As illustrated in Table 7, the $R^2$ accounts for 10.9% of the variance in student enrollment in early exit transitional bilingual programs, which is a statistically significant finding, $F (1, 280) = 34.353, p < .001$. However, when determining if economically disadvantaged populations can be a predictor for student enrollment in one-way dual language programs, the $R^2$ accounts for 0% of the variance in student enrollment in one-way dual language programs. This finding is not statistically significant, $F (1, 280) = .001, p = .980$. These findings suggest that the percentage of economically disadvantaged students is only a moderate predictor for student enrollment in early exit transitional bilingual programs and is not a predictor for student enrollment in one-way dual language programs.

Table 7

*Early Exit TBE and Economically Disadvantaged Populations*

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
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<td>.331</td>
<td>.109</td>
<td>.109</td>
<td>34.353</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), %EconDis

Interaction of Variables

Finally, a hierarchical multiple regression analysis tested the relationship between all three variable groups and the type of bilingual program. For this analysis, I designated the other central city variable as the reference group after consulting the results of the chi square test of independence, as shown in Table 8, and based on Garson’s (2006) assertion that many
researchers prefer the use of middle categories for comparisons to avoid comparisons with extreme variables. Due to multicollinearity within the model, the predictor % *White* ethnicity was excluded from the analysis. Tolerance was reached when the predictors % *White* and %*Hispanic* were added to the model in combination with the other predictors. Because of the high multicollinearity between the two ethnicity predictors and the association of Hispanic students with bilingual programs, my decision was to include % *Hispanic* ethnicity and exclude % *White* ethnicity, which, following Myers (1990) and Sprinthall (2000), is an acceptable solution.

For the hierarchical multiple regression analysis, the % *Hispanic* variable was entered first, followed by all other ethnicities excluding % *White*. The percentage of economically disadvantaged students was added next. Finally, district type was entered. Through this analysis, I was able to assess the relative strength of the study variables in predicting student enrollment in each type of bilingual program.

The $R^2$ for Model 1, which tested the % *Hispanic* ethnicity predictor alone, accounts for 24.2% of the total variance in student enrollment in early exit transitional bilingual programs. This finding is statistically significant, $F(1, 280) = 89.207, p < .001$. Model 2 adds all other ethnicity predictors except for % *White* and the results indicate that % *Hispanic* and all other ethnicities combined account for 26.5% of the total variance in student enrollment in early exit transitional bilingual programs. The additional contribution of this predictor provides a 2.4% change, which is over and above the variance accounted for by % *Hispanic*. The change in variance, however, is not statistically significant, $F(1, 275) = 1.777, p = .118$. Model 3 adds percentage of economically disadvantaged students and the results show that ethnicity
combined with percentage of economically disadvantaged students account for 26.9% of the total variance in student enrollment in early exit transitional bilingual programs. This additional contribution demonstrates a .4% change, which is over and above the variance accounted for by ethnicity and percentage of economically disadvantaged students, but is not statistically significant, $F(1, 274) = 1.535, p = .216$. Model 4 includes the addition of the district type predictors and the combination accounts for 33.7% of the total variance. The addition of this predictor results in a 6.7% change in variance over and above the variance accounted for by the other predictors and the overall model is statistically significant, $F(1, 267) = 3.857, p < .001$, with a strong effect size ($d = 0.85$). However, review of the beta weights revealed that only three variables, % Hispanic ($\beta = .591, t(280) = 4.857, p < .001$); % economically disadvantaged ($\beta = -.248, t(280) = -2.360, p < .05$); and major urban ($\beta = -.158, t(280) = -2.827, p < .05$) contributed significantly to the final model.

Table 8

All Study Variables and Early Exit Transitional Bilingual Programs

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>R Square Change</th>
<th>F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.492&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.242**</td>
<td>.242</td>
<td>89.207</td>
</tr>
<tr>
<td>2</td>
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<td>.265</td>
<td>.024</td>
<td>1.777</td>
</tr>
<tr>
<td>3</td>
<td>.519&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.269</td>
<td>.004</td>
<td>1.535</td>
</tr>
<tr>
<td>4</td>
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<td>.337</td>
<td>.067&lt;sup&gt;*&lt;/sup&gt;</td>
<td>3.857</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), %Hispanic
b. Predictors: (Constant), %Hispanic, %Native Hawaiian, %Asian, %Black/AA, %AmericanIndian, %Two
c. Predictors: (Constant), %Hispanic, %Native Hawaiian, %Asian, %Black/AA, %American Indian, %Two, %Econ. Disadv.
d. Predictors: (Constant), %Hispanic, %Native Hawaiian, %Asian, %Black/AA, %American Indian, %Two, %Econ. Disadv., non-metropolitan fast growing, rural, major urban, non-metropolitan stable, independent town, major suburban, other central city suburban
e. Dependent Variable: %TBE Early.

Note. * $p < 0.05$, ** $p < 0.001$
For student enrollment in one-way dual language programs, the $R^2$ for Model 1 shows %Hispanic accounts for 1.4% of the total variance. This finding is statistically significant, $F(1, 280) = 4.060$, $p < .05$. Model 2, with the addition of the other ethnicities excluding % White, accounts for 5% of the total variance in student enrollment in one-way dual language programs. This addition shows a change of 3.6%, which is over and above the variance accounted for by %Hispanic alone, but is not statistically significant, $F(1, 275) = 2.056$, $p = .071$. Model 3 adds economically disadvantaged students and the results indicate that the combined predictors account for 5.4% of the total variance in student enrollment in one-way dual language programs. This demonstrates a 0.4% change, which is over and above the variance accounted for by all ethnicity predictors combined. However, this finding is not statistically significant, $F(1, 274) = 1.127$, $p = .289$. Model 4 includes the addition of the district type predictors and the combination accounts for 9.7% of the total variance. District type showed a 4.3% change in predicting enrollment in one-way dual language programs over and above ethnicity and percentage of economically disadvantaged students. This finding, however, is not statistically significant, $F(1, 267) = 1.833$, $p = .081$. A review of the beta weights revealed that only one variable, major urban ($\beta = .158$, $t(280) = 2.431$, $p < .05$), contributed significantly to the final model, which was found to have a small effect size ($d = 0.44$).

Table 9

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>R Square Change</th>
<th>F Change</th>
</tr>
</thead>
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<td>2.056</td>
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<td>.004</td>
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<td>.312d</td>
<td>.097</td>
<td>.043</td>
<td>1.833</td>
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</tbody>
</table>

a. Predictors: (Constant), %Hispanic
b. Predictors: (Constant), %Hispanic, %Native Hawaiian, %Asian, %Black/AA, %American Indian, %Two
c. Predictors: (Constant), %Hispanic, %Native Hawaiian, %Asian, %Black/AA, %American Indian, %Two, %Econ. Disadv.
d. Predictors: (Constant), %Hispanic, %Native Hawaiian, %Asian, %Black/AA, %American Indian, %Two, %Econ. Disadv., non-metropolitan fast growing, rural, major urban, non-metropolitan stable, independent town, major suburban, other central city suburban
e. Dependent Variable: %DL One-way.

Note. * p < 0.05, ** p < 0.001

The overall findings from these analyses confirm the results from the individual analyses, which show that the ethnicity distribution accounts for more variance in student enrollment in a bilingual program than district type or percentage of economically disadvantaged students in the district. Consultation of regression coefficients indicates that, for early exit transitional bilingual programs, Hispanic ethnicity is a strong predictor for student enrollment in that type of program. Also, there are negative relationships between percentage of economically disadvantaged students and enrollment in early exit transitional bilingual programs, and between major urban districts and enrollment in early exit transitional bilingual programs. The regression coefficients for one-way dual language programs show that there is a positive relationship between enrollment in that program type and major urban districts.

Discussion of Findings

The findings from this study point to important issues that should be considered. After summarizing the overall frequencies and distribution of bilingual and ESL programs across the state, I focus on specific topics of discussion. I first comment on interesting observations and then move to a discussion of the two distinct patterns of program implementation observed. I conclude by considering the role of economically disadvantaged populations and student ethnicity on the discrepancy in programs offered in Texas.

Overall findings show that, of the 1026 school districts included in the study, 566 districts provide pull-out ESL programs and 687 districts provide content based ESL programs,
making these the most common programs for ELLs in the state. Of the 120 school districts that offer one-way dual language programs, many are located in the Dallas, Houston, and Austin metropolitan areas, whereas the 101 school districts that offer two-way dual language programs are more geographically scattered. Early exit transitional bilingual education programs are implemented in 206 districts, and many of the districts with a high percentage of student enrollment in these programs are located along the Texas-Mexico border. The least common program is late exit transitional bilingual education, which is offered in 83 districts across Texas. This may be due to trends in some districts of moving away from transitional bilingual programs and more towards one-way and two-way dual language programs (cf. Hill, Gómez, & Gómez, 2008).

*Interesting Observations*

Implementation of ESL programs in Texas is widespread and common, with over half of the school districts in the study implementing at least one of the two ESL program models. Due to the approximately 130 languages spoken by Texas school children, bilingual programs in all languages are not realistic options. Therefore, ESL programs are still needed in Texas to provide language support for ELLs whose home language is not English or Spanish. However, as documented in research (e.g., Thomas & Collier, 2002; Valverde & Amendáriz, 1999), a well-implemented content-based ESL program is a better alternative to the less effective and more costly pull-out ESL program model.

Also, many of the school districts in the study implement both transitional bilingual and dual language programs, and some implement all four types of bilingual programs. These districts, perhaps unknowingly, are projecting contradictory ideological and pedagogical
perspectives on bilingual education. Districts may have different reasons for offering both transitional and dual language programs, such as allocation of resources, funding for professional development, attention to fidelity in program implementation, or a desire to pilot programs prior to full implementation (Hill, Gómez, & Gómez, 2008).

As mentioned above, two-way dual language programs are sporadically implemented throughout the state. Although no obvious pattern of implementation is detectable in the current map, provided in Figure 3, a comparison of this study’s findings with those of Lara-Alecio and colleagues (2004) suggests a drastic change in two-way dual language program implementation in districts along the Texas-Mexico border over the past decade. Lara-Alecio and colleagues found that the majority of the two-way dual language programs at that time were being implemented in the Rio Grande Valley, El Paso, and Houston areas. The map of two-way dual language programs from my study suggests these programs have almost completely disappeared along the border. This is a complex situation that no doubt involves many factors, but one thing to consider in this change is the issue of federal funding. The 1994 reauthorization of Title VII of the Elementary and Secondary Education Act (ESEA) included a broader definition of bilingual education than provided in previous versions of Title VII and, in turn, provided funding for two-way dual language immersion programs. However, with the 2001 adoption of No Child Left Behind (NCLB), Title VII was replaced with Title III, which placed greater emphasis on the acquisition of English and eliminated mention of bilingual education almost entirely. With these developments came changes in, and in some instances the termination of, funding for bilingual programs that did not meet the newly adopted criteria for scientifically research-based programs (Wright, 2005). A lack of funding for two-way dual
language programs is one factor to consider when looking at the apparent return to early exit transitional bilingual programs in the districts along the border.

Two Apparent Patterns: Why?

The findings from this study indicate that districts with one-way dual language programs tend to be located in or around major urban and suburban areas, whereas many of the school districts along the Texas-Mexico border offer early exit transitional bilingual programs as the only bilingual program option.

How might this pattern be explained? The most common program used by the border districts is the program that has been supported least by the research. As previously mentioned, research has indicated that, among all types of bilingual programs, overall academic success and long-term student achievement in English is the lowest for those who participated in early exit transitional bilingual education programs (e.g., Lindholm-Leary, 2001; Ramírez, 1992; Thomas & Collier, 2002). In these programs, Spanish is used to some extent for initial literacy and content instruction, but the emphasis is on the rapid development of English. Without a sufficient foundation in the first language, the acquisition of the second language is impeded (Cummins, 1981). Various scholars (e.g., Collier, 1992; Cummins, 1981; Hakuta, Butler, & Witt, 2000; Hakuta & D’Andrea, 1992) have found that it often takes children anywhere from four to eight years to develop academic fluency in the second language, which is much longer than the three years allowed in early exit transitional bilingual programs.

Studies on bilingual and ESL program effectiveness over the past few decades have resulted in the same conclusion that children who participate in dual language programs experience higher overall long-term academic success and English proficiency than children
participating in transitional bilingual programs. The factors that matter most are a strong foundation of formal instruction in the first language and the length of time in a bilingual program (Thomas & Collier, 1997, 2002). The research is still limited, but all evidence points to dual language, both one-way and two-way, as resulting in better student outcomes.

The districts along the Texas-Mexico border that have high percentages of participation in early exit transitional bilingual programs also have large populations of students coming to school speaking both English and Spanish at various levels of fluency, and many of these students are considered ELLs. Despite the literature on bilingual/ESL program effectiveness, the most popular program in this area of Texas is among the least beneficial to ELLs. These districts represent populations who would benefit from programs that result in long-term academic success while valuing and fostering biliteracy, such as one-way and two-way dual language programs (Lindholm-Leary, 2001; Thomas & Collier, 2002).

Does Socioeconomic Status Matter?

Overall, the percentage of economically disadvantaged students in the school district was not a major contributing factor in predicting program implementation. This may be due to a lack of variability in students enrolled in bilingual/ESL programs who are also considered economically disadvantaged, which is similar to other hypothesized socio-economic status and language group relationships (e.g., Lindholm-Leary, 2001).

The Role of Ethnic Diversity

Texas school districts that implement early exit transitional bilingual programs tend to have higher percentages of Hispanic students and low percentages of students identifying as other ethnicities, whereas districts that implement one-way dual language programs are more
ethnically diverse. The obvious pattern of the location of early exit transitional bilingual programs in districts that are located along the Texas-Mexico border whose students are predominantly Hispanic raises the question of why a program that stresses a rapid transition to English with little emphasis on the maintenance of Spanish would be so popular.

Numerous scholars in the Rio Grande Valley have found that, while bilingual and code-switching practices are the norm in everyday situations outside of school, the prevailing view is that school is a place for learning English and not for developing literacy in Spanish (e.g., Guerrero, 2003; Mejías, Anderson-Mejías, & Carlson, 2003; Murillo, 2010; Smith & Murillo, 2013). In many places, including the Rio Grande Valley, these views are perpetuated because the children who are educated in the system grow up to teach in the same system. Sutterby and colleagues (2005) have claimed that “preservice bilingual teachers in the United States often come from a community and school environment that has, at best, not supported their Spanish-language development and at times tried to eliminate it” (p. 438). This has led to what González (2005) and Smith and Murillo (2013) have referred to as “linguistic insecurity” or their perceived inability to effectively teach in a bilingual classroom that supports the development of biliteracy.

Districts along the Texas-Mexico border with large populations of ELLs continue to implement early exit transitional bilingual programs despite a large body of research demonstrating the benefits of dual language programs, not only for academic achievement, but also for the value placed on the development of literacy in the students’ home language. This is a complex issue for the region and also for districts across the state. Alanís and Rodríguez (2008) among others (e.g., Collier & Thomas, 2004; Hill, Gómez, & Gómez, 2008) have discussed
the paradigm shift that must take place within the district (leadership), school (leadership, teachers, and staff), and community (parents) from a belief of bilingual education as a remedial (and subtractive) program to a belief of dual language education as an enrichment (and additive) program. Buy-in from all key stakeholders is vital in the process; however, regardless of what the district mandates, the ultimate implementation agents are the teachers at the classroom level.

Implications

In this study, GIS has provided a means for uncovering patterns that raise questions and promote discussion about the discrepancy in bilingual and ESL program implementation in Texas. Many factors contribute to the complexity behind the implementation patterns represented in the maps and this study points to issues that require in-depth attention.

First, consideration of how much input a community really has in the programmatic decisions made at the school district level is warranted. Some parents are more vocal with their advocacy for certain programs for their children because they feel their voices should and will be heard. Others, who may have a history of being silenced or ignored, may be less eager to challenge programmatic decisions made at the school or district level. The absence of vocal opposition to educational decisions could be misinterpreted as support for programs when that may not necessarily be the case.

Additionally, if teachers are the ultimate implementation agents, attention should be given to the role that university teacher preparation programs play in preparing preservice teachers to function in a climate in which program models that vary both ideologically and pedagogically are implemented across the state. Universities have a responsibility to develop
and maintain preparation programs that are rooted in theory and research so that teachers enter the classroom with the knowledge and skills necessary for providing the best learning environment possible for their students.

Finally, the findings from this study indicated that early exit transitional bilingual programs, which is the bilingual program model research has shown to be least effective is still the most commonly implemented in the state, especially along the border. This raises the question of why policies are still in effect that allow for programs that are not accomplishing the goals they are designed to achieve and that also devalue the students’ home languages.

GIS analysis has the potential to impact education policy implementation research by enabling researchers to spatially represent patterns in data that otherwise would not be as noticeable. In this way, GIS can be a tool for facilitating change when stakeholders use the visualization of data to critique situations and brainstorm potential solutions (Warren, 2004) in educational, political, and community settings.

References


minority students: A theoretical framework (pp. 3-49). Los Angeles: Evaluation, Dissemination, and Assessment Center, California State University.


Hill, S., Gómez, R., & Gómez, L. (2008). What a difference a year makes: A large urban school district’s transformation from remedial to an enrichment dual language education. TABE Journal, 10, 154-177.


Albany: State University of New York Press.


APPENDIX A

FULL-TEXT VERSIONS OF TEXAS BILLS
AN ACT

requiring that English shall be the basic language of instruction in all grade schools; providing the governing body of the school district or school may determine when, in which grades or classes, and circumstances instruction may be given bilingually; declaring state policy on bilingual instruction; requiring Texas Education Agency approval for bilingual instruction above the sixth grade; amending Subdivision 1 of Article 2893, Revised Civil Statutes of Texas, 1925; repealing Article 288, Penal Code of Texas, 1925, as amended; repealing Article 298, Penal Code of Texas, 1925, as amended; and declaring an emergency.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

Section 1. English shall be the basic language of instruction in all schools. The governing board of any school district and any private or parochial school may determine when, in which grades, and under what circumstances instruction may be given bilingually.

Section 2. It is the policy of this state to insure the mastery of English by all pupils in the schools; provided that bilingual instruction may be offered or permitted in those situations when such instruction is educationally advantageous to the pupils. Such bilingual instruction may not be offered or permitted above the sixth grade without the express approval by the Texas Education Agency, which approval shall be granted on a three-year basis subject to reapproval at the end of that time.

Sec. 3. Subdivision 1, Article 2893, Revised Civil Statutes of Texas, 1925, as last amended by Section 1, Chapter 504, Acts of the 59th Legislature, Regular Session, 1965, is hereby amended to read as follows:

“Article 2893. Exemptions

“The following classes of children are exempt from the requirements of this law:

“1. Any child in attendance upon a private or parochial school which shall include in its course a study of good citizenship.

“2. Any child whose bodily or mental condition is such as to render attendance inadvisable, and who holds definite certificate of a reputable physician specifying this condition and covering the period of absence.

“3. Any child who is blind, dumb or feebleminded, for the instruction of whom no adequate provision has been made by the school district.
“4. Any child living more than two and one-half miles by direct and traveled road from the nearest public school supported for the children of the same race and color of such child and with no free transportation provided.

“5. Any child more than seventeen (17) years of age who has satisfactorily completed the work of the ninth grade, and whose services are needed in support of a parent or other person standing in parental relationship to the child, may, on presentation of proper evidence to the county superintendent, be exempted from further attendance at school.”

Sec. 4. Article 288, Penal Code of Texas, 1925, as amended by Chapter 125, Acts of the 43rd Legislature, Regular Session, 1933, and Article 298, Penal Code of Texas, 1925, are hereby repealed.

Sec. 5. The fact that instruction in the earlier years which includes the use of language the child understands makes learning easier; and the further fact that in this highly technical and scientific world where transportation and communication have literally reduced the size of the world, knowledge of languages and understandings of other peoples and where in this hemisphere Spanish is spoken by as many people as speak English, a second language becomes vitally important, create an emergency and an imperative public necessity that the Constitutional Rule requiring bills to be read on three several days in each house be suspended, and this Rule is hereby suspended; and that this Act shall take effect and be in force from and after its passage, and it is so enacted.
AN ACT

relating to bilingual education programs in the public schools and to bilingual training institutes for training public school personnel; providing for funding; amending Texas Education Code as follows: amending Chapter 21 by amending Section 21.109 and adding a new Subchapter L; adding a new Section 11.17 to Subchapter A, Chapter 11; adding a new Subsection 12.05 to Subchapter A, Chapter 12; and declaring an emergency.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

Section 1. Chapter 21, Texas Education Code, is amended by adding Subchapter L to read as follows:

“SUBCHAPTER L. BILINGUAL EDUCATION

“Section 21.451. STATE POLICY. The legislature finds that there are large numbers of children in the state who come from environments where the primary language is other than English. Experience has shown that public school classes in which instruction is given only in English are often inadequate for the education of children whose native tongue is another language. The legislature believes that a compensatory program of bilingual education can meet the needs of these children and facilitate their integration into the regular school curriculum. Therefore, pursuant to the policy of the state to insure equal educational opportunity to every child, and in recognition of the educational needs of children of limited English-speaking ability, it is the purpose of this subchapter to provide for the establishment of bilingual education programs in the public schools and to provide supplemental financial assistance to help local school districts meet the extra costs of the programs.

“Section 21.452. DEFINITIONS. In this subchapter the following words have the indicated meanings:

“(1) ‘Agency’ means the Central Education Agency.

“(2) ‘Board’ means the governing board of a school district.

“(3) ‘Children of limited English-speaking ability’ means children whose native tongue is a language other than English and who have difficulty performing ordinary classwork in English.
“Section 21.453. ESTABLISHMENT OF BILINGUAL PROGRAMS.

“(a) The governing board of each school district shall determine not later than the first day of March, under regulations prescribed by the State Board of Education, the number of school-age children of limited English-speaking ability within the district and shall classify them according to the language in which they possess a primary speaking ability.

“(b) Beginning with the 1974-75 scholastic year, each school district which has an enrollment of 20 or more children of limited English-speaking ability in any language classification in the same grade level during the preceding scholastic year, and which does not have a program of bilingual instruction which accomplishes the state policy set out in Section 21.451 of this Act, shall institute a program of bilingual instructions for the children in each language classification commencing in the first grade, and shall increase the program by one grade each year until bilingual instruction is offered in each grade up to the sixth. The board may establish a program with respect to a language classification with less than 20 children.

“Section 21.454. PROGRAM CONTENT; METHOD OF INSTRUCTION.

“(a) The bilingual education program established by a school district shall be a full-time program of instruction (1) in all subjects required by law or by the school district, which shall be given in the native language of the children of limited English-speaking ability who are enrolled in the program, and in the English language; (2) in the comprehension, speaking, reading, and writing of the native language of the children of limited English-speaking ability who are enrolled in the program, and in the comprehension, speaking, and reading, and writing of the English language; and (3) in the history and culture associated with the native language of the children of limited English-speaking ability who are enrolled in the program, and in the history and culture of the United States.

“(b) In predominantly nonverbal subjects, such as art, music, and physical education, children of limited English-speaking ability shall participate fully with their English-speaking contemporaries in regular classes provided in the subjects.

“(c) Elective courses included in the curriculum may be taught in a language other than English.

“(d) Each school district shall insure to children enrolled in the program a meaningful opportunity to participate fully with other children in all extracurricular activities.
“Section 21.455. ENROLLMENT OF CHILDREN IN PROGRAM.

“(a) Every school-age child of limited English-speaking ability residing within a school district required to provide a bilingual program for his classification shall be enrolled in the program for a period of three years or until he achieves a level of English language proficiency which will enable him to perform successfully in classes in which instruction is given only in English, whichever first occurs.

“(b) A child of limited English-speaking ability enrolled in a program of bilingual education may continue in that program for a period longer than three years with the approval of the school district and the child’s parents or legal guardian.

“(c) No school district may transfer a child of limited English-speaking ability out of a program in bilingual education prior to his third year of enrollment in the program unless the parents of the child approve the transfer in writing, and unless the child has received a score on an examination which, in the determination of the agency, reflects a level of English language skills appropriate to his or her grade level. If later evidence suggests that a child who has been transferred is still handicapped by an inadequate command of English, he may be re-enrolled in the program for a length of time equal to that which remained at the time he was transferred.

“(d) No later than 10 days after the enrollment of a child in a program in bilingual education the school district shall notify the parents or legal guardian of the child that the child has been enrolled in the program. The notice shall be in writing in English, and in the language of which the child or the parents possesses a primary speaking ability.

“Section 21.456. FACILITIES; CLASSES. (a) Programs in bilingual education, whenever possible, shall be located in the regular public schools of the district rather than in separate facilities.

“(b) Children enrolled in the program, whenever possible, shall be placed in classes with other children of approximately the same age and level of educational attainment. If children of different age groups or educational levels are combined, the school district shall insure that the instruction given each child is appropriate to his or her level of educational attainment, and the district shall keep adequate records of the educational level and progress of each child enrolled in the program.

“(c) The maximum student-teacher ratio shall be set by the agency and shall reflect the special educational needs of children enrolled in programs of bilingual education.
“Section 21.457. COOPERATION AMONG DISTRICTS. (a) A school district may join with any other district or districts to provide the programs in bilingual education required or permitted by this subchapter. The availability of the programs shall be publicized throughout the affected districts.

“(b) A school district may allow a nonresident child of limited English-speaking ability to enroll in or attend its program in bilingual education, and the tuition for the child shall be paid by the district in which the child resides.

“Section 21.458. PRESCHOOL AND SUMMER SCHOOL PROGRAMS. A school district may establish on a full- or part-time basis preschool or summer school programs in bilingual education for children of limited English-speaking ability and may join with other districts in establishing the programs. The preschool or summer programs shall not be a substitute for programs required to be provided during the regular school year.

Section 21.459. BILINGUAL EDUCATION TEACHERS. (a) The State Board of Education shall promulgate rules and regulations governing the issuance of teaching certificates with bilingual education endorsements to teachers who possess a speaking and reading ability in a language other than English in which education programs are offered and who meet the general requirements set out in Chapter 13 of this code.

“(b) The minimum monthly base pay and increments for teaching experience for a bilingual education teacher are the same as for a classroom teacher with an equivalent degree under the Texas State Public Education Compensation Plan. The minimum annual salary for a bilingual education teacher is the monthly base salary, plus increments, multiplied by 10, 11, or 12, as applicable.

“Section 21.460. ALLOTMENTS FOR OPERATIONAL EXPENSES AND TRANSPORTATION. (a) To each school district operating an approved bilingual education program there shall be allotted a special allowance in an amount to be determined by the agency for pupil evaluation, books, instructional media, and other supplies required for quality instruction.

“(b) The cost of transporting bilingual education students from one campus to another within a district or from a sending district to an area vocational school or to an approved post-secondary institution under a contract for instruction approved by the Central Education Agency shall be reimbursed based on the number or actual miles traveled times the district’s official extracurricular travel per mile rate as set by their local board of trustees and approved by the Central Education Agency.
“(c) The Foundation School Fund Budget Committee shall consider all amounts required
for the operation of bilingual education programs in estimating the funds needed for purposes
of the Foundation School Program.

“(d) The cost of funding this Act shall, for fiscal years 1974 and 1975, be maintained at
the level contained in House Bill 139, 63rd Legislature, Regular Session, 1973.”

Sec. 2. Subchapter A, Chapter 11, Texas Education Code, is amended by adding Section
11.17 to read as follows:

“Section 11.17. BILINGUAL EDUCATION TRAINING INSTITUTES.

“(a) The Central Education Agency shall conduct bilingual education training institutes.

“(b) The agency shall make rules and regulations governing the conduct of and
participation in the institutes.

“(c) Professional and paraprofessional public school personnel who participate in the
bilingual education training institutes shall be reimbursed for expenses incurred as a result of
their participation in accordance with rules and regulations adopted by the agency.”

Sec. 3. Subchapter A, Chapter 12, Texas Education Code, is amended by adding Section
12.04 to read as follows:

“Section 12.04. BILINGUAL EDUCATION TEXTBOOKS. (a) The State Board of Education
shall acquire, purchase, and contract for, with bids, subject to rules and regulations adopted by
the board, free textbooks and supporting media for use in bilingual education programs
conducted in the public school systems of this state.

“(b) The textbooks and supporting media shall be paid for out of the textbook fund and
shall be the property of the State of Texas, to be controlled, distributed, and disposed of
pursuant to board regulations.”

Sec. 4. Section 21.109, Texas Education Code, is amended to read as follows:

“Section 21.109. LANGUAGE OF INSTRUCTION. (a) English shall be the basic language
of instruction in all schools.

“(b) It is the policy of this state to insure the mastery of English by all pupils in the
schools; provided that bilingual instruction may be offered or permitted in those situations
when such instruction is necessary to insure their reasonable efficiency in the English language
so as not to be educationally disadvantaged.”
Sec. 5. The importance of this legislation and the crowded condition of the calendars in both houses create an emergency and an imperative public necessity that the constitutional rule requiring bills to be read on three several days in each house be suspended, and this rule is hereby suspended, and that this Act take effect and be in force from and after its passage, and it is so enacted.
Sec. 6. Subsection (b), Section 21.453, Texas Education Code, is amended to read as follows:

“(b) Each school district which has an enrollment of 20 or more children of limited English-speaking ability in any language classification in the same grade level during the preceding scholastic year, and which does not have a program of bilingual instruction which accomplishes the state policy of facilitating integration into the regular school curriculum as set out in Section 21.451 of this article, shall institute a program of bilingual instruction for the children in each language classification in Kindergarten, first grade, and second grade by the 1975-76 school year and also in the third grade by the 1976-77 school year. Bilingual instruction may be offered in the fourth and fifth grades for students who have not progressed sufficiently to participate in the regular school curriculum. Any bilingual program beyond the fifth grade shall be at the expense of the respective local school district. The board may establish a program with respect to a language classification with less than 20 children.”
AN ACT

relating to bilingual education and English as a second language and other special language programs in public schools; amending Subchapter L, Chapter 21, Texas Education Code, as amended.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION  1.  Subchapter L, Chapter 21, Texas Education Code, as amended, is amended to read as follows:

“SUBCHAPTER  L.  BILINGUAL EDUCATION AND SPECIAL LANGUAGE PROGRAMS

“Section 21.451.  STATE POLICY  English is the basic language of the State of Texas. Public schools are responsible for providing full opportunity for all students to become competent in speaking, reading, writing, and comprehending the English language. The legislature finds that there are large numbers of students in the state who come from environments where the primary language is other than English. Experience has shown that public school classes in which instruction is given only in English are often inadequate for the education of these students. The legislature recognizes that the mastery of basic English language skills is a prerequisite for effective participation in the state’s educational program. The legislature believes that bilingual education and special language programs can meet the needs of these students and facilitate their integration into the regular school curriculum. Therefore, pursuant to the policy of the state to insure equal educational opportunity to every student, and in recognition of the educational needs of students of limited English proficiency, it is the purpose of this subchapter to provide for the establishment of bilingual education and special language programs in the public schools and to provide supplemental financial assistance to help local school districts meet the extra costs of the programs.

“Section 21.452.  DEFINITIONS.  In this subchapter the following words have the indicated meanings:

“(1)  ‘Agency’ means the Central Education Agency.

“(2)  ‘Board’ means the governing board of a school district.

“(3)  ‘Students of limited English proficiency’ means students whose primary language is other than English and whose English language skills are such that the students have difficulty performing ordinary classwork in English.

“(4)  ‘Parent’ means the parent(s) or legal guardian(s) of the student.
“Section 21.453. ESTABLISHMENT OF BILINGUAL EDUCATION AND SPECIAL LANGUAGE PROGRAMS. (a) The State Board of Education shall adopt rules establishing a procedure for identifying school districts that are required to offer bilingual education and special language programs in accordance with this subchapter.

“(b) Within the first four weeks following the first day of school, the language proficiency assessment committee established under Section 21.462 shall determine and report to the governing board of the school district the number of students of limited English proficiency on each campus and shall classify them according to the language in which they possess primary proficiency. The governing board shall report that information to the agency before the first day of November each year.

“(c) Each school district which has an enrollment of 20 or more students of limited English proficiency in any language classification in the same grade level shall offer a bilingual education or special language program.

“(d) Each district that is required to offer bilingual education and special language programs under this section shall offer the following for students of limited English proficiency:

“(1) bilingual education in kindergarten through the elementary grades;

“(2) bilingual education, instruction in English as a second language, or other transitional language instruction approved by the agency in post-elementary grades through grade 8; and

“(3) instruction in English as a second language in grades 9-12.

“(e) If a program other than bilingual education must be used in kindergarten through the elementary grades, documentation for the exception must be filed with and approved by the commissioner of education, pursuant to the rules of the State Board of Education.

“(f) An application for an exception may be filed with the commissioner of education when an individual district is unable to hire a sufficient number of endorsed bilingual teachers to staff the required program. The exception must be accompanied by:

“(1) documentation showing that the district has taken all reasonable affirmative steps to secure endorsed bilingual teachers and has failed;

“(2) documentation showing that the district has affirmative hiring policies and procedures consistent with the need to serve limited English proficiency students;
“(3) documentation showing that, on the basis of district records, no teacher with a bilingual endorsement or emergency credentials has been unjustifiably denied employment by the district within the past 12 months; and

“(4) a plan detailing specific measures to be used by the district to eliminate the conditions that created the need for an exception.

“(g) An exception shall be granted under Subsection (f) of this section on an individual district basis and is valid for only one year. Application for an exception a second or succeeding year must be accompanied by the documentation set forth in Subdivisions (1), (2), (3), and (4) of Subsection (f) of this section.

“(h) During the period of time for which the school district must use alternative methods approved by the commissioner of education, pursuant to the rules of the State Board of Education, to meet the needs of its students of limited English proficiency such as, but not limited to, the hiring of teaching personnel on a bilingual emergency permit.

“Section 21.454. PROGRAM CONTENT; METHOD OF INSTRUCTION. (a) The bilingual education program established by a school district shall be a full-time program of dual-language instruction that provides for learning basic skills in the primary language of the students of limited English proficiency who are enrolled in the program, and that provides for carefully structured and sequenced mastery of English language skills. The program shall be designed to consider the students’ learning experiences and shall incorporate the cultural aspects of the students’ backgrounds.

“(b) The program of instruction in English as a second language established by a school district shall be a program of intensive instruction in English from teachers trained in recognizing and dealing with language differences. The program shall be designed to consider the students’ learning experiences and shall incorporate the cultural aspects of the students’ backgrounds.

“(c) In subjects such as art, music, and physical education, students of limited English proficiency shall participate fully with English-speaking students in regular classes provided in the subjects.

“(d) Elective courses included in the curriculum may be taught in a language other than English.

“(e) Each school district shall insure to students enrolled in the program a meaningful opportunity to participate fully with other students in all extracurricular activities.
“(f) The State Board of Education shall establish a limited number of pilot programs for the purpose of examining alternative methods of instruction in bilingual education and special language programs.

“(g) Districts approved to establish pilot programs as required by Subsection (f) of this section shall be allocated an amount per student which is equal to the amount per student allocated to districts with approved bilingual education programs as outlined in this subchapter.

“Section 21.455. ENROLLMENT OF STUDENTS IN PROGRAM. (a) The State Board of Education by rule shall adopt standardized criteria for the identification, assessment, and classification of students of limited English proficiency eligible for entry into the program or exit from the program. The parent must be notified of a student’s entry into the program, exit from the program, or placement within the program. A student’s entry into the program or placement within the program must be approved by the student’s parents. The local school district may appeal the decision under Section 21.463 of this code. The criteria may include, but are not limited to the following:

“(1) results of a home language survey conducted within four weeks of each student’s enrollment in order to determine the language normally used in the home and the language normally used by the student, conducted in English and the home language, signed by the student’s parents if in kindergarten through grade 8 or by the student if in grades 9 through 12, and kept in the student’s permanent folder by the language proficiency assessment committee;

“(2) the results of an agency-approved English language proficiency test administered to all students identified through the home survey as normally speaking a language other than English to determine the level of English language proficiency, with students in kindergarten or grade 1 being administered an oral English proficiency test and students in grades 2 through 12 being administered an oral and written English proficiency test; and

“(3) the results of an agency-approved proficiency test in the primary language administered to all students identified under Subdivision (2) of this subsection as being of limited English proficiency to determine the level of primary language proficiency, with students in kindergarten or grade 1 being administered an oral primary language proficiency test and students in grades 2 through 12 being administered an oral and written primary language proficiency test.

“(b) Tests under Subsection (a) of this section should be administered by professionals or paraprofessionals with the appropriate English and primary language skills and the training required by the test publisher.
“(c) The language proficiency assessment committee may classify a student as limited English proficiency if one or more of the following criteria are met:

“(1) the student’s ability in English is so limited or the student is so handicapped that assessment procedures cannot be administered;

“(2) the student’s score or relative degree of achievement on the agency-approved English proficiency test is below the levels established by the agency as indicative of reasonable proficiency;

“(3) the student’s primary language proficiency score as measured by an agency-approved test is greater than his proficiency in English; or

“(4) the language proficiency assessment committee determines, based on other information such as (but not limited to) teacher evaluation, parental viewpoint, or student interview, that the student’s primary language proficiency is greater than his proficiency in English or that the student is not reasonably proficient in English.

“(d) Within 10 days after the student’s classification as limited English proficiency, the language proficiency assessment committee shall give written notice of the classification to the student’s parent. The notice must be in English and the primary language. The parents of students eligible to participate in the required bilingual education program shall be informed of the benefits of the bilingual education or special language program and that it is an integral part of the school program.

“(e) All records obtained under this section may be retained by the language proficiency assessment committee for documentation purposes.

“(f) The school district may not refuse instruction in a language other than English to a student solely because the student has a handicapping condition.

“(g) With the approval of the school district and a student’s parents, a student who does not have limited English proficiency may also participate in a bilingual education program. The number of participating students who do not have limited English proficiency may not exceed 40 percent of the students enrolled in the program.

“(h) A school district may transfer a student of limited English proficiency out of a bilingual education or special language program if the student is able to participate equally in a regular all-English instructional program as determined by:
“(1) tests administered at the end of each school year to determine the extent to which the student has developed oral and written language proficiency and specific language skills in both the student’s primary language and English;

“(2) an achievement score at or above the 40th percentile in the reading and language arts sections of an English standardized test approved by the agency; and

“(3) other indications of a student’s overall progress as determined by, but not limited to, criterion-referenced test scores, subjective teacher evaluation, and parental evaluation.

“(i) If later evidence suggests that a student who has been transferred out of a bilingual education or special language program has inadequate English proficiency and achievement, the language proficiency assessment committee may reenroll the student. Classification of students for reenrollment must be based on the criteria required by this section.

“Section 21.456. FACILITIES; CLASSES. (a) Bilingual education and special language programs shall be located in the regular public schools of the district rather than in separate facilities.

“(b) Students enrolled in bilingual education or a special language program shall be placed in classes with other students of approximately the same age and level of educational attainment. The school district shall insure that the instruction given each student is appropriate to his or her level of educational attainment, and the district shall keep adequate records of the educational level and progress of each student enrolled in the program.

“(c) The maximum student-teacher ratio shall be set by the agency and shall reflect the special educational needs of students enrolled in the program.

“Section 21.457. COOPERATION AMONG DISTRICTS. (a) A school district may join with any other district or districts to provide the bilingual education and special language programs required by this subchapter. The availability of the programs shall be publicized throughout the affected districts.

“(b) A school district may allow a nonresident student of limited English proficiency to enroll in or attend its bilingual education or special language programs if the student’s district of residence provides no appropriate program. The tuition for the student shall be paid by the district in which the student resides.

“Section 21.458. PRESCHOOL, SUMMER SCHOOL, AND EXTENDED TIME PROGRAMS. A school district may establish on a full- or part-time basis preschool, summer school, extended day, or extended week bilingual education or special language programs for students of limited
English proficiency and may join with other districts in establishing the programs. The preschool or summer programs shall not be a substitute for programs required to be provided during the regular school year.

“Section 21.459. BILINGUAL EDUCATION AND SPECIAL LANGUAGE PROGRAM TEACHERS. (a) The State Board of Education shall promulgate rules and regulations governing the issuance of teaching certificates with bilingual education endorsements to teachers who possess a speaking, reading, and writing ability in a language other than English in which bilingual education programs are offered and who meet the general requirements set out in Chapter 13 of this code. The State Board of Education shall also promulgate rules and regulations governing the issuance of teaching certificates with an endorsement for teaching English as a second language. The agency may issue emergency endorsements in bilingual education and in teaching English as a second language.

“(b) A teacher assigned to an English as a second language or other special language program must be appropriately certified by the agency for bilingual education.

“(c) A teacher assigned to an English as a second language or other special language program must be appropriately certified by the agency for English as a second language.

“(d) The minimum monthly base pay and increments for teaching experience for a bilingual education teacher or a special language program teacher are the same as for a classroom teacher with an equivalent degree under the Texas State Public Education Compensation Plan. The minimum annual salary for a bilingual education teacher or a special language program teacher is the monthly base salary, plus increments, multiplied by 10, 11, or 12, as applicable.

“(e) The district may compensate out of funds appropriated in Subsection (a) of Section 21.460 of this subchapter a bilingual education or special language teacher for participating in a continuing education program which is in addition to the teacher’s regular contract. The continuing education program must be designed to gain advanced bilingual education or special language program endorsement or skills.

“(f) The agency shall be authorized to conduct or contract for teacher training for persons in the acquisition of endorsements in English as a second language. The agency shall determine the amount required for the implementation of this subsection.

“(g) The State Board of Education, through the Commission on Standards for the Teaching Profession, and the Coordinating Board, Texas College and University System, shall develop a comprehensive plan for meeting the teacher supply needs created by the programs
outlined in this subchapter. The board shall submit a plan, which includes legislative recommendations, to the 68th Legislature in January, 1983.

“Section 21.460. ALLOTMENTS FOR OPERATIONAL EXPENSES AND TRANSPORTATION.
(a) Under the rules of the State Board of Education, each school district operating an approved bilingual education or special language program shall be allotted a special allowance equal to: (1) the number of limited English proficiency students enrolled in the bilingual education program multiplied by $50, or a greater amount as provided by the General Appropriations Act, and (2) the number of limited English proficiency students enrolled in the ESL or special language program multiplied by 25 percent of the bilingual education per pupil allocation. A district’s bilingual education or special language allocation may be used for program and pupil evaluation and equipment, instructional materials and equipment, staff development, supplemental staff expenses, and other supplies required for quality instruction.

“(b) The cost of transporting bilingual education and special language program students from one campus to another within a district or from a sending district to an area vocational school or to an approved post-secondary institution under a contract for instruction approved by the agency shall be reimbursed based on the number of actual miles traveled as set by their local board of trustees and approved by the agency.

“(c) The Foundation School Fund Budget Committee shall consider all amounts required for the operation of bilingual education and special language programs in estimating the funds needed for purposes of the Foundation School Program.

“Section 21.461. COMPLIANCE. (a) The legislature recognizes that compliance with this subchapter is an imperative public necessity. Therefore, pursuant to the policy of the state, the agency shall monitor school district compliance with state rules by inspecting each school district on site at least every three years.

“(b) The areas to be monitored include:

“(1) program content and design;

“(2) program coverage;

“(3) identification procedures;

“(4) classification procedures;

“(5) staffing;

“(6) learning materials;
“(7) testing materials;

“(8) reclassification of students for either entry into regular classes conducted exclusively in English or for reentry into a bilingual education or special language program; and

“(9) activities of the language proficiency assessment committee.

“(c) Not later than the 30th day after the date of an on-site monitoring inspection, the agency shall report its findings to the school district and to the division of accreditation.

“(d) The agency shall notify a school district found to be in noncompliance in writing not later than the 30th day after the date of the on-site monitoring. The district shall take immediate corrective action.

“(e) If a school district fails to or refuses to comply after proper notification, the agency shall apply sanctions, which may include removal of accreditation, loss of foundation school funds, or both.

“Section 21.462 LANGUAGE PROFICIENCY ASSESSMENT COMMITTEES. (a) The State Board of Education by rule shall require districts that are required to offer bilingual education and special language programs to establish a language proficiency assessment committee.

“(b) Each committee shall be composed of members, including but not limited to, a professional bilingual educator, professional transitional language educator, a parent of a limited English proficiency student, and a campus administrator.

“(c) The language proficiency assessment committee shall:

“(1) review all pertinent information on limited English proficiency students, including the home language survey, the language proficiency tests in English and the primary language, each student’s achievement in content areas, and each student’s emotional and social attainment;

“(2) make recommendations concerning the most appropriate placement for the educational advancement of the limited English proficiency student after the elementary grades;

“(3) review each limited English proficiency student’s progress at the end of the school year in order to determine future appropriate placement;

“(4) monitor the progress of students formerly classified as limited English proficiency who have exited from the bilingual education or special language program and, based on the information, designate the most appropriate placement for the student; and
“(5) determine the appropriateness of an extended program (beyond the regular school) depending on the needs of each limited English proficiency student.

“(d) The State Board of Education by rule may prescribe additional duties for language proficiency assessment committees.

“Section 21.463. APPEALS. A parent of a student enrolled in a district offering bilingual education or special language programs may appeal to the commissioner of education under Section 11.13 of this code if the district fails to comply with the requirements of law or the rules of the State Board of Education. If the parent disagrees with the placement of the student in the program, he or she may appeal that decision to the local board of trustees. Appeals shall be in accordance with procedures adopted by the State Board of Education consistent with the appeal of contested cases under the Administrative Procedure and Texas Register Act, as amended (Article 6252-13a, Vernon’s Texas Civil Statutes).”

SECTION 2. Bilingual education or special language programs as defined by this Act shall be taught in the public schools only for the purpose of assisting the learning ability of limited English proficiency students and to enhance the English language.

SECTION 3. This Act takes effect beginning with the 1981-82 school year.

SECTION 4. The importance of this legislation and the crowded condition of the calendars in both houses create an emergency and an imperative public necessity that the constitutional rule requiring bills to be read on three several days in each house be suspended, and this rule is hereby suspended, and that this Act take effect and be in force according to its terms, and it is so enacted.
AN ACT

relating to dual language immersion programs in certain public schools and to the review of existing rules of the State Board of Education affecting such programs.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Section 28.005, Education Code, is amended by amending Subsection (a) and adding Subsection (c) to read as follows:

(a) Except as provided by this section, English shall be the basic language of instruction in public schools.

(c) A school district may adopt a dual language immersion program for students enrolled in elementary school grades as provided by Section 28.0051.

SECTION 2. Subchapter A, Chapter 28, Education Code, is amended by adding Section 28.0051 to read as follows:

Sec. 28.0051. DUAL LANGUAGE IMMERSION PROGRAM. (a) A dual language immersion program should be designed to produce students with a demonstrated mastery, in both English and one other language, of the required curriculum under Section 28.002(a).

(b) The commissioner by rule shall adopt:

(1) minimum requirements for a dual language immersion program implemented by a school district;

(2) standards for evaluating:

(A) the success of a dual language immersion program; and

(B) the performance of schools that implement a dual language immersion program; and

(3) standards for recognizing:

(A) schools that offer an exceptional dual language immersion program; and
(B) students who successfully complete a dual language immersion program.

(c) A school district may implement a dual language immersion program in a manner and at elementary grade levels consistent with rules adopted by the commissioner under this section.

SECTION 3. Section 28.002, Education Code, is amended by adding Subsection (1) to read as follows:

(1) Section 2001.039, Government Code, as added by Chapter 1499, Acts of the 76th Legislature, Regular Session, 1999, does not apply to a rule adopted by the State Board of Education under Subsection (c) or (d).

SECTION 4. The rules adopted by the commissioner of education under Section 28.0051, Education Code, as added by this Act, must first address the implementation of dual language immersion programs in prekindergarten through second grade classes before addressing dual language immersion programs in grade levels three and above.

SECTION 5. This Act applies beginning with the 2001-2002 school year.

SECTION 6. This Act takes effect immediately if it receives a vote of two-thirds of all the members elected to each house, as provided by Section 39, Article III, Texas Constitution. If this Act does not receive the vote necessary for immediate effect, this Act takes effect September 1, 2001.
APPENDIX B

EXTENDED DESCRIPTION OF FRAME ANALYSIS
As part of a multidisciplinary field, language policy can be analyzed at different levels, from various epistemological stances, and through the use of a wide range of methods. Language policy analyses are often conducted at the implementation level (policy in practice) or at the text level (the wording of the document). Whereas research on language policy has been conducted through various approaches, including ethnographic studies (e.g., Ricento & Hornberger, 1996; Hornberger & Johnson, 2007), discourse analyses (e.g., Johnson, 2005), psycho-social analyses (e.g., Barker et al., 2001; King & DeFina, 2010), and policy evaluations (e.g., Hanna, 2011), my study focuses on the use of frame analysis for analysis at the text level and geographic information systems (GIS) at the implementation level.

Background on Framing

Frame analysis was developed by sociologist Erving Goffman (1974) as a way to study “the structure of experience individuals have at any moment of their social lives” (p. 13). His work was heavily influenced by William James’s (1890) views of reality, specifically those in his book, *The Principles of Psychology*. James raised many questions about the concept of reality and what people perceive as real, with Goffman focusing on James’s question of “Under what circumstances do we think things are real?” (p. 283). Goffman’s interest in the idea of an individual’s perception of reality and the context for the generation of that perception was further influenced by Schutz’s (1945) ideas on multiple realities. Schutz, also influenced by James, spoke of experiences, or “worlds,” that individuals perceive as real, including everyday life experiences, dreams, religious experiences, and children’s play because they all carry meaning.
By his own admission in that 1974 book, Goffman “borrowed extensively from all these sources, claiming really only the bringing of them together” (p. 8). He has sought to answer the question: “What is it that is going on here?” (p. 9) and to develop a framework for understanding how people make sense of their world. Goffman, influenced by Bateson’s (1954) use of the terms *bracketing* and *frame*, developed his own definition for the term *frame*, when he claimed that

definitions of a situation are built up in accordance with principles of organization which govern events – at least social ones – and our subjective involvement in them; frame is the word I use to refer to such of these basic elements as I am able to identify. (pp. 10-11)

Despite providing an extensive description of frames, frameworks, and other key concepts, Goffman did not offer a specific method for conducting frame analysis. He did, however, influence the application of frame analysis to a variety of disciplines and the development of various methods for studying frames.

**Definitions of Frame and Framing**

One of the biggest critiques of Goffman’s work is the lack of clarity in his definitions, specifically concerning a frame (cf. deVreese, 2012; Scheff, 2005). As scholars within and outside of sociology began to consider Goffman’s notion of framing and the use of frame analysis expanded, modified explanations of what constitutes a frame emerged.

Gitlin (1980) describes frames as “principles of selection, emphasis, and presentation composed of little tacit theories about what exists, what happens, and what matters” (p. 6).
The idea of selection in framing is a focus in Entman’s (1993) definition as well, in which he claims:

Framing essentially involves selection and salience. To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described. (p. 52)

Expanding on Entman’s definition, and influenced by Tuchman (1978), Verloo (2005) has defined a policy frame as “an organising principle that transforms fragmentary or incidental information into a structured and meaningful policy problem, in which a solution is implicitly or explicitly enclosed” (p. 20).

Wodak (2006) has focused on the complexity of frames by noting how they become embedded socially, culturally, ideologically, and cognitively. A noticeable difference between these definitions and Goffman’s definition is the idea that framing involves active selection. While many scholars have argued that Goffman’s definition is ambiguous (e.g. deVreese, 2012; Johnston, 1995; Scheff, 2003), his definition implies an instinctive interpretation based on social construction of what is “real.” In other words, a person takes in the context of what he or she sees, hears, or reads, and applies his or her concept of reality to the situation to make sense of it. Considered by some to be extensions of Goffman’s definition, the definitions proposed by Gitlin and Entman focus specifically on framing in the context of news and media analysis, as well as policy analysis. In studying political discourse, Gamson (1992) has defined a frame as “a particular set of ideas and symbols that are used in various public forums to construct meaning about [public discourse]” (p. 24), also a very specific definition to his area of inquiry.
Also important is the influence of policy discourse and text on subsequent policy texts. Important to the contextual nature of policy discourse is Bakhtin’s (1986) concept of *dialogism*, which focuses on the ways in which utterances are “answerable acts” anticipating responses. He considered every text as connected to those uttered (or written) previously as well as to those anticipated to be written in the future. Because of this and the nature of texts being historically and socially situated, no text can be original. Expanding on this concept, Kristeva (1980) has discussed how texts “absorb” and “transform,” using the term *intertextuality* to describe how texts are intertwined and are not discrete entities. Of interest as well is Bernstein’s (1990) concept of *recontextualization*, which refers to the delocation and relocation of social practices and texts associated with them into new contexts and the changes that occur during this process. More relevant is Wodak and Fairclough’s (2010) extension of Bernstein’s work as they study *recontextualization* as the practice of adopting language (in the form of words, phrases, or even style) from one text and incorporating it into a new, related text.

**Framing in Policy Studies**

Problem framing can occur at two points in a policy cycle—at both policy-making and policy implementation levels (Coburn, 2006). Particularly relevant to my study is Entman’s (1993) claim that frames define problems, and at the level of policy-making, framing is important because the way the problem is framed determines which solutions are included and which are excluded. Subsequently, those who implement policy construct their own interpretations in context, thus framing the problem on another level, which may or may not align with the way in which the problem was framed by the policy makers (e.g. Cohen, 1990).
Although specific to social movements, Benford and Snow’s (2000) ideas on diagnostic and prognostic framing align well with problem framing in policy-making and policy implementation. Diagnostic framing seeks to identify the problem and place blame and, in the process, focuses on some aspects of the problem while ignoring others. Prognostic framing includes assigning a solution to the problem and determining all the people, actions, and means necessary for accomplishing the goal of solving the problem.

An important facet of studying problem framing in policy-making is exploring how the problem is framed and by whom. Schön and Rein (1994) propose a frame critical approach to understanding how framing and policy design and implementation are interconnected. They argue that conflicting frames exist for many reasons. For instance, different actors hold different frames in the policy-making and implementation process, frames may shift over time, and the rhetorical frame that is needed to “sell” a policy is not necessarily the frame that will ultimately direct the implementation of the policy. In order to resolve these framing conflicts, Schön and Rein claim that reflection in action is important and can, but will not necessarily, lead to reframing and conflict resolution. The main obstacle to conflict resolution is the ability to reframe and take on another’s frame because framing is based on an individual’s own perceptions.

Yanow (2007) suggests an interpretive frame analysis approach to policy studies in which the researcher identifies the frames through which various discourse communities view a policy issue and seeks to distinguish the values and beliefs underlying the frames. An action research aspect consists of designing interventions to help the discourse communities resolve conflicts and understand the other’s perspective.
Critical Frame Analysis

As Fairclough, Mulderrig, and Wodak (2011) pointed out, critical discourse analysis can be seen as “a problem-oriented interdisciplinary research movement, subsuming a variety of approaches, each with different theoretical models, research methods and agenda” (p. 357). Likewise, there are many approaches to frame analysis that can be considered critical. Drawing from discourse analysis, gender theory, policy theory, and social movement theory, Verloo (2005) has advocated for critical component because “unlike other approaches, frame analysis starts from the assumption of multiple interpretations in policy-making, and addresses problems of dominance and exclusion connected to policymaking” (p. 18). This conceptual framework for comparative policy analysis is heavily influenced by Snow and Benford’s (1992) work and consists of diagnosis of the policy problem, prognosis of the policy problem, roles attributed to various actors in diagnosis and prognosis, and voice given to all actors. Also influential in developing this framework was Verloo and Roggeband’s (1996) work on gender impact assessments and the potential effects of policies on gender relations, in which they examined the issues of power, interpretation, and social norms in policies.

In addition to the concepts diagnosis and prognosis, Snow and Benford’s concepts of attribution of responsibility and call for action are important elements, but are renamed as attribution of roles in diagnosis and attribution of roles in prognosis by Verloo. Attribution of roles assigns responsibility for the problem or solution.

The diagnosis and prognosis concepts are also similar to Burns and Carson’s (2005) problem and solution complexes, which address the ways in which a problem is posed, and acceptable solutions to the problem. The attribution of roles concept is reminiscent of Burns
and Carson’s distribution of problem solving authority and responsibility, which determines who has responsibility for carrying out the solution.

Verloo (2005) has explained that in addition to the dimensions borrowed from Snow and Benford (1992), the research team added other elements such as voice, normativity, and balance to specifically address issues related to policy analysis and discourse analysis. Voice refers to the institution or body who authored the policy text as well as the perspective, authority, and ideology represented by the authorship. Normativity addresses the issue of a “problem group” as opposed to the norm group, and with balance, researchers focus on the distinguishing characteristics between diagnostic frames and prognostic frames, looking for contradictions within the policy text.

The Verloo-Benford-Snow approach to frame analysis has been employed in numerous studies analyzing policies related to gender relations and gender equality. Lombardo (2008) applied it to her study of gender inequality in politics by comparing policy documents from Spain and the European Union. She found that the problem of gender inequality is framed as quantitative in that women’s interests are not represented due to the low number of women in office, which she claims is an inadequate explanation. Additionally, the responsibility of solving this problem appears to be left up to the women, as the lack of mention of men’s impact implies they have no responsibility for change.

A study conducted by Meier and Lombardo (2008) included a comparative analysis of the framing of gender equality in European Union policies on domestic violence, gender inequality in politics, and family policies over a ten-year period. The results of this frame analysis indicate that the concept of citizenship for women as opposed to men varies
depending on the policy topic and at what level the policies are analyzed. Although the current
body of research focuses on gender equality, Verloo (2005) advocates the use of her template
in other critical comparative policy analyses.
<table>
<thead>
<tr>
<th>Problem</th>
<th>HB 103</th>
<th>SB 121</th>
<th>HB 1126</th>
<th>SB 477</th>
<th>SB 467</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not explicitly stated</td>
<td>English-only instruction is inadequate for ELLs.</td>
<td>Problem statement from S.B. 121 is not altered.</td>
<td>English-only instruction is inadequate for ELLs.</td>
<td>Existing rules for dual language programs need to be reviewed and specified.</td>
<td></td>
</tr>
</tbody>
</table>

| Solution | Bill allows bilingual instruction for grades 1-5. | Bill mandates bilingual programs (transitional bilingual education) under certain criteria for grades 1-6. | Bill mandates bilingual education for kindergarten-2nd grades, then 3rd the next year, but 4th and 5th grades are optional. | Bill mandates bilingual education for kindergarten-5th grades and provides choices (bilingual education or ESL) for grades 6-12. | Bill allows districts to offer dual language immersion as program option. |

| Attribution of Roles | Local governing boards decide if it's necessary. No funding is provided by the state. | Governing boards determine the number of LEP. SBEC sets standards for qualified bilingual teachers. | Bill adds LPAC for classifying LEP students. SBEC is authority for teacher preparation and TEA is in charge of monitoring programs. | The Commissioner of Education sets requirements and standards for programs. |

| Ideology | Monolingual ideology projected. Learning English is the ultimate goal. Contradiction between monolingual ideology and pluralist view. | Monolingual ideology projected. Learning English is the goal. “Ordinary classwork” and “regular curriculum” are the norm and bilingual education and its pedagogy deviate from the norm. | Contradiction between monolingual ideology (the bill that passed) and pluralist view (the bills that were rejected). | Monolingual English ideology is not only retained but expanded to state level. However, space created for “alternative methods” and emergence of other ideologies. | Space for the emergence of an alternative ideology—more pluralist view of language and culture. |

| Changed wording | | | | Change in terms from “children of limited English-speaking ability” to “students of limited English proficiency”; “native tongue” to “primary language”; “speaking ability” to “primary proficiency.” | “Except as provided by this section, English is basic lang. of instruction” (§28.005) |

| Retained wording | Phrases carried over include “insure mastery of English” and “English is the basic language of instruction.” | Phrases kept include “children of limited English-speaking ability” and “integration into the regular school curriculum.” | “English is the basic language” |

<p>| Excluded wording | Mention of “increasingly connected world…” and “importance of knowing a second language” are excluded. | | | | |</p>
<table>
<thead>
<tr>
<th>Influence of Tucson Recommendations</th>
<th>Repeals laws that outlaw speaking Spanish, but did not follow the recommendation to avoid wording that states English as language of instruction.</th>
<th>Instruction in early grades in both English and Spanish; English taught as second language; Apply for funding from federal programs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence of Title VII (1968)</td>
<td>“Children of limited English-speaking ability” term used but different definition; however, definition wording is incorporated into bill text. “Impart students knowledge of the history and culture associated with their languages” phrase used.</td>
<td></td>
</tr>
<tr>
<td>Influence of Title VII (1978)</td>
<td></td>
<td>Changed term to “children with limited English proficiency.” Expanded beyond verbal skills to include reading, writing, and speaking. Allowed English proficient students in bilingual programs (up to 40%).</td>
</tr>
<tr>
<td>Influence of TEA Recommendations</td>
<td>“English as basic language of instruction”; Governing board determines when to offer bilingual programs; Ensure mastery of English and provide bilingual instruction when “educationally advantageous”</td>
<td>Phrase “English as basic language of instruction.”</td>
</tr>
<tr>
<td></td>
<td>Phrase “English as basic language of instruction.”</td>
<td>Phrase “English as basic language of instruction.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phrase “English as basic language of instruction.”</td>
</tr>
</tbody>
</table>
APPENDIX D

ADDITIONAL RESULTS
This appendix contains additional results to supplement the results reported in the full-text article.

Table D.1

*Pull-out ESL Programs*

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<th>Valid Percent</th>
</tr>
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<tr>
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<td></td>
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</tr>
<tr>
<td>.01 - 20.00</td>
<td>168</td>
<td>17.4</td>
<td>18.6</td>
</tr>
<tr>
<td>20.01 - 40.00</td>
<td>118</td>
<td>12.2</td>
<td>13.1</td>
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<tr>
<td>40.01 - 60.00</td>
<td>65</td>
<td>6.7</td>
<td>7.2</td>
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<td>60.01 - 80.00</td>
<td>44</td>
<td>4.6</td>
<td>4.9</td>
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<td>80.01-100.00</td>
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<td>17.7</td>
<td>18.9</td>
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<tr>
<td>Total</td>
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Table D.2

*Content-based ESL Programs*

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<td></td>
</tr>
<tr>
<td>.01 - 20.00</td>
<td>137</td>
<td>14.2</td>
<td>15.4</td>
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<tr>
<td>20.01 - 40.00</td>
<td>147</td>
<td>15.2</td>
<td>16.5</td>
</tr>
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<td>40.01 - 60.00</td>
<td>94</td>
<td>9.7</td>
<td>10.5</td>
</tr>
<tr>
<td>60.01 - 80.00</td>
<td>60</td>
<td>6.2</td>
<td>6.7</td>
</tr>
<tr>
<td>80.01-100.00</td>
<td>249</td>
<td>25.8</td>
<td>27.9</td>
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<tr>
<td>Total</td>
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Table D.3

*Early Exit Transitional Bilingual Programs*

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<th>Valid Percent</th>
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</thead>
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<td>40.01 - 60.00</td>
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<td>60.01 - 80.00</td>
<td>57</td>
<td>5.9</td>
<td>5.9</td>
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<tr>
<td>80.01 - 100.00</td>
<td>20</td>
<td>2.1</td>
<td>2.1</td>
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<tr>
<td>Total</td>
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</table>

*Note.* Program total differs slightly from results reported in chi square test due to FERPA protected data counted as missing

Table D.4

*Late Exit Transitional Bilingual Programs*

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<th>Percent</th>
<th>Valid Percent</th>
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</thead>
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<tr>
<td>Total</td>
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Table D.5

**One-way Dual Language Programs**

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<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
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<tr>
<td>.01 - 20.00</td>
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<td>20.01 - 40.00</td>
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<td>2.1</td>
<td>2.1</td>
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<td><strong>Total</strong></td>
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*Note.* Program total differs slightly from results reported in chi square test due to FERPA protected data counted as missing

Table D.6

**Two-way Dual Language Programs**

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<tr>
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<th>Percent</th>
<th>Valid Percent</th>
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<td></td>
<td></td>
</tr>
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<td>58</td>
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<td>6.0</td>
</tr>
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<td>20.01 - 40.00</td>
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<td>40.01 - 60.00</td>
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Table D.7
Regression Coefficients for Early Exit Transitional Bilingual Programs

<table>
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<th>SE b</th>
<th>β</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>31.839**</td>
<td>1.624</td>
<td>19.609</td>
</tr>
<tr>
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<td>%Hispanic</td>
<td>.580</td>
<td>.061</td>
<td>.492**</td>
</tr>
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<td>(Constant)</td>
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<td>1.613</td>
<td>19.759</td>
</tr>
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<td>%Hispanic</td>
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<td>.104</td>
<td>.294*</td>
</tr>
<tr>
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<td>%Black/AA</td>
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<td>.142</td>
<td>-.055</td>
</tr>
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<td></td>
<td>%Asian</td>
<td>-.306</td>
<td>.480</td>
<td>-.036</td>
</tr>
<tr>
<td></td>
<td>%Native Hawaiian</td>
<td>-8.979</td>
<td>12.422</td>
<td>-.040</td>
</tr>
<tr>
<td></td>
<td>%Two or more races</td>
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<td>2.326</td>
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<tr>
<td></td>
<td>%American Indian</td>
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Dependent Variable: %TBE Early
* Variables used Unweighted Effect coding with Other central city as reference group Note. R² = 0.242 for Step 1: ΔR² = 0.024 (p = 0.118) for Step 2: ΔR² = 0.004 (p = 0.216) for Step 3: ΔR² = 0.067 (p < 0.001) for Step 4. *p < 0.05, ** p < 0.001
### Table D.8

*Regression Coefficients for One-Way Dual Language Programs*

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<th>SE b</th>
<th>β</th>
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**Dependent Variable:** %DL One-way

* Variables used Unweighted Effect coding with Other central city as reference group

Note. $R^2 = 0.014$ for Step 1: $\Delta R^2 = 0.036$ ($p = 0.071$) for Step 2: $\Delta R^2 = 0.004$ ($p = 0.289$) for Step 3: $\Delta R^2 = 0.043$ ($p = 0.081$) for Step 4. *$p < 0.05$, **$p < 0.001$


Texas H. Bill 103, Session 61, (1969)(enacted). [http://www.lrl.state.tx.us/legis/BillSearch/text.cfm?legSession=61-0&billTypeDetail=HB&billNumberDetail=103&billSuffixDetail=&startRow=1&IDlist=&unClicklist=&number=100](http://www.lrl.state.tx.us/legis/BillSearch/text.cfm?legSession=61-0&billTypeDetail=HB&billNumberDetail=103&billSuffixDetail=&startRow=1&IDlist=&unClicklist=&number=100).

Texas H. Bill 1126, Session 64, (1975) (enacted). [http://www.lrl.state.tx.us/legis/BillSearch/BillDetails.cfm?legSession=64-0&billTypeDetail=HB&billNumberDetail=1126&submitButton=Search+by+bill](http://www.lrl.state.tx.us/legis/BillSearch/BillDetails.cfm?legSession=64-0&billTypeDetail=HB&billNumberDetail=1126&submitButton=Search+by+bill).

Texas S. Bill 121, Session 63, (1973) (enacted). [http://www.lrl.state.tx.us/legis/BillSearch/BillDetails.cfm?legSession=63-0&billTypeDetail=SB&billNumberDetail=121&submitButton=Search+by+bill](http://www.lrl.state.tx.us/legis/BillSearch/BillDetails.cfm?legSession=63-0&billTypeDetail=SB&billNumberDetail=121&submitButton=Search+by+bill).


