

1-1-2011

Bilingual, ESL, and English Immersion: Educational Models for Limited English Proficient Students in Texas

Kelly Faltis
Pepperdine University

Follow this and additional works at: <http://digitalcommons.pepperdine.edu/ppr>



Part of the [Public Affairs, Public Policy and Public Administration Commons](#)

Recommended Citation

Faltis, Kelly (2011) "Bilingual, ESL, and English Immersion: Educational Models for Limited English Proficient Students in Texas," *Pepperdine Policy Review*: Vol. 4, Article 8.
Available at: <http://digitalcommons.pepperdine.edu/ppr/vol4/iss1/8>

This Article is brought to you for free and open access by the School of Public Policy at Pepperdine Digital Commons. It has been accepted for inclusion in Pepperdine Policy Review by an authorized administrator of Pepperdine Digital Commons. For more information, please contact Kevin.Miller3@pepperdine.edu.

Bilingual, ESL, and English Immersion: Educational Models for Limited English Proficient Students in Texas

Kelly Faltis

Education of limited English proficient (LEP) students is important for domestic economic growth, the cohesion of society within the United States, and for maintaining US competitiveness in the global economy. Ineffective education of LEP students might have detrimental effects on the economic future of the new immigrants, the education of English speaking students, and the US economy as a whole. A majority of the estimated 5.3 million LEP students within the United States are Hispanic.¹ Given this large population, finding the best model to educate LEP students is an important policy goal. Texas has the second largest LEP population, next to California, of which ninety-nine percent are Hispanic.² Because Texas schools have a broad range of English as a second language (ESL) and bilingual education models, the state is a good place to analyze the policy question: which model or group of models are best for educating LEP students?

HISTORY OF BILINGUAL EDUCATION IN THE UNITED STATES AND TEXAS

Since the 1800s, teachers have had the difficult task of teaching both English and non-English speaking students within one classroom. Solutions to meet both the needs of LEP students and English proficient students have been varied. For example, one school in St. Louis, in 1870, taught kindergarten in German for children of German immigrants.³ However, during World War I, “English only,” otherwise known as the “sink or swim” method,

Kelly Faltis will receive her Masters in Public Policy with a specialization in Economics and State and Local Government in 2011. Prior accomplishments include the 2006 Woman Entrepreneur of the Year for opening and running her own bakery/catering business. She since has sold the business to work in Water and Land Use Policy Analysis.

became the norm across the United States.⁴ Eventually, high drop-out rates and lack of attention to the needs of LEP students caused frustration in the growing Hispanic community.⁵ During the civil rights era of the 1960s, Latino political activists pushed for legislation to require schools to provide some form of bilingual education for LEP students.⁶ The Elementary and Secondary Education Act (ESEA) was passed in 1965, as part of President Johnson's Great Society.⁷ The ESEA funded essential programs, which included bilingual education. Then, federal legislators passed the Bilingual Education Act of 1968 (BEA) which required schools to offer bilingual education programs.⁸ To comply with the BEA, states implemented many different forms of bilingual education.⁹

The policy debate did not end there. Many teachers, parents, educators, and researchers questioned the effectiveness of bilingual education when test scores and English language acquisition did not drastically improve, and in some cases did not improve at all.¹⁰ Bilingual education is expensive; finding the most effective use of education funding is a critical part of the policy debate. In 1998, Californians used the initiative process to pass Proposition 227, which gave a statewide mandate for schools to provide a one-year structured English immersion program.¹¹ Although bilingual education continued in districts protected by a former Supreme Court Ruling (*Lau v. Nichols*), California schools were to teach English to LEP students and quickly transition them into mainstream classrooms.¹² On average, LEP test scores improved; however, critics note the difficulty in measuring language acquisition by a quick snapshot.¹³ The anti-bilingual education movement spread to Arizona and Massachusetts, where voters approved a modified form of Prop 227.

Texas is now one of only four states (the others are Illinois, New Jersey, and New York) to require bilingual education.¹⁴ The 1973 Bilingual Education and Training Act mandates that schools with twenty or more LEP students per grade level in a district must have a bilingual program.¹⁵ According to the 2009-2010 PEIMs data collection by the Texas Education Agency (TEA), a total of 817,074 students are enrolled as LEP students. Of those, 57.3 percent are in bilingual programs and 38.1 percent are in ESL programs.¹⁶ While the number of LEP students in middle school is

quite large, it declines significantly by twelfth grade. Both the transition of students into mainstream classes and the drop-out rate account for the declining trend in LEP enrollment.¹⁷

Although bilingual education has many avid supporters, Texas also has a movement to repeal its bilingual education laws in favor of some form of an English Immersion program. Texas has been a stronghold for the bilingual movement. While some schools report successful programs in bilingual education, the results are mixed overall. The future of the education of LEP students in Texas will be relevant to the current and future policy debate on bilingual education in the United States. This paper will analyze the effectiveness of English language acquisition programs offered to LEP students in Texas and offer a policy recommendation.

LITERATURE REVIEW

Empirical research shows mixed results on the effectiveness of bilingual education. While a meta-analysis by Keith Baker and Christine Rossell shows that bilingual education does not benefit LEP students,¹⁸ Jay Greene found that bilingual education had an overall positive effect.¹⁹ Greene's meta-analysis excluded many studies without a control group and only included studies within the United States. Baker and Rossell critique Greene's research because he left out a number of high quality studies of French immersion in Canada which showed positive results.²⁰ Researcher Jesus Jose Salazar comments on the problems with most current empirical models in bilingual research, stating that "one has a better chance of obtaining a statistically significant difference by simply flipping a coin, where the odds improve to 50 percent."²¹ In other words, finding statistical power is still a challenge for most researchers of bilingual education.

Yet, several frequently cited longitudinal studies analyze outcomes of the three most prevalent models of bilingual education. The purpose of all three models is to eventually "transition" the students into a mainstream classroom, and allow students to become fluent-English-proficient (FEP). There are two fundamental differences between these models: the length of time before the student is transitioned and the percentage of time English is spoken in the classroom. Structured English Immersion (SEI) models

transition LEP students to FEP status after only one to three years. Teachers of early-exit programs speak the primary language for the beginning part of the day and English for the remaining hours.²² Late-exit teachers speak the primary language for a “minimum of forty percent of their total instructional time in Spanish (Spanish language arts, reading, and other content areas such as, mathematics, social studies, and/or science).”²³

A 1991 longitudinal study conducted by David Ramirez, et al., and released by the US Department of Education, followed over 2000 LEP students enrolled in similar programs in five different states.²⁴ Inconsistent with the models’ theories, few of the students transitioned to mainstream classes before five years. However, as expected, the study found that students in the late-exit model were much slower to be reclassified as FEP students. Furthermore, it also found that “students in all three instructional programs improved their skills in mathematics, English language, and reading as fast or faster than students in the general population.”²⁵ The early-exit and English immersion programs were equally effective. Finally, the study found greater parental involvement in the late-exit strategy. By the end of sixth grade, the late-exit students who had the most time learning their primary language also learned English more quickly than the general population. The study suggests that becoming bilingual is a learning asset for LEP students in the long-term.²⁶

Another federally funded study, conducted by Wayne Thomas and Virginia Collier, researched LEP students in five school districts across the US.²⁷ LEP students from the Houston, Texas district performed best in a two-way, bilingual immersion program (TWBI) which both teaches English speaking students Spanish (or a different second language depending on the school), and Spanish-speaking students English.²⁸ The study compared the results of the TWBI program and a one-way bilingual program which contains only LEP students learning English and their primary language, and measured them against a transitional bilingual program (also known as early-exit or late-exit). By eighth grade, all three groups had similar results, with some former LEP students performing better than native English speaking students. Students in an ESL program performed relatively well until the ninth grade. By eleventh grade, the TWBI group performed

better than the others.²⁹ Since parents can sign a waiver to place their child in mainstream classes, the study also compared results from the three groups to students who had been waived. The waived students performed worse than the others, especially in high school.³⁰ Thomas and Collier do acknowledge that there may be socioeconomic factors that differentiate waived students from those in the TWBI program.³¹

Critics of bilingual education generally cite the research of Christine Rossell. The results of her research differ from the two studies previously mentioned. Rossell specifically critiques the 1991 longitudinal study stating, “the biggest shortcoming is that Ramirez, et al. never compare the achievement of children in the late-exit bilingual education program—the one with the most Spanish instruction—to that of the children in the immersion and early-exit bilingual programs.”³² She additionally critiques their failure to include LEP students in a mainstream classroom with ESL teacher support. Her recommendation for Ramirez is to use “percentage of English used in instruction” as an independent variable and achievement as a dependent variable, after controlling for other student characteristics.³³ Her suggestion is reasonable and would improve the study.

In 2009, Rossell conducted a study titled, “Does Bilingual Work? The Case of Texas.”³⁴ She compared student achievement test scores for the third through the fifth grades, since bilingual education is mandatory in elementary school. Students in grades six through eight can choose between a bilingual and ESL program, and high schools are only required to provide ESL. For students in grades three through five, the study finds a strong negative trend in the reading, math, and English writing performance of bilingual students. In science scores, Rossell found a gap of six percentage points between students enrolled and not enrolled in bilingual education.³⁵ Rossell cites a former 2002 study she performed, and a 2001 study by Valentina Bali of Michigan State University, which both found positive effects on sheltered English immersion programs in California after the passage of Proposition 227.

In long term studies, such as Thomas and Collier’s study of LEP students in Houston, Texas, the effects of bilingual education seem promising.³⁶ However, Rossell’s research in Texas had a larger sample size

and looked at achievement tests for her results. She found the opposite result and strong significance in her tests on elementary students, which might reasonably prevail through higher grades.

The necessary application of theoretical models in the construction of research designs poses a difficulty in determining the effectiveness of a program: theoretical models often function differently than originally envisioned when applied. Not all schools have the financial resources to support a certified bilingual or ESL teacher. Even if there is funding available, rural areas may not have a supply of trained educators, and may need to either certify one of their own teachers or let the program suffer. Research on a model may suffer if it is not correctly applied, or a “good” model may not work if taught by a “bad” teacher. If a community lacks support systems for parents and students, then program effectiveness might also be skewed. Additionally, other variables, such as student-to-teacher ratio, class size, funding, material availability, parental involvement, and poverty levels may all play a role in the success of a program.

Research conducted by James Cummins raises an important consideration for understanding how LEP students learn. Many LEP students may be able to speak “conversational” English; however, learning academic English can take more time.³⁷ Tests may not address the time it takes for an LEP student to understand academic language and therefore may underestimate the actual content that the LEP student has learned. Texas addresses this concern by offering assessment tests in Spanish until at least the sixth grade.³⁸ Cummins’ research suggests that students may need follow-up for several years to strengthen their academic English.

Overall, the empirical evidence is divided; each study looked at different samples across the United States using different achievement measures and found different results. More research will be needed to look at the long-term effects of bilingual educational models. Texas recently improved its education data system by separating results not just by bilingual or ESL programs, but dividing them into more specific model categories. In the near future, researchers will have a better opportunity to look at the effectiveness of each specific program relative to Texas.

COMPARING MODEL OUTCOMES

A study titled “Age and Rate of Acquisition of Second Language for Academic Purposes,” conducted by Virginia Collier, suggests that LEP students who “arrived” at a school when they are ages twelve through fifteen had the “greatest difficulty and were projected to require as many as six to eight years to reach grade-level norms in academic achievement when taught entirely in the second language.”³⁹ LEP students who were eight to eleven years of age performed the best. However, some students start school when they are very young, and Texas offers pre-kindergarten programs to assist LEP students before they even start school. The students Collier researched may or may not have had prior schooling before they “arrived” at school, at differing ages. No model can fully compensate for limited schooling.⁴⁰

In looking at the bilingual models, late-exit and dual immersion, many researchers ask whether or not learning the primary language will also help in learning English. In a paper titled, “Monolingual and Bilingual Acquisition: Learning Different Treatments of that-trace Phenomena in English and Spanish,” Virginia Gathercole analyzes that question by looking at results from three different studies. She concludes that the language acquisition of English and Spanish are “independent,” and that “bilingual children initially lagged behind their monolingual peers in linguistic development, but that they began closing the gap by fifth grade.”⁴¹ This research would suggest that bilingual models in early education might not be as effective as models teaching only one language, such as English immersion.⁴² However, in Thomas and Collier’s study, bilingual two-way/dual immersion programs outperformed the others, which suggests a different outcome.⁴³

Based on the mixed results of so many different studies, no model can be declared a winner conclusively. However, within Texas, some models show better results than others—as evidenced by the research of Rossell, who found that the bilingual models in Texas did not perform well.⁴⁴ Multiple researchers, have questioned the effectiveness of transitional models.⁴⁵ Although most of their research finds better results with sheltered or structured English immersion, Baker and Rossell do occasionally find a

positive result from bilingual education.⁴⁶

In addition, a 2004 study by the Arizona Department of Education found English immersion programs outperforming bilingual programs in Stanford-9 standardized test scores.⁴⁷ California results also show improved test scores.⁴⁸ However, determining causality is difficult, since other students' test scores also improved. Additionally, the lack of longitudinal data across California makes an econometric study difficult. At least, test scores did improve and did not decrease. English immersion has a strong possibility of success.

Statewide drop-out rates add information regarding outcomes for LEP students. The most recent rates available from the Texas Education Agency are for the 2008-2009 school year. For grades seven and eight, LEP students totaled 66,083 students. The majority of students transitioned to mainstream classes (and are no longer LEP students) by grade seven, and seventy-eight percent of LEP students remain in ESL programs. Drop-out rates for those in ESL programs are 0.4 percent for grades seven and eight, compared to drop-out rates of 1.4 percent for LEP students who are not serviced. While the drop-out rates for students of bilingual programs is zero, only 0.6 percent of students are in bilingual programs in grades seven and eight. By grades nine through twelve there is a total of 92,267 LEP students, of which 75.2 percent are in ESL programs. The drop-out rate is 4.2 percent for ESL/content-based LEP students, and 4.7 percent for ESL/pull-out LEP students, as compared to a drop-out rate of 7.4 percent for LEP students receiving no services. This figure may capture a lack of parental encouragement or participation for LEP students who have elected not to participate in an ESL program.⁴⁹

While the drop-out rates are relatively low in seventh through eighth grades, those in the ESL program fared better than those without any services. Ninth through twelfth grades experienced a similar trend, with slightly better results for those in an ESL/content-based program. Although drop-out rates are higher in grades nine through twelve, this is to be expected based on wider trends for high school students and other socioeconomic factors. Students who are still in a program by this grade might have economic challenges, family demands, or other learning

disabilities that have kept the student from joining mainstream classes. In this case, the drop-out rate would already account for students who are more likely to drop-out. The lack of bilingual students in grades 9-12 makes a comparison to ESL programs impossible. Regardless, ESL students fare better than non-serviced LEP students.⁵⁰

Table 1: LEP Education Models in Texas

<i>Texas LEP Models</i>	<i>Description</i>
Dual immersion/ two-way	Both English and Primary Language Taught, students of two different language groups in same classroom (i.e. English & Spanish), Goal of bilingual and biliterate, transition to mainstream classroom in 6-7 years
Dual immersion/ one-way	Like Two-Way, except only one group (i.e. Spanish speaking students) is taught both languages
Transitional bilingual/late-exit	English & Primary Language Taught, goal of full academic language proficiency in English and primary language, transition to mainstream classroom in 6-7 years
Transitional bilingual/ early-exit	English & Primary Language Taught, Emphasis on learning English and transitioning to mainstream classroom, 2-5 years, non-academic subjects may be taught in English
ESL/content- based	English only, ESL instruction with a full-time teacher, subjects taught in English, no time limit
ESL/pull-out	English only, part-time ESL teacher available for support, students are in mainstream classes

Data Source: Texas Education Agency

Texas state law currently mandates the availability of bilingual education for elementary students, and a choice of bilingual or ESL for middle school students. High schools must have ESL. However, within those broad categories, some schools offer more than one type of bilingual or ESL program. The type of program offered may vary based on the legal requirements or on the needs of the student population.⁵¹ Most programs fall into the six models provided in Table 1 above.

LEP MODEL CRITERIA

The primary criterion for a successful LEP model is effectiveness. A measure of success must be determined for a calculation of effectiveness. Texas already does a good job, giving statewide assessment tests and recording the results in a data bank. Previous studies have pointed to the importance of long-term results over one or two year snapshots of student achievement. Consequently, a successful model will produce consistent, successful, empirically verified results over time.

One factor which is sometimes left out of empirical research, is the cost of LEP education. According to the 2009-2010 Budgeted Financial Data from the Texas Education Agency, Texas budgets \$1.2 Billion for all bilingual/ESL programs—an average of \$253/per student.⁵² Cost is an important factor, especially during a deep recession with federal and many state budgets running a deficit. Cost-effectiveness is especially important to the taxpayers and to schools, since it frees funding for other priorities in education and may prevent taxes from being increased or a teacher from losing pay. Immigration will continue to play a role in the cost of education. Determining the most effective way to educate the incoming students without wasting money is important now and will remain so.

Cultural norms and values are an important consideration when determining an appropriate model. Is the goal to teach English or to teach two languages simultaneously? Will time spent learning one language take away from time learning English? Do educational learning theories and cognitive development support bilingual education or English immersion? A determination of the priority and goal of education for LEP students, as appropriate to cultural norms and goals within the US, is relevant to the selection of the best model. Based on awareness of opportunities that learning English provides, many parents of Hispanic students want their children to learn English and quickly assimilate into a mainstream classroom.⁵³ Other parents and educators believe in equally preserving an immigrant student's primary culture and teaching English.

Finally, a successful program must also be politically and economically feasible. In rural or poor schools funding may be an issue, and rural areas may have a shortage of qualified teachers. Alternatively,

there might also be too few LEP students in a school to justify spending limited resources on a separate program. Is it likely that any necessary changes will be made to current state law?

POLICY ALTERNATIVES FOR LEP STUDENTS IN TEXAS

After reviewing studies, Texas drop-out rates, and other academic research, no one model appears unambiguously more beneficial than others; further econometric studies, which analyze a longer time frame than prior studies in Texas have, should be undertaken. However, based on current information, Texas can make some improvements. The following policy alternatives offer means of improving educational outcomes for LEP students in Texas. All are statewide measures and would require some form of legislation:

1.) Effective Bilingual/English Immersion: Introduce statewide legislation to require that either a two year SEI program or bilingual program be available for LEP students. This legislation would abolish mandatory bilingual education in Texas. English immersion programs should be modeled after research and the best SEI programs in Arizona, California, and Massachusetts. Students will have follow-up ESL resources available outside of class, after the two year SEI program. Counties should offer a recommendation and review of research for parents to choose a program for their child. Transitional programs that fall behind other bilingual/ESL programs should be changed into the new SEI program. Well implemented bilingual programs will remain. This alternative will serve as a pilot study that could allow future research and comparisons between the effectiveness of bilingual models and SEI models.

2.) Accountability: Allow the current system to continue with some relatively minor changes, most notably the introduction of legislation to set up a statewide LEP accountability system. Schools that are underperforming may need their programs to be adapted. The system should analyze why a school is failing, and recommend improvements to be made within a given time frame. Furthermore, the analysis system should research why programs fall behind: is it because of lack of resources, socioeconomic

factors, a shortage of certified teachers, or is the program not correctly implemented? Incorrectly implemented programs should be modified as recommended by the accountability analysis. Since language acquisition may take time to show progress, schools should be given directives to be sure LEP students are not falling behind other LEP students from other school districts.

3.) SEI-Only: This alternative would require legislation to change all LEP models to a two year SEI program. Again, follow-up services would be offered for students after leaving the program. Parents could opt in for one more year, if they believe their child needs more time. The SEI programs would be modeled after the most successful programs and methodologies in other states.

FUTURE OUTCOMES OF LEP STUDENTS IN TEXAS

Creating more effective programs is a goal of all three policy alternatives. Arizona and California have seen standardized test scores increase for LEP students. Adding a two-year SEI program in place of poorly performing bilingual or ESL programs would increase the effectiveness of education for LEP students.⁵⁴ An SEI program can specifically focus on increasing a student's ability to speak English first.⁵⁵ Then, they can quickly move into mainstream classes which focus more on content. Since learning detailed academic information can be difficult in a short period of time, an SEI program gives students more of an opportunity to learn English before stressing academic content.⁵⁶ The empirical research reported successful results in the long-term for some bilingual programs. Given this information, the Optional SEI alternative and the Accountability alternative would allow only well-implemented programs to continue. Effectiveness would be observed over time.

Effectiveness is a decided goal, but may not be the main political driver. Cost was a significant reason for California, Arizona, and Massachusetts' voters approval of English immersion programs. Most voters will vote in favor of cost-reducing measures. The accountability measure might initially increase costs, but would hopefully decrease costs by eliminating wasteful programs. The optional SEI alternative would

incur some initial costs to structure the legislation and the program, but evidence shows that SEI programs cost less than most bilingual programs.⁵⁷ Additionally, replacing ESL/pull-out programs with SEI would further reduce costs. ESL/pull-out programs require additional ESL teachers and added costs to operate. SEI has been shown to be cheaper than ESL/pull-out programs.⁵⁸ The SEI-only option would definitely reduce education costs for Texas.

None of the policy alternatives fully address cultural arguments. For this reason, allowing parental choice at the local level is important. The goal of dual immersion programs is to maintain the primary culture while encouraging the cultural norms of the United States. The first two alternatives allow dual immersion to continue, so long as it is successful. Some parents may choose for cultural preservation to happen in their home rather than at school. Other parents might lobby their district to offer a bilingual program or SEI. Districts can decide which program is most economically and politically feasible based on the desires and needs of their populations. SEI focuses on quickly teaching English and assimilating the student in a mainstream classroom. Therefore, the SEI alternatives would allow parents a choice to assimilate their children. Furthermore, the SEI-only alternative would relieve schools of the burden of years of state-funded bi-cultural education. Although some flexibility exists with the implementation and curriculum choices for SEI models, the state mandate to pay for years of dual cultural programs would end. Instead, parents might decide to maintain cultural teaching within the home or by extra-curricular school activities.

Removing the mandate for bilingual education would also allow for more flexibility at the local level. For the optional SEI alternative, districts could choose which program or programs fit their budget and work best for their student population. Most likely, larger districts would maintain both a bilingual program and an SEI program. Some have called bilingual education a modern day form of segregation.⁵⁹ The SEI-only option would restrict local choices, but it would end school segregation that starts in elementary education and continues for years. By allowing an SEI program for students, parents can opt for the more efficient SEI program.

Changes in one state may also affect another state. Texas may implement a change that encourages other states to change or the English immersion movement may spread from other states. Christine Rossell, whose research supports a well implemented English immersion program, has suggested an amendment to Prop 227 which would allow a two or three year English immersion program in the place of the current one year, quick transition to mainstream classes. Such a move in California or another state might make a change in Texas more politically feasible. Both advocates of bilingual education and English immersion would likely be open to arguments for improving the effectiveness of current programs. However, the SEI alternatives would most likely receive criticism from bilingual program advocates. Some Californian teachers and principals, who were formerly bilingual supporters, changed their minds once they saw the results from the structured English immersion program.⁶⁰ The accountability alternative would have less political friction, and would provide for incremental improvement. Given the recent budget shortfall for education in Texas, voters might be more likely to opt for legislation which would reduce cost while maintaining effective education.

While all three options are politically feasible, the accountability alternative may not be economically feasible. The state has few education administrators available to check the accountability of LEP programs. Adding a specified staff may or may not be affordable. However, given the importance of educating LEP students and their future employment outcomes, the accountability alternative seems necessary. If inefficient programs were streamlined by allowing schools to offer English immersion in place of poorly operating bilingual programs, more money would be available for implementing an accountability system. In this case, the first alternative would help make the second alternative economically feasible. Additionally, a current accountability system and mandated standardized testing already exists in Texas; however, the current system would need to be improved by establishing a metric to evaluate and compare LEP program outcomes. This could be done without creating a new agency, and could be implemented through the Texas Commissioner of Education.⁶¹

RECOMMENDATION

To improve outcomes for LEP students, Texas should adopt a combination of the Optional SEI Alternative and the Accountability Alternative. Based on cost and preliminary results from Arizona and California, Texas should look at implementing SEI programs, especially in schools with larger Hispanic populations.⁶² Allowing SEI programs could improve education for LEP students for several reasons. First, an SEI program would separate LEP students for only two years with the goal of quickly integrating the students into mainstream classrooms. The SEI program would focus on students' learning the English language first, before expanding the level of content knowledge.⁶³ Students would have an opportunity to receive follow-up support after the transition. Both measures allow successful bilingual models to remain operating. Since the empirical literature is still divided, no one method would be state mandated. Texans would be allowed to choose which method they believed to be best in terms of cost, efficiency, and student results. By offering parental choice, cultural decisions will be kept at the local level.

Texas should also work at implementing accountability measures. Any models that lack successful outcomes should be analyzed and possibly dismantled or changed to improve their function. Most ESL pull/out programs and poorly performing bilingual programs should be replaced with an SEI program. In the long run, educational costs will decrease, and LEP students' educational outcomes and job opportunities will increase. The accountability measure will be able to analyze the needs of the school district at the local level. If a lack of qualified teachers is the cause of failing programs, the accountability measure would have the flexibility to offer a rewards system to encourage educated professionals to seek further training.⁶⁴

Overall, the recommended alternatives would improve the current system in Texas. With a well-run educational campaign illustrating the costs and the benefits, voters might be more likely to implement both programs. Feasibility is important, and the accountability measure offers an incremental way to improve the current system. The SEI program provides a swift alternative that has had preliminary success in raising test

scores in Arizona, California, and Massachusetts. By implementing these two options together, Texas will serve as a unique test case for the rest of the United States. Its well-recorded data system and accountability testing will allow future research to better compare LEP model alternatives. While the three alternatives listed above are all good choices and would improve the Texas education system, the two recommended options would provide an incremental and cautious approach. They would mitigate the huge economic cost and cultural burden placed on schools responsible for educating the new immigrants, and capitalize on the valuable resources brought to the United States by immigration. Ultimately, however, the future of LEP students in Texas is in the hands of the electorate.

ENDNOTES

1. Estimate from U.S. Department of Education, <http://www.nclsa.gwu.edu/t3sis>.
2. Christine Rossell, "Does Bilingual Education Work? The Case of Texas," Texas Public Policy Foundation, September 2009, <http://www.texaspolicy.com/pdf/2009-09-RR01-bilingual-rossell.pdf>.
3. "School: The Story of American Public Education," PBS.org, accessed November 1, 2010, http://www.pbs.org/kcet/publicschool/roots_in_history/choice_master2.html.
4. "Do You Speak American?" Public Broadcasting Service, <http://www.pbs.org/speak/words/sezwho/socialsetting>. English submersion or "sink or swim" meant students were placed in mainstream classes with very little or no help.
5. David Nieto, "A Brief History of Bilingual Education in the United States," *Urban Ed Journal*, 61, no. 1(2009): 61-65. <http://www.urbanedjournal.org/archive/>.
6. *Ibid*, 61-65.
7. Eric W. Robelen, "40 Years after ESEA, Federal Role in Schools Is Broader than Ever," *Education Week*, 24, no. 31(April, 2005): 1, 42.
8. Nieto, A brief history, 61-65.
9. *Ibid*.
10. Rossell, Does Bilingual Education Work, 1-24.
11. David J. Ramirez, David J. Pasta, Sandra D. Yuen, David K. Billings, David K. Ramey, Dena R., "Executive Summary of the Final Report: Longitudinal Study of Structured English Immersion Strategy, Early-exit and Late-exit Bilingual Education Programs for Language-minority Children," as prepared for the United States Department of Education under Contract No. 300-87-0156, San Mateo, CA: Aguirre International, February, 1991: 1-40. Structured English Immersion (SEI) is a program where teachers maximize use of English in classroom and English is taught at an appropriate level to the needs of the LEP students.
12. National Association for Bilingual Education, <http://www.nabe.org/files/LauvNichols.pdf>.

13. Edward Sifuentes, "Education: Proposition 227: 10 years later," *North County Times* (Escondido, CA), November 8, 2008, http://www.nctimes.com/news/local/sdcounty/article_ec5de000-1999-580b-86a1-40ba1d26934f.html.
14. Rossell, *Does Bilingual Education Work*, 1-24.
15. <http://www.tea.state.tx.us>. LEP students are sometimes called English Language Learners (ELLs) in some research. Texas Education Agency uses the term LEP students.
16. Texas Education Agency, http://www.tea.state.tx.us/index.aspx?id=2147484907&menu_id=680&menu_id2=797&cid=2147483656.
17. Data from Texas Education Agency, accessed October 2010, <http://www.tea.state.tx.us>.
18. Christine Rossell and Keith Baker, "Bilingual Education in Massachusetts: the Emperor Has No Clothes Boston," (MA: Pioneer Institute, 1996): 1-10. <http://www.eric.ed.gov/PDFS/ED416674.pdf>.
19. Jay P. Greene, "A Meta-Analysis of the Effectiveness of Bilingual Education," March 2, 1998. <http://www.languagepolicy.net/archives/greene.htm>.
20. Rossell and Baker, *Bilingual Education in Massachusetts*.
21. Jesus Jose Salazar, "A Longitudinal Model for Interpreting Thirty Years of Bilingual Education Research," *Bilingual Research Journal*, 22, no. 1(1998): 1-12, http://www.usc.edu/dept/education/CMMR/text/salazar_longitudinal_model.pdf.
22. See Table 1 for definitions of the most prevalent bilingual educational models.
23. Ramirez, *Longitudinal Study*, p.2.
24. Ramirez, *Longitudinal Study*.
25. *Ibid*,
26. *Ibid*, 1-40.
27. Wayne Thomas and Virginia Collier, "A National Study of School Effectiveness for Language Minority Students' Long-Term Academic Achievement", UC Berkeley: Center for Research on Education, Diversity and Excellence, (2002): 1-335, <http://escholarship.org/uc/item/65j213pt>.
28. See Table 2.
29. Thomas and Collier, *A National Study*.
30. *Ibid*
31. *Ibid*.
32. Christine Rossell, "Nothing Matters? A Critique of the Ramirez, et. al. Longitudinal Study of Instructional Programs for Language Minority Children," *Bilingual Research Journal*, 16, no. 1 & 2. (Winter & Spring 1992): 2, 159-186.
33. *Ibid*.
34. Rossell and Baker, *Bilingual Education in Massachusetts*. They also studied the effect of French Immersion programs in Canada and found them to be effective.
35. Rossell, *Does Bilingual Education Work*, 1-24.
36. Thomas and Collier, *A National Study*.
37. James Cummins, "The Role of Primary Language Development in Promoting Educational Success for Language Minority Students." In (Ed. California Department of Education) *Schooling for Language Minority Students: A Theoretical Framework*. Los Angeles, CA: California State University, Los Angeles.

38. Texas Education Agency, <http://www.tea.state.tx.us>.
39. Virginia P. Collier, "Age and rate of acquisition of second language for academic purposes," *TESOL Quarterly*, 21, (1987): 617-641.
40. Ibid.
41. D. Kimbrough Oller and Rebecca E. Eilers, *Language and Literacy in Bilingual Children*, (Buffalo, NY: Multilingual Matters LTD, 2002), 220-254.
42. Ibid, 253.
43. Thomas and Collier, A National Study.
44. Rossell, Does Bilingual Education Work, 1-23.
45. Rossell and Baker, Bilingual Education, 1-10.
46. Ibid.
47. Eugene Judson and Margaret Garcia-Dugan. "The Effects of Bilingual Education Programs and Structured English Immersion Programs on Student Achievement: A Large Scale Comparison." (Arizona Department of Education, 2004): 1-11, <http://epsl.asu.edu/epru/articles/EPRU-0408-66-OWI.pdf>.
48. Ibid, 1-11.
49. Texas Education Agency, <http://www.tea.state.tx.us>. Drop-out rates are available on website.
50. Ibid.
51. Ibid. Texas law dictates a school containing at least 20 or more LEP students in a grade must provide bilingual education. Schools with less than 20 must provide ESL.
52. Ibid.
53. Rossell, "Does Bilingual Education Work," 1-24.
54. Ibid.
55. Judson and Garcia-Dugan, "Effects of Bilingual Education," 1-11.
56. Cummins, Role of Primary Language.
57. Christine Rossell, "It's time to replace Texas' bilingual education policy," *Houston Chronicle*, September 3, 2009. <http://www.cron.com>.
58. Ibid.
59. Amy Stuart Wells, "Hispanic Education in America: Separate and Unequal," Eric Clearinghouse on Urban Education, 59(1989), <http://www.ericdigests.org/pre-9214/hispanic.htm>.
60. Rossell, Does Bilingual Education Work, 13.
61. Texas Education Agency, <http://www.tea.state.tx.us>.
62. Greene, A Meta-Analysis. Texas already test-piloted SEI programs in a study in El Paso and found the programs successful. However, it was not referenced due to the lack of a control group as recognized in Greene's meta-analysis.
63. Kevin Clark, "The Case for Structured English Immersion," *Supporting English Language Learners*, 66, no. 7(2009): 42-46.
64. Patricia Gandara, Julie Maxwell-Jolly, and Anne Driscoll, "Listening to Teachers of English Language Learners: A Survey of California Teachers Challenges, Experiences, and Professional Development Needs," (2005): 1-26, <http://www.cftl.org/documents/2005/listeningforweb.pdf>.