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Language and the Fulfillment of the Potential of All Americans

Introduction and Overview

This paper addresses the overarching theme of how language is related to the ability of Americans to fulfill their potential as individuals and citizens. The United States is primarily an English-speaking country and as such fluency, as well as literacy, in English are essential for Americans and U.S. residents to achieve maximum social integration, educational achievement, economic mobility, and personal fulfillment. Although the vast majority of Americans speak English, not all have attained a level of proficiency or literacy in English that would allow them to fulfill their full potential. Meanwhile, many Americans speak or live in homes where a language other than English is spoken.

Although there would appear to be strong family foundations on which to cultivate the intergenerational transmission of languages other than English, sadly, this is not happening at a level commensurate with its potential, and many among the second and third generations are losing heritage languages at an alarming rate.

Given that the United States is functioning within an increasingly global economy as an agent in rich linguistic and cultural exchange, increasing the capacity of Americans to communicate via languages other than English becomes a legitimate necessity. Unfortunately, educational opportunities for maintaining, learning, and mastering languages other than English are inadequate and have been in decline for several decades. However, the potential of all Americans can nevertheless be achieved via language-promotional educational policies.

This paper is organized around four major questions:

- 1. How can we promote language access and ensure social justice for the over 60 million Americans who live in homes where a language other than English is spoken?
- 2. How can we ensure English communication ability and literacy (in English and other languages) for all residents of this country?
- 3. How can we ensure that speakers of languages other than English have the right and means to maintain and transmit their native tongue?
- 4. How can we guarantee provision of language services to those who need them?

This paper references Census and educational data regarding what is known about the language abilities of the U.S. population, and it makes recommendations with implications for policy and practice.

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How can we promote language access and ensure social justice for the over 60 million Americans who live in homes where a language other than English is spoken?

The promotion of language access has several dimensions based on the characteristics and needs of different individuals. Given the dominant role of English in the United States, it is necessary to ensure access to English for those who must learn it as a second language.

However, within the 60+ million population of speakers of languages other than English, there are varying degrees of English proficiency and English literacy, and the majority of this population is bilingual or multilingual. Nevertheless, based on self-reported U.S. Census data, large segments of this population do not speak English "well" or "very well." In order to assess the extent of need for English access, it is useful to consider more extensive background data.

Figure 1 below provides a summary of the Census data (2011) for speakers of the top 10 languages other than English age five and older. Note that there is a high degree of English proficiency for most speakers, which implies some degree of bilingualism. Nevertheless, there is a considerable lack of proficiency among those

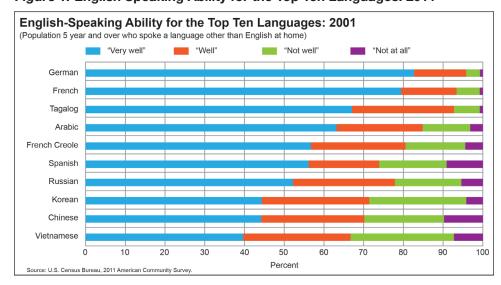


Figure 1. English Speaking Ability for the Top Ten Languages: 2011

Source: Ryan, C. (August, 2013). Language use in the United States. American Community Survey Reports (ACS-22). Washington, DC: U.S. Census Bureau, p. 3.

who indicate that they speak English "not well," or "not at all," which should be of concern. Note that total percentages for these categories are above ten percent for speakers of all languages except German, French, and Tagalog.

Given that these data apply to those ages five and older, it is useful to disaggregate the data by age group. Moreover, assuming the utility of English proficiency for employment, it is helpful to focus on the population between the ages of 18–65, since this range represents those who are most likely to be employed.

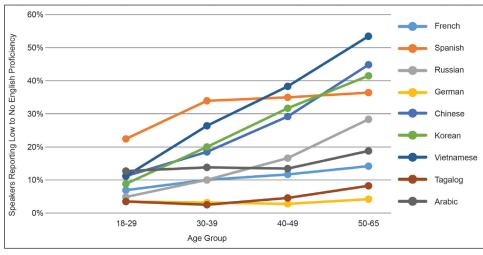
Table 1 and Figure 2 below demonstrate that older individuals within this range are less likely to have English proficiency. This is particularly the case for speakers of Spanish and Asian languages, especially those above the ages of 40. To ensure greater social integration and economic mobility, these individuals are generally the most in need of additional assistance in learning English or accommodations, such as translation assistance.

Table 1. Percentage of Speakers Reporting Low or No English Language Proficiency by Age and Native Language

Language	18-29	30-39	40-49	50-65
French	7%	10%	12%	14%
Spanish	22%	34%	35%	36%
Russian	5%	10%	17%	28%
German	4%	3%	3%	4%
Chinese	11%	18%	29%	45%
Korean	9%	20%	32%	42%
Vietnamese	11%	26%	38%	54%
Tagalog	3%	3%	5%	8%
Arabic	13%	14%	13%	19%

Source: Data in the table derived from Ruggles, Alexander, Genadek, Goeken, Schroeder, & Sobek (2010).

Figure 2. Percentage of Speakers Reporting Low or No English Language Proficiency by Age and Native Language



Source: Data in the table derived from Ruggles, et al., (2010). Integrated Public Use Microdata Series: Version 5.0 [Machine-readable database]. Minneapolis: University of Minnesota. Language Program Offerings

While proficiency in English is important, there are cognitive, economic, and social benefits to bilingualism/multilingualism.

While proficiency in English is important, there are cognitive, economic, and social benefits to bilingualism/multilingualism (Bialystok, 2001, Macias 2014; Moore et al., 2014) for all members of U.S. society. This includes those who speak only English, as well as speakers of immigrant languages, heritage and community languages, and Native American languages. Thus, it is useful to assess opportunities for learning additional languages for those who do not speak them and for maintaining languages for those who live in families and communities where additional languages are spoken.

Assessing opportunities for formal language instruction, however, can be challenging, partly because of the way languages of instruction are labeled. In addition to the strong and weak forms of bilingual education, intended to promote the acquisition of English, (see Section 2), languages are generally categorized as "foreign," "modern," or "world" languages, or—less typically—as heritage and community languages (Wiley and Bhalla, in press). Sometimes programs are labeled as "Spanish for Native Speakers," or Chinese or Vietnamese "Literacy for Native Speakers," but typically, data concerning heritage language instruction is inadequate. Even for K–12 instruction in foreign/world languages, data are not fully comprehensive because some states do not report data (Wiley & Bhalla, in press).

Among surveys of the K–12 language programs and practices that are available, the two most comprehensive are periodic surveys that have been conducted independently by the Center for Applied Linguistics (CAL) and the American Council for the Teaching of Foreign Languages (ACTFL). The CAL surveys were conducted in 1987, 1997, and 2008. They provide a picture of trends in both K–12 public and private school programs related to increases or declines in the percentage of programs that offer various languages (Rhodes & Pufahl, 2010). They do not, however, provide data on heritage and community language offerings (with the exception of Spanish for Native Speakers; Fee et al., 2014). Much of that effort is carried on outside of K–12 education at the community level, with the extent and quality of education varying across language communities (see Wiley et al., 2014). Nevertheless, the CAL surveys do point to important trends. Figure 3, for example, indicates a declines in foreign language instruction in elementary schools between 1997 and 2008.

A similar decline in middle and high school foreign language instruction, shown in Figure 4, occurred in 1997 and 2008, with a more marked decline at the middle school level.

Apart from the overall trends in foreign language teaching, it is useful to focus on the languages that are being taught. Spanish has been the most commonly taught language and saw an increase in the number of offerings from 1997–2008 (Figure 5). Elementary school enrollment increased for Spanish, Chinese, and Arabic in the same time frame, although the percentage of programs offering these languages was negligible. Meanwhile, there has been a decline in the offerings of languages such as French, German, Japanese, and Russian.

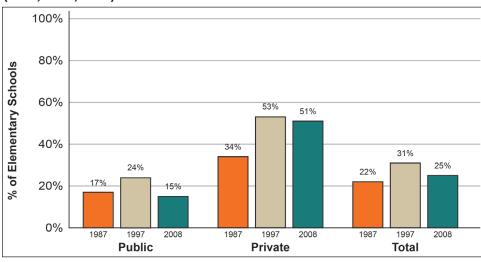


Figure 3. U.S. Elementary Schools Teaching Foreign Languages (1987, 1997, 2008)

Source: Reprinted with Permission from Rhodes, N. C., & Pufahl, I. (2010). Foreign language teaching in U.S. schools: Results of a national survey. Washington, DC: Center for Applied Linguistics.

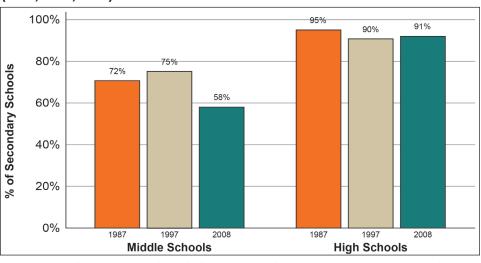


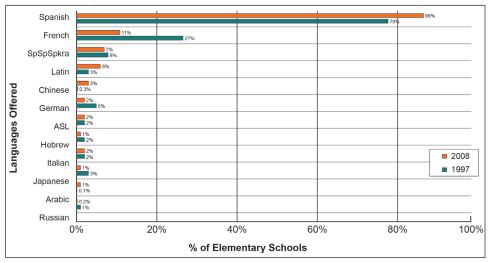
Figure 4. U.S. Middle and High Schools Teaching Foreign Languages (Total) (1987, 1997, 2008)

Source: Reprinted with Permission from Rhodes, N. C., & Pufahl, I. (2010). Foreign language teaching in U.S. schools: Results of a national survey. Washington, DC: Center for Applied Linguistics.

The trends in secondary schools (Figure 6) from 1997–2008 indicated that Spanish held steady with about 93% of schools offering the language, although there was a slight decline in offerings of Spanish for Native Speakers. This is unfortunate, given that the percentages of such offerings were already low, and this will be discussed later. Among immigrant languages, only Chinese and Arabic showed an increase, although, again, the percentages of programs offered were very low.

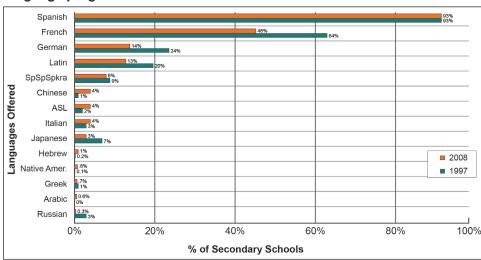
In addition to the decline of foreign language programs at both the primary and secondary levels, enrollment of students in these classes also declined.

Figure 5. Foreign languages offered by elementary schools with foreign language programs



Source: Reprinted with Permission from Rhodes, N. C., & Pufahl, I. (2010). Foreign language teaching in U.S. schools: Results of a national survey. Washington, DC: Center for Applied Linguistics.

Figure 6. Foreign languages offered by secondary schools with foreign language programs



Source: Reprinted with Permission from Rhodes, N. C., & Pufahl, I. (2010). Foreign language teaching in U.S. schools: Results of a national survey. Washington, DC: Center for Applied Linguistics.

Foreign Language Program Enrollment

In addition to the decline of foreign language programs at both the primary and secondary levels, enrollment of students in these classes also declined. Fee, et al. (2014), noted that in 2008, an estimated 4.2 million (out of 27.5 million) elementary school students in the United States (15%) were enrolled in foreign language classes. Meanwhile, from 1997–2008, the number of public elementary school students enrolled in language classes declined by about 300,000, from 2.5 million to 2.2 million. The trend in private elementary schools, however, saw an increase from 1.5 million to almost 2 million. While the data from private schools is

encouraging, it points to a social class advantage for students whose parents have the means to send their children to private schools with enriched program offerings.

At the secondary school level, an estimated 10.5 million out of 25.7 million students (41%) were enrolled in language classes in 2008. This represented a decrease from the nearly 12 million (52%) who were enrolled in 1997. In 2008, about 2.3 million attended middle or junior high schools, whereas 6.7 million attended high schools, and 1.5 million attended combined junior/senior high schools (Fee, et al., 2014).

Table 2 notes the number of 5–18 year olds living in homes where the top 10 languages other than English are spoken. Spanish is dominant in the homes of school-aged children. Nevertheless, there are over two million 5–18 year olds in homes where other languages are spoken. This population could provide a great pool of heritage and community learners.

Unfortunately, Chinese, Hindi, French, Vietnamese, German, Arabic, Korean, Filipino/Tagalog, and Russian are less frequently or rarely offered for study in primary or secondary schools (Fee, et al., 2014). Thus, there is a mismatch between languages of the home and languages offered in schools.

Table 3 demonstrates how little foreign language enrollment reflects heritage language communities in the United States and heritage and community language speakers in U.S. schools. While Spanish ranks number one on both lists, most Spanish foreign language courses are designed for Spanish foreign language learners. As noted in Figure 3 and Figure 4 above, CAL's 2008 national survey determined that only 7% of elementary schools and 8% of secondary schools offered Spanish for Native Speakers courses (Rhodes & Pufahl, 2010).

Despite being represented on the list of commonly spoken languages in homes with 5–18 year olds, Hindi and Arabic are noticeably absent from foreign language enrollment data in the United States. Likewise, other major languages in the United States, such as Vietnamese, Korean, and Tagalog, are not commonly offered. The lack of offerings of commonly spoken languages results in missed opportunities to encourage and promote the language development of heritage and community language speakers.

Table 2. Languages Most Commonly Spoken in the Home, 5–18 year olds (2008–2012)

Language Group	Raw Number	Percentage	
1. Spanish	9,080,501.00	15.5%	
2. Chinese	415,043.00	0.7%	
3. Hindi	359,466.00	0.6%	
4. French	341,934.00	0.6%	
5. Vietnamese	253,461.00	0.4%	
6. German	214,427.00	0.4%	
7. Arabic	196,198.00	0.3%	
8. Korean	173,235.00	0.3%	
9. Filipino/Tagalog	159,594.00	0.3%	
10. Russian	132,156.00	0.2%	

Source: Data in the table derived from Ruggles, et al., 2010.

There is a mismatch between languages of the home and languages offered in schools.

Table 3. Languages Mostly Commonly Spoken in the Home 5–18 Year Olds vs. Foreign Languages Studied in K–12 Schools (2007–2008)

Most commonly spoken languages at home (2007-2011 ACS Data)			Top foreign languages studied in K-12 Schools			
Language		Percentage of languages other than English spoken in the home	Language	Percentage of forgien language enrollment		
1.	Spanish	71.77%	1. Spanish	72.06%		
2.	Chinese	3.24%	2. French	14.08%		
3.	Hindi	2.77%	3. German	4.43%		
4.	French	2.72%	4. Japanese	.82%		
5.	Vietnamese	2.03%	5. Chinese	.67%		
6.	German	1.70%	6. Russian	.14%		
7.	Arabic	1.46%				
8.	Korean	1.45%				
9.	Tagalog	1.27%				
10.	Russian	1.07%				

Source: Data in the table derived from Ruggles, et al., 2010 and ACTFL, 2010.

In a further attempt to address the question of how well heritage and community language learners are represented in foreign language enrollment, Fee et al. (2014) compared ACTFL K–12 foreign language enrollment data for four selected states (California, Florida, New York, and Texas) against the number of heritage and community language learners living in households where languages other than English are being spoken based on U.S. Census American Community Survey (ACS) data. Assuming that enrollment reflects both true foreign language learners and heritage and community language learners, if the number of students actually enrolled falls significantly below the potential heritage and community language learners who might be enrolled in foreign language courses, there is a significant loss of participation by the potential heritage and community language. This is, in fact, the case (see Table 4). The number of heritage and community language learners between the ages of 5–18 is consistently lower than the actual enrollment (with the exception of Spanish in New York).

Table 4. Language Most Commonly Spoken in the Home, 5–18 Year Olds Compared to Foreign Language Enrollment Data by Selected States

	New York		Florida		Texas		California	
Language	Youth in homes where language is spoken 2005–2009	ACTFL 2007–2008 enrollment data						
German	9,876	10,483	5,736	7,897	10,350	21,037	11,061	16,202
French	43,609	116,236	85,404	60,613	9,019	79,163	19,107	120,960
Spanish	539,183	559,432	624,730	336,522	1,551,262	746,943	2,523,511	617,871
Russian	30,095	2,790	5,171	74	2,562	563	23,638	943
Chinese	60,206	6,919	7,323	1,604	18,672	1,449	134,431	12,710
Japanese	3,618	1,824	1,568	999	3,068	2,169	17,382	14,748

Source: Adapted from Ruggles, et al., 2010, and ACTFL Student Enrollment Data, 2007-2008; ACTFL 2010; cited in Fee, Rhodes, & Wiley, 2014, p. 17.

Source: Data in the table derived from Ruggles, et al., 2010, and ACTFL Student Enrollment Data, 2007-2008; ACTFL 2010; cited in Fee, Rhodes, & Wiley, 2014, p. 17.

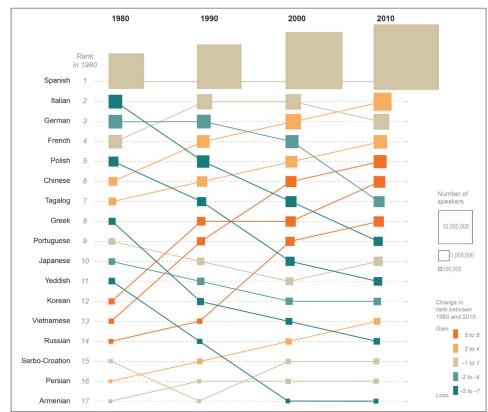
Rumbaut (2009) reports on a number of analyses that he and colleagues have undertaken which document language loss among heritage and community learners. In looking at the loss of languages other than English across generations, he reports that:

The analysis showed that even among those of Mexican origin, the Spanish language "died" by the third generation; all other languages died between the second and third generations. The death of languages in the United States is not only an empirical fact, but can also be considered as part of a larger and widespread global process of "language death" . . . [A] foreign language represents a scarce resources in a global economy, [and] immigrants' efforts to maintain that part of their cultural heritage and to pass it on to their children certainly seem worth supporting. Indeed the United States finds itself enmeshed in global economic competition . . . [t]he second generation, now growing up in many American cities, could fulfill such a need (p. 64).

It is evident that, if we are to reverse this tremendous loss of languages across generations, there is a need to dramatically improve the opportunities to study languages other than English in school, among both heritage and community and foreign language learners. To illustrate the implications of this loss of languages within the general population, Figure 7 indicates changes in rank in the top 10 languages spoken in the United States since 1980.

There is a need to bring together efforts to promote not just foreign or heritage language education but to provide an integration of efforts to promote both.

Figure 7. Top languages other than English spoken in 1980 and changes in relative rank, 1990–2010 (February 14, 2013)



Source: Data in the table derived from Decennial censuses 1980–2000 and 2010 ACS 1-year estimates.

The changes in rank are largely the result of changes in immigration patterns. Nevertheless, given the significant loss of languages by the second and third generation, it is also apparent that linguistic resources, once prominent, have not been retained to the extent that they might have been, thereby representing a loss to individuals, their families, and the nation as a whole. To reverse this trend, there is a need to bring together efforts to promote not just foreign or heritage language education but to provide an integration of efforts to promote both. Beyond that, there is a need to integrate efforts to promote English acquisition and English literacy with promoting bilingualism/multilingualism, and biliteracy/multi-literacy. The next section addresses these issues.

How can we ensure English communication ability and literacy (in English and other languages) for all residents of this country?

While the previous section identified programs, practices, and trends for the learning of languages other than English, this section addresses English Language Acquisition for speakers of languages other than English. When these speakers are schoolaged and are not yet proficient in English, they are routinely referred to as English Learners (ELs).

A Brief Review of U.S. Language Policy

Assuring that ELs have access to English in schools has been the result of Supreme Court decisions, federal policy, and state policy over the last 50 years. Early on, federal programs acknowledged the use of the native language, but as public attitudes toward the languages of minority communities started to shift, so did the role of native language instruction as outlined by the Federal Government. The brief outline below of Supreme Court decision and federal and state policy underscores the influence of the English Only movement in the education of English Learners.

The first federally-funded bilingual programs were provided under the Elementary and Secondary Education Act (ESEA) Title VII Bilingual Education Act in 1968 for poor, non-English-speaking students. This was closely followed by the landmark Supreme Court decision in 1974, *Lau v. Nichols*, which established that students not yet proficient in English had the right to equal access to the curriculum. The ESEA was reauthorized in 1974, requiring native language instruction as a condition for receiving bilingual education grants. According to Baker (2011), this funded a "weak" form of bilingual education which, rather than promoting acquisition of the native language, used it only as a bridge to English.

As districts applied for funding from the Title VII program, guidelines for adequate programs were established by an Appeals court. In *Castañeda v. Pickard* (1981), the court established three-pronged guidance for bilingual programs. Such programs must be: 1) based on sound educational theory, 2) implemented with adequate resources, and 3) evaluated and proven effective.

With modifications allowing some English-only programs in the 1988 and 1994 reauthorization the Title VII program, the influence of English-only policy started to become apparent. However, by 2002, (as part of the reaction to the English Only movement) Title VII was completely eliminated, replaced with Title III and No Child Left Behind. The Title III program provided assistance directly to states. Use of the term "bilingual" was erased from federal agencies, federal programs, and technical assistance.

Today, ELs have inherited a legal framework which maintains their rights to access the core curriculum and to understand the language of instruction, yet, depending upon the state in which they reside, teachers may or may not be allowed to use students' native language in instruction. In Arizona, Massachusetts, and California, legislation has been passed, requiring all instruction to be in English.

Assuring that ELs have access to English in schools has been the result of Supreme Court decisions, federal policy, and state policy over the last 50 years.

Over the last 30 years, the population of K-12 ELs have increased so significantly that today, on average, one out of every ten students in the United States is an EL. In this brief review of the official language policy record, we are reminded that language education, whether designed for native English speakers or speakers of other languages, has been subject to the political climate and attitudes over the past few decades (and indeed, centuries, as discussed in the next section). Although there have been tremendous efforts to address the language needs of ELs in terms of English acquisition, bilingual education has been available to only a fraction of those K–12 students who needed it, seldom reaching ten percent during the 1980's and 1990's (Macías, 2014, p. 34). Most EL students receive some form of English as a Second Language (ESL) instruction, yet according to Gándara and Hopkins, (2010) fewer ELs have had access to bilingual instruction, defined and discussed below, as time has passed.

Bilingual Educational Programs

Bilingual education has had a long and sometimes controversial history based on a misunderstanding of its purposes and goals. Thus, clarity is useful with regard to what is meant by bilingual education. A review of research by Baker (2011) informs us that there are many types of bilingual education models, which can be characterized along a continuum as "weak" or "strong" forms of bilingual education. The basic aim of weak bilingual programs is the assimilation of language minorities. Generally speaking, students in weak bilingual education (ESL withdrawal, content ESL and transitional bilingual education) typically finish school well below average in terms of English reading achievement. Participation in weak forms of bilingual education, such as immersion in English, has not resulted in increased linguistic development or academic achievement.

In 2002, Thomas and Collier published a five year, multi-state study which showed that unstructured English immersion beginning between kindergarten and first grade led to low reading and math achievement in elementary school, never to be regained, and lower graduation rates from high school. Conversely, strong forms of bilingual education have bilingualism, biliteracy and biculturalism as intended outcomes. Strong bilingual education programs, such as the dual language model, discussed below, show promising outcomes for ELs, with students scoring at or above the average for reading achievement.

Over the last 30 years, the population of K–12 ELs has increased so significantly that today, on average, one out of every ten students in the United States is an EL (Soto, Hooker, & Batalova, 2015). As bilingual and potentially biliterate individuals, these students are uniquely positioned to contribute to the cultural, social, and economic advancement of their communities as well as the country at large. Unfortunately, this potential is not being reached, since, in most typical educational programs, ELs are lagging behind their English-fluent peers by at least one standard deviation in measures of reading and math (Valentino & Reardon, 2014). Put differently, a full ten percent of the nation's public school students are failing to receive equal educational opportunities, and are in critical need of educational interventions that could ameliorate the staggering achievement gap between them and their peers. There are however, positive models of strong bilingual programs, as discussed above, which offer better alternatives for the future.

Dual language (DL) programs present both a viable alternative to English-only program models in which many ELs are languishing and a means for them to develop literacy in their native language, while also promoting literacy and proficiency in English (Lindholm-Leary & Howard, 2008). In addition to providing the opportunity to develop bilingual fluency among English-fluent students, over 20 years of research on DL programs has documented that they offer a positive alternative to monolingual English (or English immersion) instruction for ELs. Valentino and Reardon found that "for Latino EL students, two-language programs lead to better academic outcomes than English immersion programs in the long term" (forthcoming, p. 36). Despite the importance of their findings, a limitation of their research was that it was unable to probe "differences among the programs in quality of instruction and classroom environments" (p. 36).

Similarly, Lindholm-Leary and Genesee (2014) underscored that little research on DL education has examined pedagogical issues in relation to student outcomes, calling for further empirical evidence on pedagogical strategies. They also note that immersion programs (including DL programs) frequently lack a clear definition with regard to the amount of instructional time devoted to each language. Hopewell and Escamilla (2014) likewise have called for a better understanding of the instruction in bilingual settings: "We know that formal bilingual education results in positive long-term academic achievement, however, we know very little about how best to design and deliver instruction such that we maximize students' potential to become bilingual" (p. 184).

There are a variety of DL program models that have had positive results for ELs and English-fluent students alike. The emerging research on the outcomes of DL models can be summarized as follows:

- 1. For English language development, ELs and English-fluent students demonstrate high levels of oral language proficiency by upper elementary (4-5) in both 50/50 and 90/10 models (Christian, Genesee, Lindholm-Leary, & Howard, 2004);
- 2. By upper elementary (4-5), ELs in DL models demonstrate reading and comprehension of grade-level passages comparable to English-fluent students (Christian et al., 2004; Lindholm-Leary, 2005);
- 3. Students in 90/10 programs develop higher levels of bilingual proficiency than students in 50/50 programs (Lindholm-Leary, 2005); and
- 4. Both ELs and English-fluent students who participate in DL programs have a very positive attitude toward school, a desire to go to college, and view bilingualism as a benefit; ELs who participate in DL programs credit the programs with keeping them in school, thereby reducing the school drop-out rate (Christian et al., 2004).

Such outcomes (academic, linguistic, and emotional) are extremely important for ELs, who are often in programs that do not provide the support required to achieve academically and graduate at the same rates as their English-fluent peers (Genesee, Lindholm-Leary, Saunders, & Christian, 2005; Lindholm-Leary & Genesee, 2014; de Jong, 2014; Lindholm-Leary & Hernandez, 2011).

There are a variety of DL program models that have had positive results for ELs and English-fluent students alike.

Since the 1990's there has been a steady growth in DL programs. Approximately 40 states now offer DL schooling (U.S. Department of Education, 2015). Most DL programs are at the elementary level although there are also programs at the middle and high school levels. Recently, entire states (Utah and Delaware) and entire school districts (U-46 in Illinois) have adopted DL programs.

Promoting Native Language Acquisition

In addition to promoting the acquisition of English, there is a need to recognize the benefits of bilingualism for ELs. In the early decades of the 20th century, there was a belief that bilingualism had a negative effect on cognition. Since that time, advances in cognitive research and neuroscience have dispelled that notion, even allowing for the fact that bilinguals have certain cognitive advantages in thinking dimensions, such as divergent thinking, creativity, metalinguistic awareness, and mental flexibility (Hakuta, 1990; Peal and Lambert, 1962). Bialystok (2011) characterizes this mental flexibility as the ability to adopt to ongoing changes and process information efficiently and adaptively. Bilinguals may have stronger symbolic representation and abstract reasoning skills (Diaz, 1985) as well as better learning strategies. The evidence supports the fact that bilingualism can enhance aspects of cognitive function, and that knowledge of two languages deepens children's understanding of key mathematical concepts.

Research in the United States indicates that supporting the native languages of ELs while adding English promotes high levels of achievement in English. (Barnett et al, 2007; Bernhard et al., 2006, Duran, Roseth & Hoffman, 2010). These results signify that the processes of acquiring two languages and of simultaneously managing those languages allows bilinguals to develop skills that extend into other domains. Given all of the apparent benefits of bilingualism, it appears important to stress the learning of multiple languages in school.

The Shortage of ESL and Bilingual Teachers

What then, can be the impediment for ELs to acquire English proficiency similar to their English- fluent peers? There is a strong legal framework, there are identified curricular approaches and instructional models, and evidence of effective approaches. So why do ELs continue to be underachievers and lag in English proficiency? Research conducted by Valdés (2002) noted an absence of studentteacher interactions in bilingual classrooms, owing to the lack of availability of ESL teachers. Many EL students do not receive specialized language services and instead are taught by regular classroom teachers who have had no training in this area. Many ELs are segregated to the "ESL ghetto" (Valdés, 2002). These findings encourage us to review the availability of trained teachers of ESL or bilingual education and the review is sobering: while ten percent of all public school students are ELs, less than one percent of public school teachers are prepared to be ESL instructors. This means the ratio is 1:150 of ESL teachers to EL students, which is staggering compared to the 1:15 standard classroom ratio across America. There is no data available for the number of certified bilingual teachers working with ELs. Nevertheless, the two largest public school systems in the country, New York City, and Los Angeles, acknowledged in 2013 that they had been failing to meet the needs of ELs and promised to implement new programs to improve the situation.

Bilingualism can enhance aspects of cognitive function, and knowledge of two languages deepens children's understanding of key mathematical concepts. The trouble in these systems underscores the depth of the problem faced by systems around the country. Unfortunately, the rapid growth in the EL population has not been matched by sufficient growth in teachers prepared to work with them. In addition, a mounting body of quantitative and qualitative evidence overwhelmingly points to a long-term shortage of certain categories of teachers in the United States. These shortages appear to be particularly acute in critical fields such as mathematics, science, special education, and English as a Second Language.

A variety of official and independent sources confirm this teacher shortage, especially for ESL and bilingual education teachers. The "2003–04 Schools and Staffing Survey," (Tourkin, Warner, Parmer, Cole, Jackson, Zukerberg, Cox, & Soderborg, 2007) which is the most recent publicly available version of a triennial sample survey of U.S. elementary and secondary schools conducted by the U.S. Department of Education's National Center for Education Statistics, reported that about one of every seven public schools with Limited English Proficient (LEP) students had difficulty in, or was ultimately unsuccessful at, filling vacancies for ESL or bilingual teachers.

The EPE Research Center identifies a "significant mismatch between the projected need for ESL teachers and state policies designed to increase the supply of such educators" (Hightower & Lloyd, 2009). States collectively anticipate the need for 56,000 new ESL teachers, which represents an increase of more than 38 percent from the current ESL instruction workforce. The American Association for Employment in Education, a professional organization for teachers and school administrators, concludes that there is a "considerable shortage" of bilingual teachers and "some shortage" of ESL teachers (2008). These shortages are particularly acute in the Southeastern, Rocky Mountain, and South Central regions of the United States, which have experienced significant immigration over the past decade. Some states (e.g., Illinois, Iowa, New York, Texas, and Wisconsin) appear to have chronic difficulties finding sufficient ESL instructors, having reported a shortage in eight of the past nine years.

Again, to date, there has been relatively little attention paid to the role of systemic factors that contribute to inadequately-trained teachers and the associated low academic outcomes for ELs. Research shows that a high quality teacher can have a significant effect on student outcomes. Thus, improving the policies that stipulate teacher knowledge and skills for working with ELs is one way to improve the educational outcomes for these students.

Based on these considerations, there is a need to:

- support the development of a national teacher preparation program that focuses on the development of biliteracy skills, and ESL skills targeted at bilingual individuals.
- develop teacher preparation programs that prepare teachers to be dual language educators.
- develop teacher education programs that prepare all K-12 teachers to work with ESL students.

The rapid growth in the EL population has not been matched by sufficient growth in teachers prepared to work with them.

There has been relatively attention paid to the role of systemic factors that contribute to inadequately-trained teachers and the associated low academic outcomes for ELs.

- include in all state teacher preparation programs, coursework on ESL and dual language education.
- require courses on EL education as part of school administrator certification.

Thus, the goal of developing English communication ability and literacy among EL students can be met in tandem with the goal of preserving native languages, as discussed in the next section.

How can we ensure that speakers of languages other than English have the right and means to maintain and transmit their native tongue?

Given the success of dual language (DL) programs and evident cognitive advantages afforded bilinguals, it is clear that the support and promotion of literacy and English communication ability is only possible when we guarantee that speakers of languages other than English have the right and means to transmit their native tongue. Macías (1979) claims that language rights are classified into two fundamental categories: a right to protection from discrimination and a right to express oneself in one's native language. As Wiley (2013) notes, membership in a protected class based on characteristics like race or national origin historically has been the basis for these language protections in the United States. According to Crawford (2009), this may stem from the fact that, unlike other nations, language rights in the United States have always been framed within the context of other civil liberties, like ensuring that defendants are provided translators when necessary so that they can understand and participate in any trial proceedings. Consequently, only such protected groups have the legal standing to assert a right to language protection, resulting in an inextricable link that impedes protection of all citizens.

The combination of this potential legal barrier and the endurance of English-only movements, which tend to follow anxieties regarding immigration and more extreme periods of xenophobia resulting from international conflicts such as World War I and World War II (Wiley, 1998; 2004) require scrutiny. More recently, the political discourse reflecting fear of terrorists lurking among refugees necessitates reflection on how the current political state affects speakers of languages other than English.

In order to do this, it is important to first understand both the history and current context of language rights in the United States. Although the United States was formed under the auspices of protecting the individual freedoms of peoples from all parts of Europe, the Constitution does not directly address issues related to language (Spolsky, 2011). Prior to 1787, the Continental Congress printed documentation and correspondence in French and German, as well as English, and as recently as the early 20th century, areas with large language minority populations utilized native language instruction in transitional bilingual education programs (Crawford, 2009; Wiley, 2013). Nevertheless, Nativist concerns have persisted throughout the history of the United States, particularly since World War I (Wiley 1998; 2004), with trends often reflecting concomitant attitudes about immigration issues. In recent years, proposed Congressional amendments have sought to elevate English to the status of national language; while nearly two-thirds of the Senate voted in favor of one such proposed amendment in 2007, it did not have the requisite number of votes to become law.

Other legislation has focused on the use of English in the workplace. In 2007, for example, a bill aimed to bar the Equal Employment Opportunity Commission (EEOC) from suing employers requiring workers to speak only English while on the job, even when their use of English "is not justified by business necessity" ("ACLU

Backgrounder on English Only Policies in Congress," 2015). At the same time, there is also growing awareness within the United States that bilingualism/multilingualism increases social and economic opportunities within the world market (Brecht & Rivers, 2005).

Policy Orientations Toward Minority Languages

As a result of the lack of guidance at the national level and the wide range of views toward language in the United States, a range of policies could be used in response to issues surrounding language rights. Kloss (1998) and Macías and Wiley (1998) identify governmental policy orientations that range from promoting minority languages to actively suppressing them. A government that institutes "promotion-oriented policies" expends resources to expand and promote the official use of minority languages. Under "tolerance-oriented policies," the government abstains from actively pursuing a policy on minority languages; in other words, there is no effort to restrict language use in any way, but the onus is on the community to maintain and support their native language. "Restriction-oriented policies" do not overly limit the use of a given language, but they link access to certain benefits and opportunities to mastery of the dominant language which, in the case of the United States, is English. Finally, "repression-oriented policies" are committed to eliminating minority language use within a state.

The policy orientations instituted by a government have direct implications within the realm of education. In the United States, this is also compounded by what Wiley and Lukes (1996) note are two "popularly accepted ideologies:" (a) the notion that monolingualism is preferable to linguistic diversity within a nation because language difference promotes discord, and (b) the idea that there exists a "standard" version of a language that is superior to and more correct than other varieties of that language and therefore denotes a social hierarchy (p. 106). These beliefs lend themselves to government policies that tend toward restriction or repression, especially in education where "standard" or "mainstream" English is considered by some to be the only acceptable medium of communication. There also have been, however, protections of language rights in education that date back to 1953. At that time, a United Nations Educational, Scientific and Cultural Organization (UNESCO) resolution asserted that all children have the right to an education in their native language. Unfortunately, UN resolutions are not binding, and the United States and other countries have often not adhered to them (Wiley, 2013). Still, there is a need for advocacy.

Spring (2010), for example, has argued for the existence of a universal right to education, which includes the right of all peoples, including indigenous and minority cultures, to be educated in their own language. Within Spring's argument, youth need to connect positively to their native culture and their native language in order to learn effectively, and doing so has been supported by research, as discussed in the previous section. In addition, Spring, among others, has argued that youth must learn the dominant language in order to participate within the larger society. Finally, he posits that it is necessary for all people to understand the relationship between global cultures and economies and their own ways of living. The recommendations made within this argument are particularly germane within the multicultural United States and highlight the fact that the effects of enacting

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language rights in education may extend far beyond the classroom, though adequate programming and teacher preparation is certainly a start, as discussed in this paper.

Language Variation and Discrimination

Inadequate protection and support for all speakers' right to use their native language has consequences that extend beyond legal and educational outcomes. Work focusing on the links between language attitudes and outcomes like linguistic profiling, employment, and social mobility emphasize the far-reaching effects that language policies have on communities that speak something other than "standard" English. In fact, as Lippi-Green (2012) points out, the notion of a standard or idealized version of any language is, in fact, a myth. Indeed, she notes that even the editors of the Merriam-Webster Dictionary concede that "there can be no objective standard for correct pronunciation other than usage of thoughtful and, in particular, educated speakers of English" and they state that they "include all variants of a word that are used by educated speakers" (Merriam-Webster, 2009, p.83 in Lippi-Green p.58).

This simultaneously gives preference to certain classes of speakers, while also noting that language naturally varies. This exemplifies a common view of language: that there is a "correct" way to speak, but defining it is confounded with the person speaking. It is this perception that results in much of the linguistic subordination and discrimination faced by speakers of non-standard varieties of English and languages other than English. Given the large number of speakers of languages other than English identified as speaking English "not well" or "not at all" (Table 1, Figure 1, Figure 2), there is much evident potential for linguistic discrimination.

The effects of linguistic discrimination often begin in the classroom, but extend into adulthood. In the housing market, while it is illegal to deny housing based on a person's race, studies have found patterns of "linguistic profiling" that correlate with tenants' language. Linguistic profiling describes the practice of making assumptions about a person based on how he or she speaks, which can, in effect, penalize racial and linguistic minorities (Smalls, 2004). Purnell, Idsardi, and Baugh (1999), for example, found that this practice occurs even among native English speakers. In their study, landlords in California responded to phone calls from prospective tenants who spoke with a variety of English dialects. Results indicated that the landlords discriminated against prospective tenants on the basis of the sound of their voice during a short telephone conversation. In the wake of September 11, 2001, housing discrimination toward Muslims increased in the United States (Lippi-Green, 2012). Recorded incidents of Muslim families denied emergency housing transfers after being the victim of hate-motivated crimes point to an awareness of a "Muslim accent."

This kind of discrimination has also be recorded in the workplace. Zentella (2014) recounts cases of Spanish-English bilinguals being unfair targets in the workplace because of either using Spanish or speaking English with a Spanish accent. In addition, there has been a surge in the number of people fired for speaking Spanish on the job, in spite of being hired for their skill as bilinguals. Zentella notes that between 1996 and 2000, the number of job-related accent and language discrimination complaints filed with the EEOC increased from 96 to 447; the annual average in 2014 was approximately 460, showing that this remains a

The effects of linguistic discrimination often begin in the classroom, but extend into adulthood.

pervasive issue. Gilmore and Broderick (2007) indicate that many employers are unaware that federal regulations and court decisions prohibit discrimination based on an applicant's speech. Many employers prevent minorities and non-native English speakers from being considered for a position by advertising for "English only, no accents" even when an accent would have no ill effect on their performance. These types of attitudes hamper opportunities for social and economic mobility among minority and immigrant workers, when, as Gilmore and Broderick recommend, "with our increasingly multicultural business world, English-only rules must be reviewed and workplaces must more clearly reflect today's cultural realities" (p. 336).

In recognition of the need to provide protections to individuals with limited English, President Clinton signed Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, on August 11, 2000. The aim of this order is to "improve access to federally conducted and federally assisted programs and activities for persons who, as a result of national origin, are limited in their English proficiency (LEP)" (Clinton, 1993). To achieve this, the order obliges all federal agencies to assess the services they provide and identify ways in which they can modify services so that they are more accessible to LEP persons while not unduly burdening the fundamental mission of the agency. These requirements extend to federal agencies that dispense financial assistance; they must guarantee that all recipients, including those who are LEP, are able to apply for and receive appropriate benefits. To support federal agencies in making the necessary adjustments to fulfill these responsibilities, the U.S. Department of Justice (2000) has provided a guidance document that identifies the standards the agencies must follow, ensuring that they are not engaging in any discriminatory practices toward LEP persons and therefore adhering to the Title VI prohibition against discrimination based on national origin.

How can we guarantee provision of language services to those who need them?

Given the range of issues discussed here, it is apparent that a clear and comprehensive national language policy is needed to ensure that provisions of language services are guaranteed for all. It is clear that a lack of policies and programs relate to a failure to value and nurture the linguistic capital prevalent in the multilingual United States. A language policy "based on the current and historical reality of multilingualism in this country" is much needed (Wiley, 2007, p. 79). A comprehensive language policy, which meets all provisions, would "bring together the issues of foreign, heritage, and immigrant languages and start to build a unified policy that will include heritage languages . . . and the traditional values of learning other languages and cultures" (Spolsky, 2011, p. 5).

Indeed, Spolsky (2011) has noted the need for principles that bring together issues of foreign, heritage, and community languages into a coherent, unified policy that is based on valuing the linguistic and cultural diversity of the United States. Spolsky argues that such a policy would be based on four principles:

The first [principle] is the development of policies to ensure that there is no linguistic discrimination—that languages and speakers of specific languages are not ignored in the provision of civic services. As Wiley (2007) suggests, immigrant language policies need provision for both "protective rights" from discrimination as well as "rights of access" to instruction. The second principle is the provision of adequate programs for teaching English to all, native-born or immigrant, old or young. The third is the development of respect both for multilingual capacity, the cognitive advantages of which have been shown (Bialystok, 2001), and for diverse individuals. Arising out of this will be approaches that enhance the status and enrich the knowledge of heritage and community languages. Fourth will be a multi-branched language capacity that:

- strengthens and integrates a variety of language education programs,
- connects heritage programs with advanced training programs,
- builds on a heritage and immersion and overseas-experience approach to constantly replenish a cadre of efficient multilingual citizens capable of professional work using their multilingual skills, and
- provides rich and satisfying language instruction that leads to a multilingual population with knowledge of and respect for other languages and cultures (p. 5).

It is apparent that a clear and comprehensive national language policy is needed to ensure that provisions of language services are guaranteed for all. The most significant changes to promote the fulfillment of American potential must come from the classroom in the form of strong language education programs and the preparation of language educators.

A national policy with such a broad, comprehensive scope would recognize and build on the significant language diversity within the United States while helping to better link the country's citizens with a multilingual world (Wiley and Bhalla, in press). As discussed in this paper, the most significant changes to promote the fulfillment of American potential must come from the classroom in the form of strong language education programs and the preparation of language educators.

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About the Center for Applied Linguistics

The Center for Applied Linguistics (CAL) is a non-profit organization founded in 1959 and headquartered in Washington DC. CAL has earned an international reputation for its contributions to the fields of bilingual and dual language education, English as a second language, world languages education, language policy, assessment, immigrant and refugee integration, literacy, dialect studies, and the education of linguistically and culturally diverse adults and children. CAL's mission is to promote language learning and cultural understanding by serving as a trusted resource for research, services, and policy analysis. Through its work, CAL seeks solutions to issues involving language and culture as they relate to access and equity in education and society around the globe.

