The Binational Option: Meeting the Instructional Needs of Limited English Proficient Students

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Table of Contents

Executive Summary	4
I. Introduction and Background	5
A. Immigration Policy Context	5 6
II. The Teacher Shortage	7
A. The Origins of the Teacher Shortage B. State and Local Strategies to Address the Teacher Shortage	10 12
III. The Binational Option	19
A. US-Mexico Binational Migrant Education Program Teacher Exchanges B. The US-Mexico and US-Spain Visiting Teacher Programs	
IV. Conclusion	34
Appendices	42
Works Cited	49
About the Authors	55

Executive Summary

Since 1990, the number of limited English proficient (LEP) students in US schools has grown rapidly as a result of increasing immigration. At the same time, federal education policies under the No Child Left Behind Act have introduced new standards holding many schools accountable for the educational outcomes of LEP students. As a result school districts across the country are facing challenges in meeting students' educational needs and finding enough qualified bilingual and English as a Second Language educators.

States and districts have explored a variety of strategies to meet their teacher needs, including providing incentives for local youth and professionals in other fields to enter teaching, assisting foreign teachers residing in the United States in obtaining the appropriate credentials, and recruiting foreign teachers through the US government's temporary worker program or via teacher exchange programs.

Absent broader reforms to the US elementary and secondary education system and to the educator pipeline, it is unlikely that states and districts will be able to fully meet their needs through any single strategy.

This report examines one often-overlooked strategy: binational teacher exchanges. Although hardly flawless, these exchanges challenge widely held misconceptions about immigrants and immigration and potentially offer lessons for future policy directions. In conjunction with efforts to recruit local teachers, foreign teachers can help alleviate endemic shortages — particularly in districts that face rapid, unexpected, or short-term changes in the student population.

The focus of the report is twofold. It first examines the instructional needs of LEP students and the various approaches that schools and districts have implemented to meet these needs. It then highlights the shared interests and shared benefit from cooperation between countries to address the specialized educational needs of immigrant and second-generation youth.

Binational teacher exchanges have been most fully developed between the United States, Mexico, and Spain. Some short-term exchanges — ranging from three to eight weeks in duration — focus on meeting the educational needs of students who are forced to change their residences frequently because of the agricultural occupations of their parents. Under the aegis of other, longer-term exchanges, states and districts coordinate with governments in Mexico and Spain to select and hire bilingual teachers for one to three years.

The limited evidence of the impact of these programs suggests that, although small, they expose students to experienced educators. The teachers also benefit from the workplace experience and language skills that they acquire in the United States. When thoughtfully designed and aligned with longer-term strategies to address teacher shortages, teacher exchange programs show a clear potential to meet the needs of all the stakeholders involved: School districts fill their most urgent staffing needs, Spanish and Mexican teachers gain

practical experience working in the United States and improve their knowledge of English, and students gain access to qualified and experienced teachers.

International migration is a global challenge, and at times cooperation between countries can ensure that all stakeholders gain from migration. While many countries work together to control immigration flows and meet labor needs, little attention is given to what happens to immigrants after arrival. But it is precisely what happens after arrival that determines success or failure — both for the individual migrants and for their broader communities at origin and destination.

Local governments and communities have long borne the greatest burden in helping immigrants succeed. The largely unexplored experience of binational teacher exchanges illustrates how new partners are emerging that share similar objectives: ensuring that immigrants and their children succeed.

I. Introduction and Background

A. Immigration Policy Context

This report focuses primarily on the shortage of English as a Second Language (ESL) and bilingual education teachers in US schools and the strategies that states and districts have explored to meet their needs for teachers. Among these strategies are teacher exchange programs. However, this relatively narrow set of programs is set against a much broader policy backdrop. Behind the operational detail of the teacher exchange programs described, there is the emerging story of how these relatively small programs offer unique solutions to some of the more complex challenges that result from international migration.

International migration is a global challenge, and policymakers are gradually coming to recognize that viable solutions require cooperation between countries. While many countries cooperate to some degree in controlling immigration flows and meeting labor needs, little attention is given to what happens after arrival. But it is precisely what happens after arrival that determines success or failure — both for the individual migrants and for their broader communities at origin and destination.

Local governments and communities have long borne the greatest burden in helping immigrants succeed once they arrive at their destinations. The experience of teacher exchanges described here shows that new partners are emerging that share many of the same objectives. Some state and local governments are reaching across borders to create innovative policy responses to the challenges raised by growing international migration and its consequences. Increasingly, countries of origin and destination have joint interests in ensuring that immigrants and their children — including those who move back and forth across borders — succeed in building their human capital, achieving socioeconomic mobility, and accumulating assets over time.

From this perspective, binational teacher exchange initiatives can be considered part of a cluster of responses to the international movement of youth. These responses also include, for instance, the electronic transmission of student records and curricula between communities at origin and destination and the translation of academic standards so that newly arriving and highly mobile students can be placed in grade levels appropriate to their learning needs. And potential responses extend well beyond elementary and secondary education to fields such as health care and workforce training and preparation.¹

More generally, the experience of teacher exchanges holds important lessons for conventional thinking about the role of immigrants in the labor force. As this report describes, teacher exchange programs serve (although they could be improved) as a flexible, short-term stopgap that allows districts to respond to changes in teaching needs while viable longer-term solutions are developed. Where student populations fluctuate rapidly, making staffing choices difficult, teacher exchanges allow districts to quickly build up teaching capacity at the margin without making permanent commitments. In an increasingly dynamic and competitive global economy, this strategy for promoting workforce flexibility may be worthy of broader consideration.

B. Education Policy Context

Immigrants and their children are changing the profile of America's schools. From 1995 through 2006, the enrollment of limited English proficient (LEP) students in US schools grew 57 percent — far outpacing total enrollment, which grew 4 percent over the same period. The growth of LEP student enrollment during the same period has been much faster in some states, such as North Carolina (346 percent) and Nevada (199 percent). Nationwide, LEP students now account for 10 percent of all students, according to the US Department of Education.³

At the same time, the No Child Left Behind Act of 2001 (NCLB) requires that schools and districts teach and test LEP students in both English *and* academic content areas such as math, history, and science. The law also requires that teachers have special qualifications in the subjects that they teach: Teachers who instruct LEP students in both academic content and English language must have special credentials in both fields.

Previous research has examined how immigration and NCLB have changed the demographic profile of America's schools and placed new demands on America's students as well as on their academic outcomes, but surprisingly little has been written on how the convergence of these two events has changed America's teaching force. ⁴ The latter question

¹ See Laureen D. Laglagaron, *Protection through Integration: The Mexican Government's Efforts to Aid Migrants in the United States* (Washington, DC: Migration Policy Institute, forthcoming 2009).

² While many educators prefer the term English Language Learner (ELL), limited English proficient (LEP) is the designation found in federal and state legislation and policy guidance. We use LEP throughout this report.

³ During the 2005–06 academic year, the most recent year of data available. National Clearinghouse for English Language Acquisition and Language Instruction Educational Programs.

⁴ On demographic trends, see Randolph Capps, Michael Fix, Julie Murray, Jason Ost, Jeffrey S. Passel, and Shinta Herwantoro, *The New Demography of America's Schools: Immigration and the No Child Left Behind Act* (Washington, DC: The Urban Institute, 2005). On academic outcomes, see Jeanne Batalova,

is not trivial: Among all inputs associated with educational outcomes, access to quality teachers is widely recognized as the most important. And, perhaps more significantly from a policy perspective, surprisingly little research has comprehensively documented the strategies that schools and districts across the United States are employing to cope with these changes and the successes or failures of these strategies. Existing studies on teacher labor markets overlook the potential role of teacher exchanges.⁵

This report represents an initial, if only partial, attempt to survey the landscape of strategies that states and districts have implemented to recruit and retain qualified ESL and bilingual education teachers and to begin to think strategically about how to coordinate approaches to filling the gaps in the teacher workforce. It then examines the potential and the pitfalls of one particular approach that has largely been overlooked by researchers and policymakers: binational teacher exchange programs. Binational teacher exchange programs are collaborative efforts between two countries that allow educators to teach abroad for a limited period of time.

II. The Teacher Shortage

Identifying labor market shortages is notoriously difficult. The US Department of Labor concluded in 1999 that "no single empirical measure of occupational labor shortages exists, nor does it appear that one can easily be developed." Despite analytic challenges, 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.⁹

Michael Fix, and Julie Murray, *Measures of Change: The Demography and Literacy of Adolescent English Learners: A Report to the Carnegie Corporation of New York* (New York: Carnegie Corporation, 2007) and Nancy Kober, Naomi Chudowsky, and Victor Chudowsky, *Has Student Achievement Increased Since 2002? State Score Trends Through 2006–07* (Washington, DC: Center for Education Policy, 2008). ⁵ See for example Brian A. Jacob and Jens Ludwig, "Improving Educational Outcomes for Poor Children," in Maria Cancian and Sheldon Danziger, eds., *Changing Poverty, Changing Policies* (New York: Russell Sage Foundation, 2009): 277-278.

⁶ There are a variety of instructional methods for teaching LEP students. Most fall into one of four categories: bilingual education, dual-language instruction, English as a Second Language (ESL), and immersion. Bilingual education uses the students' native language part of the time, while ESL provides little instruction in the students' native language. LEP students in ESL programs often spend part of the day learning English and the rest of the day in regular classes. Immersion is an instructional method that provides no instruction in the students' native language. Dual language programs teach students skills using two languages. As a result, LEP students in dual language programs are often grouped according to their native language.

⁷ For a comprehensive list of educational and cultural exchange programs currently operated by the United States, see Interagency Working Group on US Government-Sponsored International Exchanges and Training, *Inventory of Programs*, various years, http://www.iawg.gov/reports/inventory/.

⁸ Carolyn M. Veneri, "Can occupational labor shortages be identified using available data?" *Monthly Labor Review* 122, no. 3 (March 1999): 17.

⁹ Diane Stark Rentner, Caitlin Scott, Nancy Kober, Naomi Chudowsky, Victor Chudowsky, Scott Joftus, and Dalia Zabala, *Report on the No Child Left Behind Act, Year 4* (Washington, DC: Center on Education

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" — the most recent publicly available version of a triennial sample survey of US elementary and secondary schools conducted by the US Department of Education's National Center for Education Statistics — reported that about one of every seven public schools with LEP students had difficulty in — or was ultimately unsuccessful at — filling vacancies for ESL or bilingual teachers. The EPE Research Center recently identified a "significant mismatch between the projected need for ESL teachers and state policies designed to increase the supply of such educators." The report estimates that the 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, recently concluded that there is a "considerable shortage" of bilingual teachers and "some shortage" of ESL teachers. 11 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.¹²

More recent analysis of shortages reported to the US Department of Education by the states indicates that 36 states and the District of Columbia have reported shortages of ESL or bilingual teachers since 2000. Some states — such as Illinois, Iowa, New York, Texas, and Wisconsin — appear to have chronic difficulties finding sufficient ESL instructors, having reported a shortage in eight or more of the past nine years. About 30 states expect shortages of ESL or bilingual teachers for the 2009-10 academic year, but as this report describes later, their ability to hire teachers will likely be curtailed by the fiscal crises facing many states.

The current economic crisis facing the United States — and much of the world — could change these trends in three important ways. First, if fewer immigrants enter the United States, the demand for ESL instruction could diminish. Second, in a tight labor market, teaching could become a more attractive option for workers who would have otherwise selected a different profession, and fewer teachers may decide to exit the field. Both of these scenarios would potentially alleviate some of the shortage. However, state budget crises could reduce funding for teacher recruitment and retention, further aggravating the shortage.

Attempts to predict the precise impact of the recession on the demand for ESL and bilingual education teachers are still premature. Observers agree that new immigrant inflows have

Policy, 2006); American Association for Employment in Education (AAEE), *Educator supply and demand in the United States* (Columbus, OH: AAEE, 2001).

¹⁰ Education Week and the EPE Research Center, Quality Counts 2009: Portrait of a Population (Bethesda, MD: Education Week, 2009).

¹¹ AAEE, Educator Supply and Demand in the United States, 2006 (Columbus, OH: AAEE, 2006).

¹² The Southeastern region includes Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia; the Rocky Mountain region includes Colorado, Montana, New Mexico, and Wyoming; and the South Central region includes Arkansas, Louisiana, Oklahoma, and Texas.

¹³ Tabulated from US Department of Education, Office of Postsecondary Education, Policy and Budget Development Staff, *Teacher Shortage Areas Nationwide Listing 1990-91 through 2009-10* (Washington, DC: US Department of Education, March 2009), http://www.ed.gov/about/offices/list/ope/pol/tsa.html.

slowed considerably, but there is as yet only limited evidence of return migration.¹⁴ Indeed, return migration to Mexico from the United States has remained surprisingly constant over the past two years.¹⁵ Irrespective of any potential return migration and particularly if legalization legislation is approved by the US Congress (as some legislators have proposed), it is unlikely that the need for ESL or bilingual education teachers will diminish as a result of the recession.

However, the fiscal impacts of the economic crisis may indirectly influence teacher demand despite continuing need. As of March 2009, 21 states had made budget cuts to K–12 and early education programs—including many states that appear to face shortages of ESL or bilingual teachers. School districts across the United States are facing hiring freezes, salary cuts, larger workloads, early retirements, and in some cases, layoffs. These setbacks could jeopardize the quality of the teaching force, and as a consequence, jeopardize students' educational outcomes. Education is an important focus of the federal stimulus package, known as the American Recovery and Reinvestment Act of 2009 (ARRA). Federal spending will probably be insufficient to forestall many cuts, but as a working group of distinguished researchers recently suggested, ARRA funds could be targeted to improving LEP student instruction. ARRA funds could be targeted to improving LEP student instruction.

Attempts to predict how the supply of ESL and bilingual teachers will react to the recession are just as premature. It is possible that the tight labor market might reduce teacher attrition rates and attract new entrants into teaching given the profession's relative employment and wage stability. However, empirical evidence does not support this hypothesis. Regression analysis performed for the Organization for Economic Cooperation and Development (OECD) finds that business cycle fluctuations are generally unrelated to teacher supply in the United States. Furthermore, retraining unemployed workers to become teachers or encouraging youth to enter teaching may be a wise strategy for the long term, but cannot address immediate needs because of the lengthy investments typically necessary for teacher

¹⁴ Demetrios G. Papademetriou and Aaron Terrazas, *Immigrants and the Current Economic Crisis: Research Evidence, Policy Challenges, and Implications* (Washington, DC: Migration Policy Institute, 2009), http://www.migrationpolicy.org/pubs/lmi_recessionJan09.pdf.

¹⁵ Instituto Nacional de Estadística y Geografía, "Información sobre el flujo migratorio internacional de México" (Comunicado Num 162/09, June 2, 2009).

¹⁶ Nicholas Johnson, Phil Oliff, and Jeremy Koulish, *An Update on State Budget Cuts: At Least 34 States Have Imposed Cuts That Hurt Vulnerable Residents, But the Federal Economic Recovery Package is Reducing the Harm* (Washington, DC: Center on Budget and Policy Priorities, 2009).

¹⁷ Center for Applied Linguistics, Stanford University and the American Institutes for Research, *The American Recovery and Reinvestment Act: Recommendations for Addressing the Needs of English Language Learners* (Report of the Working Group on ELL Policy, March 20, 2009), http://www.migrationinformation.org/integration/files/ELL-Stimulus-Recommendations.pdf. Although Section 1611 of ARRA (Public Law 111-115) — called the Employ American Workers Act — prohibits banks receiving federal funds from hiring foreign workers on nonimmigrant visas, these restrictions do not apply to other groups receiving funds under the Act (such as workers on federally funded infrastructure projects or schools).

¹⁸ Peter Dolton, Andrew Tremayne, and Tsung-Ping Chung, *The Economic Cycle and Teacher Supply* (paper commissioned by the Education and Training Policy Division of the Organization for Economic Cooperation and Development, Paris, March 2003).

education and licensing. Overall, teacher shortages appear to be an enduring, rather than cyclical, challenge.¹⁹

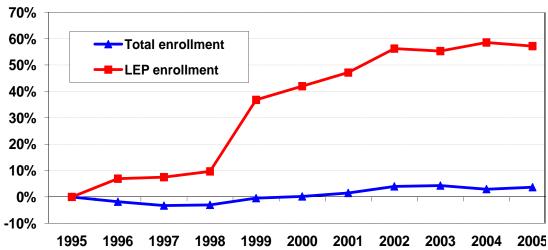
A. The Origins of the Teacher Shortage

Observers attribute the shortages of ESL and bilingual teachers to a variety of sources, including low retention, arguably uncompetitive compensation and working conditions, interstate barriers to teacher mobility, and broader labor market conditions. The following section outlines some of the major demographic and policy trends that may also be behind the long-term shortage of ESL and bilingual teachers.

1. The Demographic Context

Sustained immigration over the past three decades has dramatically changed the demographic profile of America's schools. While total enrollment has generally stagnated, growing only 4 percent from 1995 through 2006, the enrollment of LEP students has increased 57 percent over the same period (see Figure 1). About one in ten students in US schools is now LEP. In some states and districts, this trend has been even more dramatic. For instance, total enrollment in North Carolina grew 14 percent and LEP enrollment grew 346 percent from 1995 through 2006.

Figure 1. Total and LEP Student Enrollment Growth in the United States, Academic Years 1995-96 to 2005-06



Note: Years correspond to the academic year starting in the year listed and ending in the subsequent calendar year.

Source: National Clearinghouse for English Language Acquisition and Language Instruction Educational Programs, 2007.

¹⁹ Stephen Gorard, Beng Huat See, Emma Smith, and Patrick White, *Teacher Supply: The Key Issues* (London: Continuum International Publishing Group, 2006).

²⁰ For a review, see Linda Darling-Hammond and Gary Sykes, "Wanted: A National Teacher Supply Policy for Education: The Right Way to Meet the 'Highly Qualified Teacher' Challenge," *Education Policy Analysis Archives* 11, no. 33 (September 2003); and Richard M. Ingersoll, *Is There Really a Teacher Shortage?* (Seattle: Center for the Study of Teaching and Policy and the Consortium for Policy Research in Education, 2003).

The LEP student population shows considerable diversity with regard to its origins, but most LEP students are native Spanish speakers (see Figure 2). As immigrants increasingly settle in communities around the United States that have little historical experience integrating immigrants, states and districts have had to develop ESL or bilingual programs seemingly overnight.

Figure 2. Top 15 Languages Spoken by LEP Children, 1990, 2000, and 2007

199	0	2000 2007			
Spanish	67.7%	Spanish	73.5%	Spanish	74.6%
Chinese ^a	4.0%	Chinese ^a	3.4%	Chinese ^a	2.4%
French	3.6%	Vietnamese	2.8%	Vietnamese	3.6%
Vietnamese	2.8%	French	2.3%	Korean	1.7%
German	2.3%	Korean	1.5%	French	1.5%
Korean	2.1%	German	1.3%	Tagalog ^c	1.1%
Mon-Khmer ^b	1.4%	Miao, Hmong	1.3%	German	1.0%
Tagalog ^c	1.3%	Russian	1.0%	Russian 1.09	
Miao, Hmong	1.3%	Haitian Creole ^e	1.0%	Haitian Creole ^e	<1.0%
Japanese	1.2%	Tagalog ^c	<1.0%	Miao, Hmong	<1.0%
Thai ^d	1.1%	Arabic	<1.0%	Arabic	<1.0%
Russian	<1.0%	Japanese <1.0% Yiddish		<1.0%	
Arabic	<1.0%	Mon-Khmer ^b <1.0% Japanese		<1.0%	
Italian	<1.0%	Polish <1.0% Penn. Dutch		<1.0%	
Portuguese	<1.0%	Portuguese <1.0% Portuguese		<1.0%	

Note: Includes children age 5 to 18 who reported speaking English less than "very well."

Sources: Migration Policy Institute analysis of a 1 percent sample of the 1990 and 2000 censuses and a sample of 2007 American Community Survey microdata. Steven Ruggles, Matthew Sobek, Trent Alexander, Catherine A. Fitch, Ronald Goeken, Patricia Kelly Hall, Miriam King, and Chad Ronnander, Integrated Public Use Microdata Series: Version 4.0 [Machine-readable database], Minneapolis, MN: Minnesota Population Center [producer and distributor], 2008.

2. The Education Policy Context

These dramatic demographic changes have taken place in the context of legislative reforms under NCLB which, for the first time, requires that schools and districts report the academic progress of all students — including English learners. Schools and districts that fail to demonstrate that their LEP students have made progress both in learning English and in learning academic content (notably in mathematics and science) may be subject to sanctions that range from staffing reassignments to state takeovers.

The law also introduces new special requirements for teachers, who must be "highly qualified" in the subject areas that they teach. To be deemed highly qualified, teachers must have a bachelor's degree, full state certification or licensure, and prove that they know each subject that they teach.

^a Includes Cantonese, Chansa, Chinese, Hsiang, Hunan, Iyan, Mandarin, Miao-Yao, Mien, Min, and Yueh.

^b Cambodian

^c Filipino

d Includes Siamese and Lao

^e Or Haitian French

To prove their knowledge, middle and high school teachers must have done at least one of the following:

- majored in the subject
- accumulated credits equivalent to a major in the subject
- earned a graduate degree in the subject
- passed a state-developed test in the subject
- received advanced certification from the state in the subject
- in the case of existing teachers, have a combination of teaching experience in the subject, professional development, and developed knowledge of the subject over time working in the profession

Content-area teachers who have several LEP students in the classroom do not necessarily need to be "highly qualified" in ESL instruction, but ESL-certified teachers who provide content instruction to LEP students must be "highly qualified" both in ESL instruction and in the subject area that they teach. ESL or bilingual certification, even for teachers who only teach LEP students, does not qualify a teacher under NCLB's "subject matter competency" requirement. If an ESL or bilingual teacher provides instruction in core academic content to a class (e.g., teaching a math lesson in Spanish without the assistance of another mathqualified teacher), he or she must meet subject matter requirements as well. An ESL teacher does not have to meet the subject matter requirements if he or she provides only support to strengthen another teacher's instruction of LEP students or advises a subject teacher on methods or techniques.

States vary in the type of instruction provided to English learners, but in general the law states that if a school district has 20 or more students who speak a common foreign language, the district must provide bilingual teachers in that foreign language as well as ESL teachers. Approaches to teaching English range from English-only instruction in mainstream classrooms to programs that emphasize building both a child's native language and English skills simultaneously. These approaches may vary for different age groups and depend on the number of students in a given school who speak a shared language. For example, elementary schools with large numbers of Spanish-speaking students may opt for bilingual programs, while high schools may use traditional ESL pull-out instruction with students who speak less common languages. 22

B. State and Local Strategies to Address the Teacher Shortage

In response to the shortage of bilingual and ESL teachers, states and districts around the United States have developed a number of strategies to recruit and retain qualified educators. These strategies typically fall into two groups: long-term investments in training and

²¹ Julie Murray, Jeanne Batalova, and Michael Fix, "Educating the Children of Immigrants," in *Securing the Future: US Immigrant Integration Policy*, ed. Michael Fix (Washington, DC: Migration Policy Institute, 2007).

²² Julie Murray, Michael Fix, and Wendy Zimmermann, *New Directions for Newcomers: A Roadmap to No Child Left Behind and Limited English Proficient Students* (report to the Foundation for Child Development and the Kellogg Foundation, October 2006).

retaining new teachers, and more immediate attempts to recruit trained teachers from other regions or other countries.²³

Long-term investments in training include student incentives for entry into the teaching profession and alternative certification programs for mid-career professionals or paraprofessionals. More immediate approaches include encouraging recent labor market entrants to temporarily take up teaching (although often with only limited pedagogical training), offering financial or benefits incentives for trained teachers living elsewhere in the country to relocate to a particular school district, unilaterally recruiting foreign teachers through the US government's skilled temporary worker program, and arranging for visiting exchange teachers through unilateral recruitment or binational programs.

Because of the relatively long process of teacher training and preparation (especially given NCLB's new requirements), investments in training can only respond to anticipated demand, which is often difficult to predict with precision. On the other hand, overreliance on more immediate solutions such as recruitment may fail to address broader problems and provide only a temporary remedy.

1. Incentives for Entry into the Teaching Profession for Students or Recent Labor Market Entrants
One strategy that states and districts have pursued to increase the supply of qualified
teachers has been to provide incentives for local students or recent graduates to enter into
the teaching profession. Among the most widespread programs have been "Grow Your
Own" initiatives, which may include providing tuition subsidies, job guarantees, textbooks,
or other assistance to high school and college students who intend to become teachers.
Other, similar programs may offer preferential lending terms to finance higher education or
even loan forgiveness for individuals committing to the teaching profession. A 2002 survey
of 635 Texas school district superintendents on strategies that they have used to address
ESL or bilingual teaching shortages found that 51 percent of the sampled districts offered
additional professional development opportunities or funds as an incentive to potential
teachers, 37 percent offered stipends, 15 percent offered reimbursement of alternative
certification program costs, 10 percent offered tuition and fee reimbursement for graduate
work, and 7 percent offered signing bonuses; others offered moving bonuses, day care, and
reimbursement of attorneys' fees for international teachers.²⁴

Often, these incentive and "Grow Your Own" programs are targeted toward minority or low-income students who may view the teaching profession as an avenue for social advancement. Illinois' 2004 Grow Your Own Teacher Education Act,²⁵ for example, aims to add 1,000 teachers to low-income schools and in hard-to-staff positions by 2016 and hopes to retain these teachers for seven years (in contrast to the average retention period of two-

²³ A similar version of this typology is presented in Carlos Vallejo and Ana G. García, *Teacher Recruitment* and Employment Practices in Selected States: Promising Prospects for Foreign-Trained Teachers (San Antonio and Tempe: Intercultural Development Research Association and the Arizona State University Center for Bilingual Education and Research, 2001).

²⁴ Rafael Lara-Alecio, Martha Galloway, Beverly J. Irby, and Genevieve Brown, *An Analysis of Texas Superintendents' Bilingual/ESL Recruitment and Retention Practices* (paper presented at the Annual Meeting of the American Educational Research Association, San Diego, April 13, 2004).
²⁵ 110 ILCS 48.

and-a-half years typical of new Illinois teachers assigned to these schools and positions).²⁶ The initiative has fared well despite the state budget cuts resulting from the US recession: the program retained 90 percent of its fiscal year 2009 budget for 2010.²⁷

Other recent innovations in providing incentives to entry into teaching include service-oriented initiatives such as Teach for America (TFA) and Troops to Teachers. TFA recruits recent college graduates to commit to two years of teaching in urban and rural public schools with high levels of poverty. (For this reason, TFA recruits may play an important role in improving student outcomes in high-poverty schools in some urban and rural districts but may play a lesser role in suburban schools that have also experienced recent rapid growth of the LEP student population.) A recent analysis of TFA by the Urban Institute finds that TFA teachers tend to have positive effects on high school student test scores relative to non-TFA teachers, including those who are certified in-field, and that these effects exceed the impact of additional years of teaching experience.²⁸ The Troops to Teachers program helps members of the armed forces to obtain certification or licensing as highly qualified elementary, secondary, vocational, or technical school teachers and assists them in finding employment.

2. Alternative Certification Programs for Mid-Career Professionals

Where incentive programs focus on recruiting students, recent college graduates, and other new labor market entrants into the teaching profession, alternative certification programs (which are often coupled with financial or training incentives) aim to recruit professionals who work in other fields or who lack the precise credentials required to teach.²⁹ The range of benefits or incentives may include fast-track certification, signing bonuses, child care, paid health insurance, professional development opportunities, credential validation for teachers qualified in other US states or foreign countries, and tuition and fee reimbursement for graduate work, among others. The National Center for Education Information — a nonpartisan research organization — estimates that in 2004-05, approximately 50,000 individuals were issued teaching certificates through alternative routes.³⁰

Generally, alternative certification programs target three categories of professionals:

a. existing teachers, teachers' aides, and paraprofessionals who work in schools but lack the appropriate teaching credentials and cannot assume full teaching responsibilities

²⁶ The law defines "hard-to-staff" schools as any Illinois public school that ranks in the upper third among public schools of its type (elementary, middle, or secondary) in terms of the rate of teacher attrition. "Hard-to-staff" positions include a teaching category (such as special education, mathematics, science, or English as a Second Language) in which statewide data compiled by the State Board of Education indicate a multi-year pattern of substantial teacher shortage or that has been identified as an area of critical need by the local school board.

²⁷ Grow Your Own Illinois, "Update (8/6/09): FY 10 GYO Budget Finalized at \$3,150,000," (Press Release, August 6, 2009), http://www.growyourownteachers.org/BeAnAdvocate/index.htm.

²⁸ Zeyu Xu, Jane Hannaway, and Colin Taylor, *Making a Difference? The Effects of Teach for America in High School* (Washington, DC: Urban Institute, 2008).

²⁹ For a review of alternative certification programs, see US Department of Education, Office of Innovation and Improvement, *Alternative Routes to Teacher Certification* (Washington, DC: US Department of Education, 2004).

³⁰ C. Emily Feistritzer, *Alternative Teacher Certification: A State-by-State Analysis* (Washington, DC: National Center for Education Information, 2006).

- b. professionals with specialization in high-demand fields (such as mathematics or science)
- c. foreign-trained teachers who are unable to translate their foreign teaching credentials into US standards

Teachers, teachers' aides, and paraprofessionals may require only several additional courses to achieve full certification, and most already have the requisite language skills. Professionals from other fields typically require more extensive coursework in pedagogy.

The prospect of recruiting teacher's aides and paraprofessionals prompted much enthusiasm in the early 1990s, and school districts in a number of cities (including Houston, Texas; Portland, Oregon; and Kansas City, Missouri, among others) maintain successful programs.³¹ Still, the EPE Research Center recently found that only 11 states have an incentive policy to help existing teachers or teachers' aides receive ESL endorsements.³²

Foreign-trained teachers residing in the United States who work in other fields may also be a potentially significant source of teachers. Foreign-educated teachers immigrate to the United States for a variety of reasons, including family unity and humanitarian motives. Many are unable to work as teachers — often due to difficulty translating their credentials; different teacher education standards in the origin and destination countries, limited English proficiency, or legal immigration status — leading to the underutilization of their skills. Recent analysis of this "brain waste" by Jeanne Batalova and Michael Fix of the Migration Policy Institute found that fully 43 percent of recent Latin American immigrants in California (not limited to teachers) who entered the United States after they were age 25 and who hold at least a bachelor's degree were working in unskilled jobs.³³

Recent Migration Policy Institute analysis of pooled 2005-07 American Community Survey data indicate that there are about 94,000 prime working-age (25 to 54) immigrants — including both naturalized citizens and noncitizens — in the United States who report their primary occupation as a teacher,³⁴ but who are either unemployed or not in the labor force.³⁵ This result may owe to their work authorization,

³³ Jeanne Batalova and Michael Fix with Peter A. Creticos, *Uneven Progress: The Employment Trajectories of Skilled Immigrants in the United States* (Washington, DC: Migration Policy Institute, 2008), http://www.migrationpolicy.org/pubs/BrainWasteOct08.pdf.

³¹ See, for example, Lynne T. Diaz-Rico and Jerilynn Smith, "Recruiting and Retaining Bilingual Teachers: A Cooperative School Community-University Model," *The Journal of Educational Issues of Language Minority Students* 14 (Winter 1994): 255–268; Erling E. Boe, "Demand, Supply and Shortage of Bilingual and ESL Teachers: Models, Data and Policy Issues," in *Proceedings of the First Research Symposium on Limited English Proficient Student Issues*, ed. Office of Bilingual Education and Minority Language Affairs, ED (Washington, DC: Office of Bilingual Education and Minority Language Affairs, US Department of Education, September 1990); and Norman C. Gold, "Solving the Shortage of Bilingual Teachers: Policy Implications of California's Staffing Initiative for LEP Students," *Third National Research Symposium on Limited English Proficient Students: Focus on Middle and High School Issues* (Washington, DC: Office of Bilingual Education and Minority Language Affairs, US Department of Education, 1992).

³² Education Week and the EPE Research Center, Quality Counts 2009.

³⁴ Including as a preschool, kindergarten, elementary, middle, or secondary school teacher, or as a special education teacher, "other" teacher or instructor, or teacher assistant.

³⁵ Excludes individuals residing in group quarters; estimates are rounded to the nearest thousand. MPI pooled 2005, 2006, and 2007 American Community Survey microdata. Steven Ruggles, Matthew Sobek,

lack of English language proficiency, credentialing difficulties, or personal preferences, among other explanations. The leading countries of origin of these "lost" teachers appear to be Mexico (14,000), India (6,000), Korea (4,000), Canada (4,000), and the Philippines (4,000). Over half (55 percent) are not US citizens and about one-third (33 percent) report being limited English proficient (i.e., speak English less than "very well").

A number of programs attempt to help these immigrant teachers to enter the teaching profession. For instance, Upwardly Global, a San Francisco-based nonprofit that assists immigrants to the United States in obtaining the necessary certification to work in the occupations for which they are trained and have experience in their home countries, received applications from over 400 foreign-born teachers from 2004 through 2008.³⁶ Another innovative pilot program in Texas attempted to target this pool of potential teachers by helping them complete the required coursework and, if necessary, improve their English proficiency. The results of the pilot program are promising. Despite relatively high attrition rates, the final evaluation of the program suggested replicating it in other settings.³⁷

3. Recruiting Foreign Teachers through Temporary Visas

States and districts that face significant difficulties in recruiting and retaining teachers despite incentive and alternative certification programs may decide to hire foreign teachers through the United States' specialty professional worker program. Specialty professional workers are defined by the Immigration Act of 1990 as individuals having a bachelor's degree or higher in the field of specialization and, if required, a full state license in their field. Upon arriving in the United States, these foreign teachers must fulfill any state certification or licensure requirements. This is often done through alternative certification programs.

The specialty professional worker program established by section 101(a)(15) of the Immigration and Nationality Act — more commonly known as the H-1B visa worker program — is the principal avenue through which skilled foreign workers (including teachers) gain temporary residence and work authorization in the United States. The H-1 visa program, since its inception in 1952, has evolved from a comparatively narrow program allowing "individuals of distinguished merit and ability" to work temporarily in the United States at temporary jobs to a more flexible system that admits foreign workers to fill permanent jobs and potentially remain indefinitely in the United States. H-1B visas are valid for three years and can be renewed once, for a total of six years. Although ostensibly a

Trent Alexander, Catherine A. Fitch, Ronald Goeken, Patricia Kelly Hall, Miriam King, and Chad Ronnander, *Integrated Public Use Microdata Series: Version 4.0* [Machine-readable database] (Minneapolis: Minnesota Population Center [producer and distributor], 2008).

³⁶ Jane Leu, Executive Director, Upwardly Global, personal communication with the author, December 17, 2008.

³⁷ See, generally, Belinda Bustos Flores and Ellen Riojas Clark, *El Desarrollo del Proyecto Alianza: Lessons Learned and Policy Implications* (San Antonio and Tempe: Intercultural Development Research Association and Arizona State University, 2002).

³⁸ The H-1 category was subdivided in 1989 into H-1A (temporary nursing workers) and H-1B (temporary non-nursing specialty professional workers).

³⁹ Deborah Waller Meyers, "Temporary Worker Programs: A Patchwork Policy Response" (Independent Task Force on Immigration and America's Future, Insight No. 12, 2006), http://www.migrationpolicy.org/ITFIAF/TFI 12 Meyers.pdf.

temporary program, an estimated 60 percent of H-1B visa holders adjust to permanent resident status during their maximum six years of temporary US residence.⁴⁰

The National Education Association, the largest professional organization for public elementary and secondary educators in the United States, estimated that during the 2002-03 academic year, there were 10,068 teachers in US elementary and secondary schools working on H-1B visas. (The 2000 census reported about 5.5 million elementary school, middle school, secondary school, special education, and "other" teachers in the United States.) US Citizenship and Immigration Service (USCIS) data indicate that 5,582 H-1B visas were issued to elementary and secondary school teachers in 2005 — a 68 percent increase since 2001. (USCIS has not released more recent data on the characteristics of specialty occupation workers.)

4. Binational Teacher Exchange Programs

A fourth, less familiar and smaller source of teachers that some schools, states, and districts have turned to is teacher exchange programs. In comparison to other strategies for alleviating teacher shortages, such as incentive programs and alternative certification, teacher exchange programs are relatively unexplored as a policy option. Although as a direct result of their educational and cultural mandate, legislation prohibits exchange programs from responding directly to labor market needs, exchange participants and sponsors are motivated by a wide variety of reasons including educational and cultural, professional, and personal factors.

Teacher exchanges occur within the framework of the Mutual Educational and Cultural Exchange Act of 1961, also known as the Fulbright-Hays Act. According to the act, the purpose of the program is to "provide foreign nationals with opportunities to participate in educational and cultural programs in the United States and return home to share their experiences, and to encourage Americans to participate in educational and cultural programs in other countries." Exchange visitors typically enter the United States on temporary J visas which are valid for the duration of the exchange program — ranging from three weeks to

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⁴⁰ Julia Gelatt, "Annual Immigration to the United States: The Real Numbers," MPI Fact Sheet No. 16 (Washington, DC: Migration Policy Institute, 2007), http://www.migrationpolicy.org/pubs/FS16 USImmigration 051807.pdf.

⁴¹ Randy Barber, Report to the National Education Association on Trends in Foreign Teacher Recruitment (Washington, DC: National Education Association, June 2003).

⁴² Each H-1B visa is valid for three years and can be renewed once, so the total number of H-1B teachers working in US schools in any given year is much higher. The number of H-1B visas issued to elementary and secondary school teachers (including those starting with a new employer and those continuing with an existing employer) totaled 3,318 in 2001, 3,983 in 2002, 4,992 in 2003, 5,553 in 2004, and 5,582 in 2005. US Citizenship and Immigration Services, *Characteristics of Specialty Occupation Workers (H-1B): Fiscal Year 2005* (Report Mandated by Public Law 105-277, Division C, American Competitiveness and Workforce Improvement Act of 1998, Issued November 2006); US Citizenship and Immigration Services, *Characteristics of Specialty Occupation Workers (H-1B): Fiscal Year 2004* (Report Mandated by Public Law 105-277, Division C, American Competitiveness and Workforce Improvement Act of 1998, Issued November 2006).

⁴³ 22 CFR Sec. 62.1(b).

one year — and can be renewed twice, for a maximum total of three years. ⁴⁴ All programs that are recognized by the State Department as exchange sponsors must include a reciprocal component, which can range from visits by US citizens to the exchange visitor's country of origin to cultural presentations by the visitor while in the United States.

Each exchange visitor must have a "sponsor," which must be designated as such by the US Secretary of State. The US Department of State's Bureau of Educational and Cultural Affairs administers the teacher exchange program and certifies exchange sponsors. Sponsors may include the following:

- US local, state, and federal government agencies (including school districts)
- international agencies or organizations of which the United States is a member and which have an office in the United States
- a general or limited partnership created or organized under the laws of the United States and of which a majority of the partners are citizens of the United States
- a for-profit corporation, association, or other legal entity created or organized under US law
- a nonprofit corporation, association, or other legal entity created or organized under US law
- an accredited college, university, or other post-secondary educational institution created or organized under US law

At the sponsor level, institutions in origin countries (typically the ministry of education) and US agencies (often state departments of education or school districts) may agree to cooperate to facilitate the exchanges. However, the US sponsoring institution remains the responsible entity for all official purposes, including coordination with the State Department.

There are 13 categories of exchange visitors, including elementary and secondary school teachers. ⁴⁵ In fiscal year 2008, the United States used J-1 visas to admit 338,862 exchange visitors — mostly summer workers and travelers (152,726) and professors and researchers (48,932) (see Figure 3). As before, less than 1 percent of all exchange visitors were teachers.

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⁴⁴ According to the US Department of Education, some short-term exchange teachers — for example, educators participating in the US-Mexico Binational Migrant Education Program, which is described in later sections — enter on tourist (B) visas.

⁴⁵ See 22 CFR Part 62.20 to 22 CFR Part 62.32, revised as of 2004.

Figure 3. Exchange (J-1) Visitors by Category of Admission, 2003 to 2008

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	2003	2004	2005	2006	2007	2008				
Total J-1 visitors	230,631	271,799	229,440	267,437	317,117	338,862				
Physician	8,000	7,295	1,533	1,480	1,779	1,853				
Au pair	11,901	16,093	12,659	14,054	17,149	17,503				
Camp counselor	23,490	20,602	20,895	26,296	22,205	21,485				
College and university students	14,158	32,780	19,268	22,925	29,097	34,504				
Interns					634	15,934				
Professor or researcher:	22,233	59,965	35,309	40,943	46,589	48,932				
Short-term scholar*		7,513	9,550	11,976	16,802	19,475				
Professor		2,980	2,279	2,304	1,903	1,557				
Research scholar		49,472	23,480	26,663	27,884	27,900				
Secondary student	28,000	24,084	24,608	26,711	29,512	28,627				
Specialist	1,132	1,151	945	1,150	1,537	2,289				
Summer work/travel	88,851	77,323	88,557	106,725	147,645	152,726				
Teacher	2,366	5,292	2,447	2,534	3,052	2,456				
Trainee:	30,500	27,214	23,219	24,619	29,998	12,553				
Trainee (specialty)		15,912	13,595	10,602	10,915	1,496				
Trainee (non-specialty)		11,302	9,624	14,017	18,750	2,632				
Other trainee					333	8, <i>4</i> 25				

Note: Data are for the fiscal year ending in the year indicated.

Source: Interagency Working Group on US Government-Sponsored International Exchanges and Training, Annual Reports, 2003 to 2008.

Exchange visitors must have sufficient proficiency in English to participate. In addition, exchange teachers must meet the qualifications for teaching in elementary or secondary schools in their country of origin, meet the standards required of teachers in the state where they will teach, and have a minimum of three years of experience in teaching or other education-related activities.

III. The Binational Option

Any viable strategy to address shortages of ESL and bilingual teachers will need to focus on supply and demand issues in the short and long term. As demographic trends, labor markets, and legislative requirements change, policymakers face the challenge of responding to constantly evolving teaching needs. Often, policymakers (perhaps incorrectly) perceive a tradeoff between immediate efforts to recruit and retain teachers and long-term initiatives aimed at expanding the teacher education pipeline and making the teaching profession more attractive to new workers.

While an important component of any comprehensive strategy, approaches that focus entirely on long-term efforts to expand the domestic teacher pipeline and improve the work environment for teachers risk overlooking the immediate educational needs of students. On

^{*}Data on short-term scholar exchanges are reported independently of data on professors and researchers in years subsequent to 2003.

the other hand, ignoring long-term challenges would only further aggravate the shortage and jeopardize the competitiveness of the future American workforce. Absent broader reforms to the US elementary and secondary education system and to the educator pipeline, it is unlikely that states and districts will be able to fully meet their needs through any single strategy. In conjunction with efforts to locally recruit teachers, foreign teachers can help alleviate this endemic shortage — particularly in districts that face rapid, unexpected, or short-term changes in the student population.

The following sections of this paper examine the role that binational teacher exchanges play in helping states and districts meet immediate teaching needs. To date, binational teacher exchanges have been most fully developed by the United States, Spain, and Mexico. Given that both Spain and Mexico are Spanish-speaking countries, these exchanges may be particularly well suited to addressing the teaching needs of ESL and bilingual students. Where possible, this report attempts to consider the impact of exchange teachers and teacher exchange programs on students' academic outcomes, since most people would agree that any educational system or program should principally focus on students. Recognizing that sponsors and participants have diverse motivations for participating in teacher exchanges, we are also cognizant of the impact of these programs on educational systems in the teachers' countries of origin.

Teacher exchanges between the United States, Spain, and Mexico occur within the broader context of bilateral cooperation on education. In 1990, the United States signed a Memorandum of Understanding on Education with Mexico, and it signed a similar agreement with Spain in 1994. In reality, cooperation between the countries on education issues extends much further back: The United States and Spain first agreed to collaborate on educational and cultural exchanges in 1958, and state-level cooperation on education between the United States and Mexico began during the 1970s.

The memoranda address a wide range of fields of cooperation, including teacher exchanges. The teacher exchanges fall into two categories:

- short-term exchanges under the US-Mexico Binational Migrant Education Program (BMEP) that range from three to eight weeks in duration (typically during the summer term)
- longer-term exchanges under the US-Mexico and US-Spain visiting teacher programs that range from one to three years in duration

Beyond the difference in duration, the two categories of exchanges are markedly different in their sizes, target populations, and operations. In both cases, the impacts are not clear because of a lack of systematic evaluation.

Importantly, BMEP teacher exchanges appear to be focused on students (the program is authorized by the Elementary and Secondary Education Act) while the two visiting teacher programs, authorized by the Fulbright-Hays Act, emphasize teacher development and educational and cultural exchange. Clearly, the distinction between *student-focused* and *teacher-focused* exchanges is a simplification of on-the-ground realities (participants in both programs have diverse motivations), but it is helpful in understanding their administration and rationale.

A. US-Mexico Binational Migrant Education Program Teacher Exchanges

1. The Regulatory Framework

In 1990, the Mexican Secretariat of Public Education (SEP) and the US Department of Education formally agreed to cooperate on education issues although, as indicated, state-level cooperation dates much further back. The parameters of the agreement were formally outlined in a Memorandum of Understanding on Education (MOU). The memorandum is to be renewed every two years, although renewal negotiations scheduled for 2006 were delayed — reportedly due to the Mexican presidential election — and are still pending. (The 2004 memorandum remains in force.)

The most recent version of the memorandum identifies 15 priority areas of cooperation, including intergovernmental cooperation to facilitate the educational pathways of students who frequently cross the US-Mexico border, adult education and literacy, technical and vocational education, language acquisition (both foreign language acquisition and bilingual education), institutional research collaboration (by pairing universities or research centers on both sides of the border, for instance), vocational certification, and teacher exchange and development, among others.

The MOU does not oblige either party to specific actions or programs, but officials from both countries claim that the agreement provides a useful framework for discussions. In reality, the different organizational structures of the Mexican and US education systems complicate collaborative efforts. While elementary and secondary education in Mexico is highly centralized (although it has become less so in recent years ⁴⁸), the US elementary and secondary education system is highly decentralized (although it has become somewhat less so in recent years ⁴⁹), with states and districts retaining most decision-making powers. Accordingly, with some exceptions, most cooperation takes place between the federal SEP in Mexico, the various state departments of education in the United States, and in some cases, local US school districts. Mexico's consular offices are an essential component of virtually all of Mexico's engagement with Mexicans in the United States, so the Secretariat of Foreign Affairs (SRE) and the Institute of Mexicans Abroad (IME) also play important roles in the implementation of all binational education collaboration. ⁵⁰

Mercado de Valores 7 (July 2001): 28–37.

The Mexican Ministry of Education first began to support bilingual education targeted toward the Mexican origin population in the United States in 1978. See Graciela Orozco, "Pasado, Presente y Futuro de Nuestra Relación con las Comunidades Mexicanas y de Origen Mexicano en Estados Unidos," *El*

⁴⁷ The original Memorandum of Understanding on Education between the Mexican Secretariat of Public Education and US Department of Education and the most recently signed annex are available at http://www.ed.gov/admins/tchrqual/learn/binational.html. According to the US Department of Education, the US and Mexican governments were close to finalizing a new annex to the memorandum in fall 2008, but were unable to conclude negotiations in advance of the US presidential election. They expect to continue discussions in 2009. Rafael Nevarez, US Department of Education, International Affairs Office, personal communication with the authors, March 17, 2009.

⁴⁸ Since the 1992 National Agreement for the Modernization of Basic Education (Acuerdo Nacional para la Modernización de la Educación Básica).

⁴⁹ As a result of NCLB.

⁵⁰ Laglagaron, Protection through Integration.

The BMEP was officially established nationwide in 1996, but its origins date back to 1976, when California educators began working with counterparts in the Mexican state of Michoacán to provide greater educational continuity for students who migrate between the two countries. Binational migrant students are a limited subset of US elementary and secondary school students. In addition to meeting the requirements for participation in the traditional migrant education program, ⁵¹ a binational student must have moved between Mexico and the United States with his or her parents or as an emancipated youth at least once during the preceding 36 months.

BMEP teacher exchanges aim to minimize the disruption to a student's educational career caused by a migratory lifestyle. According to the US Department of Education, binational migrant children and their families often require support to overcome educational discontinuity, acquire English proficiency, make up missed instruction, enhance low levels of school and social engagement, overcome cultural and language barriers, resolve health-related problems that interfere with learning, expand parents' capacity to support their children's education, and gain access to education and social services. Moreover, schools and districts face significant hurdles in placing students who began their educational careers on the other side of the border in an appropriate grade level because of the general lack of alignment between the US and Mexican educational systems (see Box 1 for an overview of the Mexican system).

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⁵¹ According to Title I, Part C, Section 1309(2) of the Elementary and Secondary Education Act as reauthorized by NCLB, a student qualifies for the migrant education program if the student or the student's parent or spouse is "a migratory agricultural worker, including a migratory dairy worker, or a migratory fisher, and who, in the preceding 36 months, in order to obtain, or accompany such a parent or spouse, in order to obtain, temporary or seasonal employment in agriculture or fishing work (A) has moved from one school district to another; (B) in a State that is comprised of a single school district, has moved from one administrative area to another within such district, or (C) resides in a school district of more than 15,000 square miles, and migrates a distance of 20 miles or more to a temporary residence to engage in a fishing activity."

Box 1: An Overview of the Mexican Education System

Mexico's education system is composed of five levels: preschool (*preescolar*), elementary school (*primaria*), lower secondary school (*secundaria*), upper secondary school (*media superior*), and post-secondary education (*superior*). It is compulsory for youth age 3 to 14 to enroll in school though the lower secondary level. The government provides some funding to public upper and post-secondary education institutions, although this schooling is not compulsory.

Preschool in Mexico serves many of the same functions as it does in the United States and is broken down into three program types. General education (*preescolar general*) serves the majority of Mexican youth; children from indigenous communities are enrolled in education programs that emphasize their cultural heritage (*preescolar indígena*); and special arrangements are made for education in towns with populations of fewer than 500 (*cursos comunitarios*). Of the 4.7 million preschool students enrolled in Mexican schools during the 2006–07 academic year, about 89 percent were enrolled in general education courses.

Students between the ages of 6 to 14 attend elementary school (*primaria*), which consists of six grade levels. (Elementary schools enroll students as young as 6 years old and as old as 14 years old.) Similar to preschool, special programs are offered for indigenous children and children who reside in small, rural communities. In 2006-07, about 94 percent of Mexico's 14.6 million elementary school students were enrolled in the general education curriculum.

The next three grade levels, which make up lower secondary (*secundaria*), are also compulsory. Programs of study include the general curriculum (including a special curriculum for adults who have not yet completed their lower secondary education), a distance education curriculum via television for students who live in sparsely populated or remote areas, and a vocational education program (*secundaria técnica*). About half (51 percent) of the 6.1 million lower secondary students enrolled in Mexican schools during the 2006–07 academic year were enrolled in the general curriculum and 28 percent were enrolled in the vocational education program. The remaining 21 percent — which amounted to over 1.2 million students — were enrolled in distance education courses.

Optional upper secondary education (*media superior*) offers students two options: to prepare for the equivalent of US undergraduate studies at a college or university through a baccalaureate program (*bachillerato*) or to learn vocational skills (*professional técnico*). Of the 3.7 million students enrolled in Mexican upper secondary schools in 2006-07, over 90 percent chose a baccalaureate program. Students in the undergraduate track can select between general courses and technical courses (mainly mathematics and science). Of the 3.4 million Mexican students enrolled in university-track upper secondary courses in 2006-07, about two-thirds were enrolled in the general curriculum and one-third was enrolled in the technical curriculum.

	Preschool Elementary School		Lower Secondary	Upper S (Educación M	Post- Secondary	
	(Preescholar)	(Primaria)	(Secundaria)*	Vocational Education (Profesional Técnico)*	Upper Secondary Education (Bachillerato)	(Educación Superior) *
Student Ages	4 to 5 years	6 to 14 years	12 to 16 years	15 to 18 years	15 to 18 years	18+ years
Grade Levels		6 levels	3 levels	1 level	2 to 3 levels	Variable
Years of Coursework	1 to 3 years	6 years	3 years	2 to 3 years	2 to 3 years	Variable

Notes: Shaded areas indicate compulsory education, * indicates terminal degree or certification. Source: N. Prchal Svajlenka, Migration Policy Institute

Sources: Instituto Nacional para la Evaluación de la Educación, Panorama Educativo de México 2007: Indicadores del Sistema Educativo Nacional 2007 (Mexico, D.F.: Instituto Nacional para la Evaluación de la Educación, 2007); Instituto Nacional de Estadística, Geografía e Informática, II Conteo de Población y Vivienda 2005, Porcentaje de la población de 5 y más años que asiste a la escuela por grupos de edad y sexo, 1970 a 2005 (Mexico, D.F.: Instituto Nacional de Estadística, Geografía e Informática, 2005).

Most teacher exchanges under BMEP take place during the summer term. Summer-term projects offer concentrated, intensive instruction to provide supplemental education to students whose education has been interrupted during the academic year. Services provided during the summer typically include remedial instruction in core academic areas (e.g., reading and math), other instructional areas (e.g., ESL and special education), and other activities (e.g., dropout prevention, vocational or college counseling, cultural activities, and sports). Summer programs also provide support services such as health counseling, transportation, food, and parental outreach.⁵²

To address the particular needs of binational migrant students, the US Department of Education's Office of Migrant Education (OME), SEP, and state education agencies in both countries arrange for Mexican teachers — often from migrant-sending states in Mexico — to spend three to eight weeks (typically during the summer months of June, July, and August) in the United States working with migrant students and their families. Mexican teachers apply for the program during the previous academic year, and SEP jointly selects the top candidates in coordination with SRE and the state education agencies in Mexico. The Mexican government and the education departments in the receiving US states cover transportation, food, and lodging for the participants; however, the visiting teachers receive no additional wages or receive only a small stipend.

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⁵² Basmat Parsad, Sheila Heaviside, Catrina Williams, and Elizabeth Farris, *Participation of Migrant Students in Title I Migrant Education Programs (MEP) Summer-Term Projects, 1998* (National Center for Education Statistics, Statistics Analysis Report NCES-2000-023, February 2000).

2. Numbers and Characteristics of Program Participants (Students and Teachers)

State enrollment counts indicate that there were 557,424 students eligible for migratory student status in the United States during the 2006-07 academic year — about 1 percent of the 49 million students enrolled in US public schools.⁵³ Of these eligible students, 352,686 — or 63 percent of those eligible — enrolled in Migrant Education Program (MEP) courses during the regular or summer term.⁵⁴ In 2006-07, 42 of 48 states operating MEPs reported serving an estimated 195,562 binational migrant students — about 55 percent of the total MEP student population.⁵⁵ Twenty-two states currently participate in BMEP, and 17 states received visiting BMEP teachers during the 2006-07 academic year. According to estimates from the Mexican Secretariat of Public Education, 25,817 binational migrant students were enrolled in courses with exchange teachers in 2007.

Children of migrant workers are overwhelmingly concentrated in a few states, and binational migrant students are concentrated in these same states to an even greater degree. California and Texas had 22.3 percent of all elementary and secondary school students in the United States during the 2006-07 academic year, but 63.6 percent of all migrant students, and 69.9 percent of all binational migrant students (see Figure 4). Other Western states, such as Colorado and Washington, also had a larger share of binational migrant students compared to their share of the overall K–12 student population.

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http://www.ed.gov/admins/lead/account/consolidated/index.html#csp2006.

⁵³ Compiled from US Department of Education, SY 2006–2007 Consolidated State Performance Report, Part II, MEP Participation Program Year, Table 2.3.1.1,

⁵⁴ Ibid., Table 2.3.3.3. Data reflect the most comprehensive count of students based on state data availability.

⁵⁵ Nationwide, 149,323 of identified binational migrant students were served by the program during the academic year, and about 91,544 were served during summer programs; some students were served by both. The estimated total 195,562 binational migrant students is an unduplicated count. US Department of Education, Office of Migrant Education (OME), *Binational Migrant Education Program Annual Report* 2006–07 (annual report, US Department of Education, OME, 2007).

Figure 4. K-12, Migrant, and Binational Migrant Students by State, 2006-07

	Total K–12 Students ^a		Migrant Students ^b			Binational Migrant Students ^c		
	 Number	Share	Number	Share		Number	Share	
Arizona	1,065,082	2.2%	8,383	2.4%		2,723	1.4%	
Arkansas	476,409	1.0%	5,276	1.5%		1,833	0.9%	
California	6,406,821	13.0%	178,662	50.7%		119,562	61.1%	
Colorado*	794,026	1.6%	8,769	2.5%		10,994	5.6%	
Delaware*	122,254	0.2%	120	0.0%		88	0.0%	
Florida*	2,671,513	5.4%	8,735	2.5%		9,450	4.8%	
Georgia	1,629,157	3.3%	4,832	1.4%		2,679	1.4%	
Idaho*	267,380	0.5%	6,216	1.8%		85	0.0%	
Kansas*	469,506	1.0%	2,623	0.7%		1,968	1.0%	
Kentucky*	683,173	1.4%	2,884	0.8%		1,800	0.9%	
Louisiana*	675,851	1.4%	3,328	0.9%		303	0.2%	
Michigan*	1,714,709	3.5%	4,672	1.3%		1,200	0.6%	
Montana*	144,418	0.3%	1,246	0.4%		620	0.3%	
Nebraska*	287,580	0.6%	1,143	0.3%		1,524	0.8%	
Nevada*	424,240	0.9%	98	0.0%		10	0.0%	
North Carolina	1,444,481	2.9%	5,926	1.7%		1,906	1.0%	
North Dakota*	96,670	0.2%	514	0.1%		10	0.0%	
Ohio*	1,836,096	3.7%	1,499	0.4%		2,250	1.2%	
Oregon*	562,574	1.1%	10,029	2.8%		1,143	0.6%	
Other states**	17,265,124	35.0%	30,583	8.7%		0	0.0%	
Pennsylvania	1,871,060	3.8%	8,193	2.3%		5,677	2.9%	
South Carolina*	703,119	1.4%	292	0.1%		425	0.2%	
South Dakota	121,158	0.2%	648	0.2%		48	0.0%	
Tennessee	978,368	2.0%	648	0.2%		1,124	0.6%	
Texas	4,599,509	9.3%	45,547	12.9%		17,143	8.8%	
Washington	1,026,774	2.1%	10,859	3.1%		10,656	5.4%	
Wisconsin*	876,700	1.8%	828	0.2%		300	0.2%	
Wyoming	85,193	0.2%	161	0.0%		41	0.0%	

Note: *Indicates estimated number of BMEP eligible students. ** Includes states where the number of binational migrant students is unreported or unknown. Binational migrant student estimates include total students identified, both served and unserved. Estimates of the migrant student population reflect the unduplicated count of students of all grades who enrolled in a regular- or summer-term MEP course from September 1, 2006, through August 31, 2007. During this period, many states reported highly variable or declining MEP enrollment. According to consolidated state reports to the US Department of Education, declining MEP enrollment reflects general declines in the migratory workforce, increased settlement by former migratory workers, and the enforcement of immigration laws. MEP program participation data reflect the most comprehensive count of students based on state data availability.

Sources: ^aNational Center for Education Statistics, Core of Common Data, Total Student Enrollment by State, 2006–2007; ^bCompiled from US Department of Education, SY 2006–2007 Consolidated State Performance Report, Part II, MEP Participation Program Year, Table 2.3.3.3; ^cUS Department of Education, OME, *Binational Migrant Education Program Annual Report 2006–07*.

Since 1996, the number of visiting Mexican teachers and the number of states participating in the BMEP exchanges generally increased through 2003, when the number of participating teachers and states began to decline (see Figure 5).

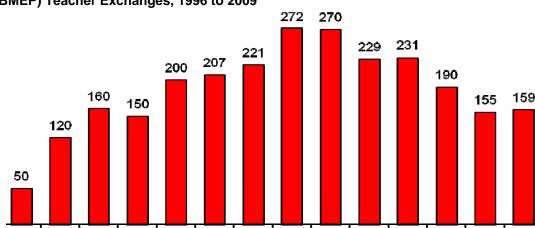


Figure 5. Number of Participating Teachers in Binational Migrant Education Program (BMEP) Teacher Exchanges, 1996 to 2009

Note: These data represent participating visiting teachers during the academic year ending in the year designated.

1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009

Source: Courtesy Secretaría de Educación Pública (SEP).

In 2007, 39 US teachers and school administrators from seven states —Arizona, Arkansas, California, Nebraska, Oregon, Pennsylvania, and Wisconsin — participated in reciprocal exchanges (17 went to the Mexican state of Jalisco). US teachers provided ESL and pedagogical training to Mexican teachers, visited with parents and community members, observed local schools, and provided English and math lessons to local students.⁵⁶

The majority of BMEP visiting teacher programs occur at community-based organizations or summer school programs. Students are typically enrolled in summer MEPs (including Even Start and agricultural education), supplemental ESL or bilingual education programs, or year-round schools (see Figure 6).⁵⁷

Data from IME show that most exchange teachers worked with binational migrant students at the preschool and elementary school level (see Figure 7). About one-quarter of BMEP exchange teachers worked with middle and high school students. These data also show that BMEP visiting teachers generally lead small groups of students; assist US teachers in the classroom; provide advice to teachers, students, and parents; and observe classroom instruction (see Figure 8). Visiting teachers may have multiple responsibilities, and the activities that they are involved in vary widely between states and even between districts.

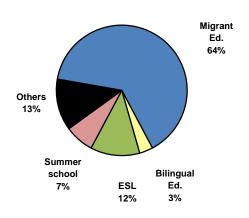
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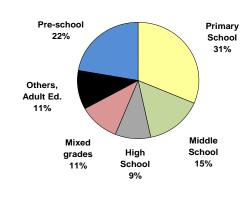
⁵⁶ Gobierno de Jalisco, Secretaría de Educación, Dirección de Relaciones Internacionales, *Cooperación Internacional Educativa en Jalisco: Reporte de Actividades 2007* (Guadalajara, Jalisco: Secretaría de Educación, 2007).

⁵⁷ OME, Binational Migrant Education Program Annual Report 2006-07.

Figure 6. Student Programs with BMEP Exchange Teachers, 2006-07

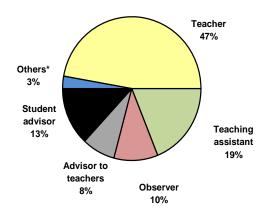
Figure 7. Level of Students Taught by BMEP Exchange Teachers, 2006-07





Source: Courtesy Instituto de los Mexicanos en el Exterior (IME), Secretaría de Relaciones Exteriores 2007.

Figure 8. Activities of BMEP Visiting Teachers, 2006-07



*Includes parent outreach and conducting informal arts and culture classes. *Source*: Courtesy IME, Secretaría de Relaciones Exteriores, 2007.

Binational migrant students have historically been (and continue to be) an extremely vulnerable subset of the US student population with particular instructional support needs.⁵⁸ Their high rates of residential mobility subject them to curricular discontinuity and alarmingly high dropout rates. Often, they suffer from substandard living conditions, malnutrition, and a host of other health risks.⁵⁹ The collaborative approach pioneered by the

⁵⁸ Julia Gelatt and Michael Fix, "Federal Spending on Immigrant Families' Integration," in *Securing the Future: US Immigrant Integration Policy*, ed. Michael Fix (Washington, DC: Migration Policy Institute, 2007).

⁵⁹ Sharon P. Cooper, Nancy F. Weller, Erin E. Fox, and Sara R. Cooper, "Comparative Description of Migrant Farmworkers versus Other Students Attending Rural South Texas Schools: Substance Use, Work, and Injuries," *Journal of Rural Health* 21, no. 4 (Fall 2005): 361–366.

BMEP provides a promising, if limited model to provide academic support to these students on both sides of the US-Mexico border.

Other sectors of the economy where immigrants are concentrated — such as construction, retail, and accommodation and food service — undergo similar seasonal fluctuations in employment, which can also lead to fluctuations in student enrollment and attendance. The children of immigrant workers in these sectors could benefit from similar academic support.

B. The US-Mexico and US-Spain Visiting Teacher Programs

US schools, districts, and states are able to attract exchange teachers on a longer-term basis through the US-Mexico and US-Spain visiting teacher programs. In comparison to the BMEP teacher exchanges, the visiting teacher program exchanges last significantly longer — from one to three years — and are more dependent on the teaching needs of the districts and states. Spain's visiting teacher program is older and larger than its Mexican counterpart.

1. The Regulatory Framework

Unlike the BMEP teacher exchanges that are overseen by OME, there is no US federal office that coordinates longer-term visiting teacher exchanges. The programs are decentralized and arranged between the Spanish and Mexican education ministries and US state and local education agencies. To manage the exchanges, Spain and Mexico have signed memoranda of understanding with the department of education in each participating US state. Spain signed its first memorandum of understanding on teacher exchanges with California and New York in 1986. Since then, it has signed agreements with 29 additional states. Exchanges for Mexican teachers are much more recent: Mexico signed its first memorandum on teacher exchanges with California in 2001, followed by New Mexico in 2005, Utah in 2007, Illinois in 2008, and Oregon in 2009.

Although the memoranda vary between the two countries and from state to state, there are similarities in the programs' operations. Consular or education ministry officials in the United States work with state education agencies regarding the number of exchange teachers each state expects to need during the following academic year. During late fall, the Spanish and Mexican education ministries publish an official notice inviting applications from interested teachers.

The requirements for candidates vary by state. There are broad similarities: Most teachers must have prior teaching experience and must be proficient in English, for example. There are also some important differences. For instance, the California-Spain agreement requires

⁶⁰ New York suspended its participation in the US-Spain visiting teacher program in 1987 but rejoined in 1998. According to reports in *The New York Times*, the program was discontinued in 1987 after teachers complained of a lack of advice and support from both their government and the New York City Board of Education. Randal C. Archibold, "Teachers Imported from Spain to Teach Spanish in the Bronx," *The New York Times*, September 2, 1998.

⁶¹ Spain's agreements with Colorado, Missouri, and New Jersey are currently inactive. Colorado has not hosted visiting teachers from Spain since the 2004-05 school year, Missouri has not hosted any visiting teachers from Spain since 2000-01, and New Jersey has not hosted any visiting teachers since 2003-04.

that the State of California develop and maintain an abbreviated version of the California Basic Educational Skills Test (CBEST) to administer to applicants during the selection process in Madrid. Similarly, the Mexican government requires that applicants take the Test of English as a Foreign Language (TOEFL) and score a minimum of 550 points (out of a maximum possible 677 points). (See Appendix 1 for a detailed list of requirements for visiting Spanish teachers in each state.) The ministries prescreen applicants and then state and local education officials are given the opportunity to interview candidates.

For the Spanish program, the Ministry of Education invites the state education officials to Madrid to interview preapproved candidates (covering all costs) while for the Mexican program, state and local officials travel independently to Mexico City for the interviews. For teachers from Spain, several states — including California, Colorado, Illinois, Maine, and Texas — administer English exams to applicants. Other states — including North Carolina, South Carolina, Georgia, and Virginia — do not administer exams, but interview candidates in English to establish that they are English proficient. New York interviews candidates in English and requires a written composition in English. North Carolina, South Carolina, Georgia, Virginia, Florida, and Utah contract this process to two US-based private recruitment agencies: Visiting International Faculty and Academica Corporation.

Visiting teachers must attend a predeparture orientation session, and many also receive additional orientation upon arrival in the United States. Immediate family members (spouses and children) are permitted to accompany visiting teachers on J-2 visas, although spouses must request special permission from US Citizenship and Immigration Services for work authorization. Visiting teachers receive a salary equal to that of a similarly experienced US teacher in the destination state (the Spanish Ministry of Education estimates that this ranges between \$28,000 and \$70,000 annually) and are responsible for covering their own transportation and living expenses for the duration of the program. Salary differentials between the three countries can be significant. According to OECD, the minimum starting salary of an elementary school teacher in the United States is about \$32,703, compared to \$31,381 in Spain and \$12,665 in Mexico. Thus, while Mexican visiting teachers receive a 258 percent salary increase by participating in the US program, Spanish teachers get a much smaller salary increase of 4 percent.

2. Program Description

As a result of the extremely decentralized management of the US-Spain and US-Mexico visiting teacher programs, there is very little comprehensive data on the programs beyond numbers of participants. Once hired, states and districts can decide what grade level and what subject visiting instructors teach. Some teachers may teach multiple subjects or grade levels, and their assignments may change if their contracts are renewed for a second or third year.

In comparison to the US-Spain visiting teacher program, the US-Mexico visiting teacher program is both much smaller and much more recent. Since its inception in 2001, a total of 182 teachers have been employed in four states: California, Illinois, New

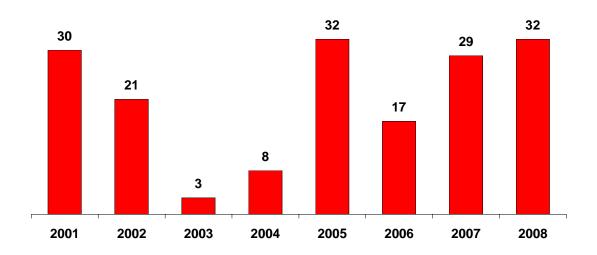
⁶² OECD, Education at a Glance (Paris: OECD, 2006).

⁶³ Exchange rate fluctuations and variations in the cost of living between the three countries may change the real effect of these salary differentials.

Mexico, and Utah (see Figure 9). Oregon expects to begin participating in the program in the 2009-10 academic year, and exchange agreements are currently being negotiated with Texas and Nebraska. By contrast, since 1992 (the first year of available data), more than 4,700 Spanish teachers have been employed by school districts in the United States under the US-Spain visiting teacher program.

The number of Spanish teachers in the United States under the program has grown from 292 in 1998 to 1,246 in 2008 (see Figure 10).⁶⁴ (This includes all Spanish teachers in the United States under the program in a given year regardless of whether they are completing the first, second, or third year of their total permissible three years.) The number of states participating in the US-Spain visiting teacher program has also increased from six states in 1998 to 28 states in 2008.

Figure 9. Visiting Teachers from Mexico (J-1 visas), 2001 to 2008



Note: These data represent participating visiting teachers during the academic year ending in the year designated.

Source: Secretaría de Educación Pública, Dirección General de Relaciones Internacionales.

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⁶⁴ Ministerio de Educación, *El Mundo Estudia Español*, 2007 (Madrid: Ministerio de Educación, Secretaría General Técnica, 2008): 176.

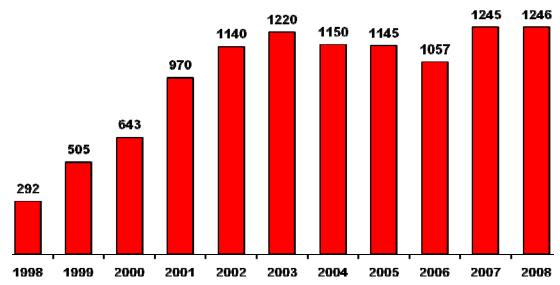


Figure 10. Visiting Teachers from Spain (J-1 visas), 1998 to 2008

Note: These data represent the total number of participating visiting teachers during the academic year ending in the year designated. It includes repeat counts of visiting teachers who renew their contracts beyond one year. Data for years prior to 1998 are not available. *Source*: Ministerio de Educación, Subdirección General de Cooperación Internacional.

California is the largest recipient state for both programs: it received about half of visiting Mexican teachers (15 of 32) and about a quarter of visiting Spanish teachers (314 of 1,169) in 2007. Illinois and Texas were the next most important destinations for Spanish visiting teachers. Complete state-by-state data on the number of visiting teachers from Spain and Mexico are available in Appendices 2 and 3.

Within the states, teachers are assigned to a variety of urban, suburban, and rural districts. Figure 11 lists districts and regions where visiting teachers from Spain are expected to be placed for the 2009-10 academic year. The list represents only districts and regions that expressed interest in hosting exchange teachers from Spain and provides general guidance on participating districts. Hiring patterns may differ significantly.

Figure 11. Districts and Regions Participating in the US-Spain Binational Teacher

Exchange Program, 2009-2010

State	Districts and Regions
California	San Francisco, Los Angeles
Colorado	Denver, mountain areas
District of Columbia	District of Columbia
Florida	Miami-Dade, Palm Beach, Orange, Pinellas, Seminole, Volusia, Broward, Duval
Georgia	Atlanta
Illinois	Aurora, Chicago, Cicero, Elgin, Highland Park, Manheim, Peoria, Rockford, Schaumburg, Waukegan, Wheeling, Woodstock
Indiana	Indianapolis
Kansas	Western Kansas
Kentucky	None listed.
Louisiana	Dossier, Caddo, Desoto, East Baton Rouge, Lafayette, Livingston, Orleans, Zachary, Baker, Bogalusa, Calcasieu, Concordia, Richland
Maine	
Massachusetts	Boston
Nebraska	Omaha
New Mexico	Albuquerque, Las Cruces, Santa Fe
New York	New York City, Schenectady
North Carolina	Charlotte-Mecklenburg, Iredell-Statesville
Ohio	Cleveland, Mansfield
Oregon	Canby
South Carolina	Greenville, Spartanburg
Tennessee	Lake, Macon, Memphis City, Nashville
Texas	Athens, Austin, Corsicana, Dallas, Fort Bend, Fort Worth, Galena Park, Houston, Tyler
Utah	Davis, Salt Lake City
Virginia	Alexandria, Arlington, Campbell, Henrico, Stafford, Manassas City, Prince Edward, Prince William, Rockingham
Washington	Varied, coast and interior

Note: The above list provides general guidance on districts and regions that expressed interest in hiring visiting teachers for the 2009-10 academic year and areas where visiting teachers from Spain typically work. It is not comprehensive, and hiring patterns may differ significantly. Source: Compiled from state profiles published by the Ministerio de Educación, Subdirección General de Cooperación Internacional,

http://www.mepsyd.es/educa/jsp/plantilla.jsp?id=12001&area=internacional (accessed March 2009).

Schools and districts assign visiting teachers based on needs, so the courses that they teach vary widely and may change over time. Interviews with program coordinators in a several of the states that admit the largest numbers of teachers suggest that visiting teachers working in elementary schools almost universally teach ESL or bilingual courses, while visiting teachers who work in secondary schools are more evenly distributed between ESL or bilingual courses, Spanish language acquisition courses, and other subjects (ranging from mathematics and science to Latin). About 70 percent of Spanish teachers are assigned to elementary

schools, while around 20 percent are assigned to high schools and 10 percent to middle schools.⁶⁵

Subject-area requests for teachers published by the Spanish Ministry of Education suggest that the assignments vary widely by state and depend largely on the instructional programs and priorities of the state. For instance, while Maine hires visiting teachers exclusively for Spanish language instruction, an estimated 80 percent of visiting teachers in Texas work in dual language instruction programs (often teaching academic subjects in Spanish).⁶⁶ Appendix 1 lists subject areas where states indicate that they intend to hire visiting teachers from Spain.

IV. Conclusion

The apparent teacher shortages facing US schools are the result of the convergence of recent demographic trends — notably, the growing population of English learner students — and legislative developments, including the No Child Left Behind Act of 2001. This convergence of workforce and demographic trends has increased demand for qualified educators with credentials in ESL instruction or bilingual education, and in content areas such as mathematics and science. And research shows that teacher supply does not typically respond to changes in the business cycle.

On balance, the evidence suggests that the shortage of ESL and bilingual teachers in US schools is an enduring, rather than cyclical, challenge. However, the recession has caused a fiscal crisis in many states and education budgets have been broadly cut. In the coming months, and even years, some states will face a limited capacity to hire new ESL and bilingual teachers despite the evident need. The demand for visiting teachers is already falling: As of December 2008, states had expressed interest in hosting about 431 teachers from Spain for the 2009-10 academic year, compared to 514 and 665 teachers for the 2008-09 and 2007-08 academic years, respectively. Mexico also reports lower demand from some participating states. These numbers mask much variation by state. California, which has been particularly hard hit by the economic crisis, typically hosts a large share of both Spanish and Mexican teachers. California expects to hire fewer exchange teachers for the 2009-10 academic year, but Illinois faces the opposite challenge. Illinois officials responsible for recruiting teachers have expressed concern that they will not find enough qualified candidates to meet their expected needs.

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⁶⁵ Antonio M. Gutiérrez Martín, *El Programa de Profesores Visitantes en Estados Unidos y los Programas de Enseñanza Bilingüe de la Comunidad Autónoma de Madrid* (unpublished report, August 2006). ⁶⁶ Ministerio de Educación, Subdirección General de Cooperación Internacional, "Profesores Visitantes en EE.UU. y Canadá: Texas," http://www.mepsyd.es/educacion/actividad-internacional/convocatorias-trabajo-formacion/para-espanoles/visitantes-EEUU-canada.html (accessed March 25, 2009).

⁶⁷ Boletín Oficial del Estado, Orden ECI/3542/2008, Ministerio de Educación, Política Social y Deporte (BOE 294, December 6, 2008): 48966–48975; Boletín Oficial del Estado, Orden ECI/3672/2007, Ministerio de Educación y Ciencia (MEC) (BOE 301, December 17, 2007): 51871–51877; and Boletín Oficial del Estado, Orden ECI/3393/2006, MEC (BOE 263, November 3, 2006): 38278–38288.

⁶⁸ Mexico's program also suffered from delays due to the global influenza pandemic that erupted in April 2009.

Schools, districts, and states have pursued a variety of strategies to address these shortages, including long-term investments in training and retaining new teachers and more immediate attempts to recruit trained teachers from other regions of the United States or from abroad. Without passing judgment on the respective merits and liabilities of these strategies (which would require a much more detailed evaluation of the programs than this report attempts), we briefly review four distinct approaches:

- incentives for students or recent labor market entrants to become ESL teachers
- alternative certification and credential acquisition programs for mid-career professionals
- recruiting foreign teachers through the US government's temporary skilled worker
- binational teacher exchange programs

Researchers and policymakers have at least begun to examine the first three of these strategies, but binational teacher exchanges remain relatively unexplored as a policy option to respond to teacher shortages. Presumably, any comprehensive effort to alleviate teacher shortages would incorporate all of these strategies to varying degrees depending on the local characteristics of the shortage.

Teacher exchange programs are not designed to respond to occupational shortages, and legislation explicitly prohibits them from doing so. Still, exchange programs are allowed to include employment for which the visitor receives compensation by the sponsor. 69 Clearly, exchange sponsors and participants have diverse motivations for participating in teacher exchanges. These usually include a pragmatic mix of educational, cultural, professional, and personal reasons.

Anecdotal evidence suggests that some states and districts rely on exchanges to fill immediate teaching needs, among other purposes. For instance, one study on South Carolina's visiting teacher agreement with Spain found that the program's objectives included the following:

- meeting the greater demand for Spanish teachers
- providing qualified native Spanish speakers at all grade levels
- providing students with a linguistically and culturally rich education to better prepare them for success in their personal, academic, and professional lives
- actively participating in cross-cultural activities that will provide greater knowledge and appreciation of the Spanish culture in schools and communities⁷⁰

Similarly, the US Department of Education's 2007 annual report on teacher exchanges under the US-Mexico BMEP cites the "representative" feedback of one state director, who claims that "teachers from Mexico fill a void in the schools in our state due to a shortage of teachers."71

⁶⁹ 22 CFR Part 62.16.

⁷⁰ Pamela B. Finney, Jess Torres, and Stephen Jurs, "The South Carolina/Spain Visiting Teacher Program," *The Clearing House* 76, no. 2 (November/December 2002): 94–97. OME, *Binational Migrant Education Program Annual Report* 2006–07.

Exchange teachers seem to have somewhat different motives for participating. Teachers participating in short-term exchanges under the BMEP are volunteers and likely have more altruistic motives. In the cases of longer-term exchanges, participating teachers may seek to improve their English skills, learn new teaching methodologies, provide services to their co-nationals residing abroad (in the case of Mexico), or simply embark on a foreign adventure. These objectives all fit within the parameters of the Fulbright-Hays Act.

The countries of origin also have reasons for participating in the exchange that fall within the parameters of the Fulbright-Hays Act. Spain appears to have at least two strategic motives for continued participation in the teacher exchanges: increasing the capacity for English instruction in Spain and developing methods to teach Spanish to and assist with the integration of Spain's rapidly growing immigrant population.

Anecdotal evidence suggests that Spanish teachers who participate in exchange programs return to Spain and often teach English language curricula. Since the 1970s, Spain has gradually reformed its education system and has dramatically expanded the teaching of foreign languages and the teaching of academic subjects in foreign languages — especially English — in its elementary and secondary schools. The reforms have been aimed at improving the competitiveness of Spanish students in the global labor market and facilitating and accelerating Spain's European integration. Whereas in the past, the focus of foreign language instruction was on simple communication skills, since the education reforms, foreign language instruction has focused on mastery and the development of higher cognitive skills in a foreign language. This shift increased the demand for qualified contentarea teachers with a high degree of English proficiency. Presumably, many former visiting teachers are qualified to fill these posts.

A study of former visiting teachers conducted for the Education Department of the Autonomous Region of Madrid found that many visiting teachers receive substantial professional development while in the United States — including in English language, general education, ESL instruction, bilingual instruction, and using technology in the classroom. Based on focus-group interviews with former visiting teachers who had returned to Madrid, the study concluded that many former visiting teachers have incorporated teaching methodologies observed in the United States into their Spanish classroom repertoire. During the interviews, many former visiting teachers expressed interest in teaching English or bilingual curricula in Spain, but few were actually doing so. This suggests that much of the talent created by the visiting teacher program is not being used.

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⁷² See MEC, *Educación General Básica: Nuevas orientaciones* (Madrid: Magisterio Español, 1970); MEC, *Libro blanco para la Reforma del sistema educativo* (Madrid: MEC, 1989); and Ministerio de Educación y Ciencia, *Ley orgánica de ordenación general del sistema educativo* (Madrid: Escuela Española, 1990).

⁷³ MEC, "Real Decreto 1006/1991, de 14 de junio, por el que se establecen las enseñanzas mínimas correspondientes a la Educación Primaria," *Boletín Oficial del Estado* no. 152 (June 26, 1991), 21,191-121,193.

⁷⁴ Daniel Madrid, "La función docente del profesorado de idiomas," in *La función docente en educación infantil y primaria desde las nuevas especialidades*, eds. C. Gómez and M. Fernández (Granada: Grupo Editorial Universitario, 1998): 215–236.

⁷⁵ Gutiérrez Martín, El Programa de Profesores Visitantes.

Second, the immigrant population in Spain has grown dramatically over the past decade. The number of foreign-born students enrolled in Spanish elementary and secondary schools increased more than sixfold from the 1999-00 through the 2007-08 academic years: from 107,301 to 695,190 (or from about 1.5 to about 9.6 percent of total enrollment). About 30 percent of the 503,803 immigrant children age 15 and under in Spain are from Spanishspeaking countries and often do not require Spanish language instruction; however, immigrant students who are not from Spanish-speaking countries come from a wide variety of countries that speak diverse languages.⁷⁷ The top non-Spanish-speaking countries of origin for foreign-born children in Spain in 2007 were Morocco (152,853, or 30 percent), Romania (50,546, or 10 percent), China (23,820, or 5 percent), and Bulgaria (12,422, or 2 percent). These demographic trends have dramatically increased the demand for Spanish as a Foreign Language (Español como Lengua Extranjera) instruction in Spanish schools.⁷⁸ And although Spain has a long history of bilingual education because of the proliferation of regional languages, immigration poses new challenges for the Spanish elementary and secondary education systems. The OECD recently concluded that Spanish teachers are "illequipped to deal with the cultural diversity brought on by Spain's immigrant population."⁷⁹ Spanish teachers who spend time in the United States are exposed to pedagogical methods that have been developed in a country with, arguably, a much longer history of immigration and immigrant integration.

The small size and short history of the US-Mexico teacher exchanges make even anecdotal conclusions regarding motivations and outcomes particularly difficult. Interviews with key Mexican government officials suggest that exchanges are considered part of the Mexican government's long-term strategy of establishing a proactive relationship with Mexicans in the United States. Similar to Spain, former visiting teachers could contribute to expanding English instruction in Mexico, but at present, the Mexican Secretariat of Public Education has not prioritized English language acquisition in the country's public schools (as Spain has done for workforce competitiveness reasons), and the number of exchange participants is likely too small to achieve a measurable impact. Still, there is widespread consensus that governments and international donors should prioritize exchange programs such as the US-Mexico teacher exchanges. And in the context of slowing migration from Mexico to the United States, the current economic crisis may represent a unique opportunity for Mexico to increase elementary and secondary school enrollment among its youth, and equally importantly, to improve their educational outcomes — an objective that would benefit both the Mexican and US economies.

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⁷⁶ Ministerio de Educación, Política Social y Deporte, *Datos y Cifras: Curso Escolar 2008/09* (Madrid: Secretaría General Técnica, Subdirección General de Información y Publicaciones, 2008); Ministerio de Educación, Política Social y Deporte, "Estadísticas de la Enseñanza no Universitarias, Resultados Detallados, Curso 1999–2000."

⁷⁷ Legal immigrants as of December 31, 2007. Ministerio de Trabajo e Inmigración, Secretaría de Estado de Inmigración y Emigración, "Tabla I.4. Extranjeros con certificado de registro o tarjeta de residencia en vigor según sexo, nacionalidad y grupo de edad," *Anuario Estadístico del Año 2007* (Madrid, 2009).

⁷⁸ Miguel Carrera Troyano and José J. Gómez Asencio, "La industria de la enseñanza del Español como lengua extranjera," *Circunstancia* 5, no. 13 (September 2007).

⁷⁹ OECD, Economic Survey of Spain (Paris: OECD, 2008).

⁸⁰ See Carlos González Gutiérrez, ed., *Relaciones Estado-Diaspora: Approximaciones desde Cuatro Continentes* (Mexico City: Miguel Ángel Porrúa, 2006); Orozco, "Pasado, Presente y Futuro."

⁸¹ The World Bank, *The Growth Report: Strategies for Sustained Growth and Inclusive Development* (Washington, DC: The World Bank, 2008): 43.

There is even less scientific evidence regarding the impacts of exchange teachers on students' academic outcomes. For exchanges that take place under BMEP, data on program outcomes are difficult to establish, and some officials agree that outcome evaluation is a big "hole" in the program. US Department of Education survey results indicate that while most MEP state program directors (10 of 10 surveyed) believe that the teacher exchange program strengthens students' language and cultural identities and self esteem, fewer state directors (5 of 10 surveyed) think that the exchange program improves students' content achievement. (It is possible that strengthened cultural identity and self-esteem may contribute to improving academic outcomes in the longer term. However, these outcomes are difficult to measure and track.)

The long-time director of California's BMEP visiting teacher program points to how exchange teachers from Mexico provide bilingual education for Mexican-origin students whose native language is not Spanish — notably, students who speak indigenous languages such as Mixtec and Zapotec. School districts are normally unable to provide bilingual teachers proficient in these indigenous languages and must rely on visiting Mexican teachers as intermediaries. In addition, the Mexican Secretariat of Public Education and IME claim that participating students show improved reading and math outcomes, although the claim still appears anecdotal.

Overall, a recent evaluation of binational education cooperation commissioned by the IME reached the following conclusion:

While there is great potential for *intercambios* [exchanges] to enhance the education of Mexican-origin students in the United States, the program has a limited impact because of its small size, short duration of stay of the teachers, and most importantly, because they do not routinely interact with the regular students. Most of the emphasis is on cultural diffusion, with little emphasis on academic preparation of students. We do not discount the importance of culture in the developing identity of Mexican-origin students, but their educational needs extend far beyond this.⁸⁵

It is perhaps more difficult to attach a metric to the relative success or failure of the US-Spain and US-Mexico visiting teacher programs. US students may benefit from access to experienced instructors: All exchange teachers must have a minimum of three years of experience, and in 2008, visiting teachers from Spain had an average of six years of experience according to the Education Office of the Embassy of Spain in the United States. Particularly in schools and districts with high teacher turnover — which are often urban districts or underperforming schools with high concentrations of LEP students —

38

⁸² OME, Binational Migrant Education Program Annual Report 2006–07.

⁸³ Edda Caraballo, Exchange Visitor Program, Migrant, Indian, and International Education Office, California Department of Education, interview via telephone with MPI, June 24, 2008.

⁸⁴ Secretaría de Relaciones Exteriores, Instituto de los Mexicanos en el Exterior (IME), and Secretaría de Educación Pública, "Programa Binacional de Educación Migrante México-Estados Unidos: Evaluación 2007" (presentation provided by the IME, September 2007).

⁸⁵ Patricia Gándara, "A Preliminary Evaluation of Mexican-sponsored Educational Programs in the United States: Strengths, Weaknesses, and Potential," in Southwest Center for Education Equity and Language Diversity, *Second Binational Symposium: Resource Book* (Tempe: Arizona State University, March 2007). ⁸⁶ Personal communication with the author, June 17, 2008.

such experienced educators may be a valuable rarity. Still, attributing student outcomes to a specific teacher when students are exposed to several instructors is difficult. Without more scientific measures, definitive conclusions will continue to be premature.

In comparison to other strategies used by states, districts, and schools to meet their teaching needs, exchange programs appear to be a relatively flexible tool to respond to immediate, short-term changes in the demand for teachers. Exchange teachers cannot address long-term teacher undersupply, but could complement more farsighted efforts to improve the teacher education pipeline and to recruit professionals from other fields who lack the precise credentials necessary to teach. Despite statutory limitations preventing teacher exchanges from responding to labor market needs and in addition to their intrinsic value as educational and cultural exchanges, teacher exchange programs display the clear potential to alleviate — although not to solve — teacher shortages in many states, districts, and schools that are struggling to respond to new immigrant inflows.

Although teacher exchanges cannot respond to labor shortages, the US government's skilled temporary worker (H-1B) program is designed to respond to occupational shortages such as the shortages of some categories of teachers. While these visas have proven highly popular in some industries, such as information technology and healthcare, they continue to be controversial. Observers disagree over the degree to which the program responds to changes in demand, ⁸⁷ and some business leaders have criticized the program for being too costly. ⁸⁸ Others claim that the program perpetuates the drain of human resources from developing countries, ⁸⁹ saying it enables private recruitment agencies to take advantage of potential migrants eager for entry to the United States. ⁹⁰

The merits and limitations of the US government's skilled professional worker program and other recruitment strategies aside, teacher exchanges offer their own independently valuable attributes. Given the minimum three years of teaching experience required for participation in the program, teacher exchange programs may provide states and districts with *access to experienced educators* and enable them to target these experienced teachers to traditionally underserved schools that suffer from high

⁸⁷ For a review of arguments surrounding the responsiveness of the skilled temporary worker program, see Demetrios G. Papademetriou and Stephen Yale-Loehr, *Balancing Interests: Rethinking the US Selection of Skilled Immigrants* (Washington, DC: Carnegie Endowment for International Peace, 1996) and Jacob Funk Kirkegaard, "Outsourcing and Skill Imports: Foreign High-Skilled Workers on H-1B and L-1 Visas in the United States" (Peterson Institute for International Economics, Working Paper 05-15, December 2005).
⁸⁸ William H. Gates, Chairman, Microsoft Corporation and Co-Chair, Bill and Melinda Gates Foundation, Written Testimony before the United States House of Representatives Committee on Science and Technology, March 12, 2008, http://www.microsoft.com/presspass/download/press/2008/03-12GatesWrittenTestimony.doc.

⁸⁹ See, for example, Devesh Kapur and John McHale, *Give Us Your Best and Brightest: The Global Hunt for Talent and Its Impact on the Developing World* (Washington, DC: Center for Global Development, 2005).

For a review of abuses committed by some private recruitment agencies — including providing misleading information regarding salaries and living costs to potential exchange teachers — see Shannon McLeod Lederer, *Importing Educators: Causes and Consequences of International Teacher Recruitment* (Washington, DC: American Federation of Teachers, 2009), http://www.aft.org/pubs-reports/intl/Teacher Migration.pdf.

teacher turnover. And research consistently shows that having an experienced teacher in the classroom measurably improves student outcomes. ⁹¹

Secondly, exchange teachers may have a comparative advantage for instruction in certain fields where extensive knowledge of a foreign language is necessary — such as foreign language instruction, dual language instruction, and academic content instruction in a foreign language. For LEP students, research consistently shows that dual language instruction — where two instructors team teach students in both a native language and a second language — is the most effective instructional approach for LEP students. If paired with US teachers, exchange teachers could provide effective dual language instruction to LEP students.

Finally, schools and districts often face the challenge of providing *effective instruction to LEP students who speak uncommon foreign languages*. Although most LEP students enrolled in US schools are native Spanish speakers, the remaining LEP student population speaks a wide variety of native languages. Training existing teachers in these languages to enable dual language instruction would require long-term investments that may not be feasible. Binational exchange programs (with countries other than Spain and Mexico) may be a cost effective way to address the needs of these particular students. Similarly, exchange teachers might be an effective means of providing dual language instruction to speakers of rapidly growing language groups (for example, following the influx of a refugee group) where the teacher training infrastructure is not yet in place or is unable to keep pace with demand.

Binational teacher exchanges have the potential to alleviate the shortage of ESL and bilingual teachers in US schools, but the program also has room for improvement. **Most obviously, there is a** *lack of empirical evidence of student and teacher outcomes.* Surprisingly little is known about how exchange teachers benefit from participation in the programs, about the motivations of states and districts for signing memoranda of understanding and investing in program coordination, or about how students benefit (or do not benefit) from exchange teachers. Visiting teachers are subject to the same annual evaluations as other teachers as outlined in each district's standard contract, but most research shows that these evaluations are generally an ineffective metric and are difficult to compare across districts. ⁹⁴ More robust, comparable analysis of the outcomes of teacher exchange programs—including exit interviews with teachers, longitudinal analysis of participants' employment trajectories, and student assessments — could address these concerns.

Secondly, the highly decentralized nature of the US elementary and secondary education system poses both advantages and challenges for teacher exchange programs. Through bilateral agreements — for example, with Spain and Mexico — states

40

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⁹¹ Darling-Hammond and Sykes, "Wanted: A National Teacher Supply Policy for Education."

⁹² Many states also report shortages of foreign language instructors.

⁹³ Diane August and Timothy Shanahan, eds., *Developing literacy in second-language learners: Report of the National Literacy Panel on Language Minority Children and Youth* (Washington, DC: Center for Applied Linguistics, 2006).

⁹⁴ National Council on Teacher Quality, *State Teacher Policy Yearbook: What States Can Do To Retain Effective New Teachers* (Washington, DC: National Council on Teacher Quality, August 2008).

and districts are able to respond to local teaching needs. On the other hand, the proliferation of memoranda of understanding between origin country education ministries and state or local education agencies, along with the onus of managing multiple relationships, can overwhelm already overstretched bureaucracies at both ends.

Finally, the programs' per capita administrative costs can be burdensomely high, particularly in states that contract relatively small numbers of exchange teachers. A federal coordinating agency — for example, housed at the US Department of Education — might alleviate some of these costs. US states and districts could articulate their needs to the federal agency, which would then be responsible for the selection and orientation of exchange teachers in coordination with Spanish and Mexican authorities. Under the current framework, US state and local education officials travel to Spain and Mexico to interview candidates — often a costly endeavor. Both parties might make better use of videoconferencing and other remote-access technologies to lessen this burden on education budgets.⁹⁵

When thoughtfully designed and aligned with longer-term strategies to address teacher shortages, teacher exchange programs show a clear potential to meet the needs of all the stakeholders involved: Districts fill their most urgent staffing needs, Spanish and Mexican teachers gain practical experience working in the United States and improve their knowledge of English, and students gain access to qualified and experienced teachers. In addition to their intrinsic cultural and educational value, teacher exchanges play a vital role in filling school districts' immediate needs for these shortage area educators and could offer a promising model of binational cooperation on education — both for students and for teachers. Teacher exchanges will not solve the chronic shortages of ESL and bilingual teachers facing US schools, but they could help satisfy immediate needs.

⁹⁵ In response to travel concerns relating to the global influenza pandemic in early 2009, Mexico began offering states the option to interview potential teachers through videoconferencing technology. To date, only Utah has applied to use the technology, although New Mexico and Oregon reportedly are considering it as well.

Appendices

APPENDIX 1. Credential and Experience Requirements for States Participating in the US-Spain Visiting Teacher Program

State	Level(s)	Subject(s)	Credentials	Experience	Other requirements
California	Elementary		(1) Elementary teaching degree with any specialization, (2) Bachelor's degree in philology, mathematics, biology, biotechnology, environmental science, physics, geology, chemistry, or physical education with a teaching certificate, or (3) Bachelor's degree in pedagogy or educational psychology. Candidates with previous experience as a visiting teacher in California must have passed the CBEST and have the credentials required by the California Commission on Teacher Credentialing, or have fulfilled the requirements necessary to obtain the appropriate credentials.	Three years of experience in teaching or other education-related activities, of which at least 18 months must have been in an accredited institution.	Driver's license
	Secondary		(1) Bachelor's degree in philology, mathematics, biology, biotechnology, environmental science, physics, geology, chemistry, physical education, or fine arts with a teaching certificate, (2) Elementary teaching degree with a bachelor's degree in any field, or (3) Bachelor's degree in pedagogy or educational psychology. Candidates with previous experience as a visiting teacher in California must have passed the CBEST and have the credentials required by the California Commission on Teacher Credentialing, or have fulfilled the requirements necessary to obtain the appropriate credentials.		
Colorado	Elementary	Early childhood bilingual education	(1) Elementary teaching degree, preferably with a specialization in English, or (2) Elementary teaching degree with a bachelor's degree, preferably in pedagogy or educational psychology.	Three years of experience in teaching or other education-related activities, of which at least one year must have been in an accredited institution.	Driver's license

Connecticut ^c	Elementary and secondary	translation with a teaching certificate (elementary teachers and secondary school career administrators are excluded), or (2) Elementary teaching degree with a bachelor's degree.		Three years of experience in teaching or other education-related activities.	Driver's license	
Delaware ^a	Elementary and secondary	Spanish, bilingual education	(1) Elementary teaching degree with a bachelor's degree, or (2) Bachelor's degree in philology with a teaching certificate.	Three years of experience in teaching or other education-related activities.	Driver's license	
District of Columbia	Elementary and secondary	Spanish, bilingual education	(1) Elementary teaching degree, or (2) Bachelor's degree in philology with a teaching certificate.	Three years of teaching experience.		
Florida	Elementary and secondary			Three years of experience in teaching or other education-related activities.	Driver's license	
Georgia	Elementary and secondary	Spanish, English immersion, ESL, Latin	(1) Bachelor's degree in philology or translation with a teaching certificate, or (2) Elementary teaching degree with specialization in foreign languages, elementary or early childhood education.	Previous teaching experience is not necessary. Priority will be given to active teachers and recent graduates.	Availability for a minimum of two years. Driver's license granted prior to August 1, 2008.	
Illinois	Elementary and secondary	Bilingual education in all academic subject areas, Spanish	(1) Elementary teaching degree, (2) Bachelor's degree in philology, translation, mathematics, biology, physics, chemistry, or history with a teaching certificate, (3) Bachelor's degree in psychology with a teaching certificate, or (4) Bachelor's degree in education.	Three years of experience in teaching or other education-related activities.	Some districts require a driver's license.	
Indiana	Elementary and secondary	Spanish, bilingual education	(1) Elementary school, elementary teaching degree, (2) Secondary school, bachelor's degree in philology or translation with a teaching certificate, or (3) Other bachelor's degrees with a teaching certificate.	Experience in teaching or other education-related activities.	Driver's license	
Iowa	Elementary	Dual language immersion	Elementary teaching degree.	One year of teaching experience in an accredited	Driver's license	
	Secondary	Spanish	Bachelor's degree in Hispanic literature with a teaching certificate.	institution.		
Kansas	Elementary Elementary and secondary	Spanish, ESL, mathematics, physics, science	(1) Elementary teaching degree, (2) Bachelor's degree in education, or (3) Bachelor's degree with a teaching certificate.	One year of experience in teaching or other education-related activities.	Driver's license	

Kentucky	Elementary and secondary	Elementary and secondary Spanish, bilingual education (1) Elementary school, elementary teaching degree, (2) Secondary school bachelor's degree in philology or translation with a teaching certificate.		Three years of experience in teaching or other education-related activities.	Driver's license
Louisiana	Elementary and middle	Spanish	Elementary teaching or bachelor's degree with a teaching certificate. Priority will be given to teachers with experience in foreign language education.	Two years of experience in teaching or primary or secondary education-related activities, of which at least one	Driver's license
	Elementary	English immersion	Elementary teaching degree.	must have been teaching experience in an accredited institution. Priority will be given to teachers with experience in foreign language education.	
Maine	Elementary and secondary	Spanish	(1) Elementary teaching degree, or (2) Bachelor's degree in philology with a teaching certificate.	Three years of experience in teaching or other education-related activities.	Driver's license
Maryland ^a	Elementary and secondary	Spanish, English immersion, ESL, Latin	(1) Elementary teaching degree, or (2) Bachelor's degree in philology with a teaching certificate.	(1) For teachers receiving a bachelor's or elementary teaching degree prior to 2004, three years of teaching experience. (2) For teachers receiving a bachelor's or elementary teaching degree starting in January 2004, no previous teaching experience.	Driver's license with at least one year of validity remaining.
Massachusetts	Elementary and secondary	Spanish, English immersion, bilingual education	(1) Elementary school, elementary teaching degree, or (2) Otherwise, bachelor's degree in philology with a teaching certificate.	Three years of experience in teaching or other education-related activities.	Driver's license
Missouri ^e	Elementary and secondary	Spanish, other areas	(1) Elementary school, elementary teaching degree, (2) Secondary school, bachelor's degree (preferably with a specialization in pedagogy or Hispanic or English philology.	One year of experience in teaching in an accredited institution or other education-related activities.	
Nebraska	Elementary		Elementary teaching degree with specialization in philology.	One year of experience in teaching or other education-	Driver's license
	Secondary	Spanish, other areas	Bachelor's degree in Hispanic or English philology, translation and interpretation, humanities, mathematics, science, geography, or history with a teaching certificate.	related activities.	
Nevada ^a	Elementary and secondary	Spanish, bilingual education, other areas	(1) Elementary teaching degree, (2) Bachelor's degree in philology, biology, biotechnology, environmental science, marine science, physics, geology, mathematics, or chemistry with a teaching certificate, or (3) Bachelor's degree in pedagogy or educational psychology.	Three years of experience in teaching or other education-related activities, of which at least one year must have been in an accredited institution.	Driver's license

New Jersey ^d	Elementary and secondary	Spanish	(1) Elementary teaching degree, or (2) Bachelor's degree in philology with a teaching certificate.	Two years of experience in teaching languages.	Driver's license with a minimum two years of validity.	
New Mexico	Elementary and secondary	Spanish, bilingual education, other areas	(1) Elementary school, elementary teaching degree, (2) Secondary school, bachelor's degree with a teaching certificate.	Experience in teaching or other education-related activities.	Driver's license	
New York	Secondary	Spanish, ESL, mathematics, earth science, chemistry, biology	Bachelor's degree in Hispanic or English philology, mathematics, biology, geology, chemistry, or environmental science with a teaching certificate. In addition to the diploma, include an outline of courses taken, and hours or credits received by subject.	Three years of experience in teaching or other education-related activities.		
North Carolina	Elementary and secondary	Spanish, English immersion, ESL, Latin	(1) Bachelor's degree in philology with a teaching certificate, or (2) Elementary teaching degree with specialization in foreign languages, elementary education, or early childhood education.	(1) For teachers specializing in foreign languages, previous teaching experience is not necessary; priority will be given to active teachers and to recent graduates. (2) For teachers specializing in elementary and early childhood education, six months of recent experience are required.	Availability for a minimum of two academic years. Driver's license granted prior to August 1, 2008.	
Ohio	Elementary and secondary	education teaching degree, (2) Secondary school, teaching or other		Three years of experience in teaching or other education-related activities.	Driver's license	
Oregon	education, other areas		(1) Elementary school, elementary teaching degree with a university orientation, elementary teaching degree with a bachelor's degree, or bachelor's degree with a teaching certificate, (2) Secondary school, bachelor's degree with a teaching certificate.	Three years of experience in teaching or other education-related activities, of which at least one year must have been in an accredited institution.	Driver's license	
South Carolina	South Carolina Elementary and secondary Spanish, English immersion, ESL, Latin		(1) Bachelor's degree in philology with a teaching certificate, or (2) Elementary teaching degree with specialization in foreign languages, elementary education, or early childhood education.	(1) For teachers specializing in foreign languages, previous teaching experience is not necessary; priority will be given to active teachers and to recent graduates. (2) For teachers specializing in elementary and early childhood education, one year of recent experience required.	Availability for a minimum of two academic years. Driver's license granted prior to August 1, 2008.	

Tennessee	Elementary and secondary	Spanish, bilingual education	Elementary teaching or bachelor's degree with a teaching certificate.	Three years of experience in education-related activities	Driver's license
Texas	Elementary	Bilingual education	(1) Elementary teaching degree with any specialization, (2) Elementary teaching degree with a bachelor's degree in any specialization, or (3) Bachelor's degree in any specialization with a teaching certificate or equivalent.	Three years of experience in teaching or primary or secondary education-related activities, of which at least one must have been teaching experience in an accredited	Driver's license
	Secondary	Spanish	Bachelor's degree in philology with a teaching certificate or equivalent.	institution.	
Utah	Elementary and secondary	Bilingual education, Spanish, other areas	(1) Elementary school, elementary teaching degree, (2) Secondary school, bachelor's degree, preferably with a teaching certificate.	Experience in teaching or other education-related activities.	Driver's license
Virginia	Elementary and secondary	Spanish, English immersion, ESL, Latin	(1) Bachelor's degree in philology or translation with a teaching certificate, or (2) Elementary teaching degree with a specialization in foreign languages, elementary education, or early childhood education.	(1) For teachers with a bachelor's or elementary teaching degree with a specialization in foreign languages, no prior teaching experience is necessary. Priority will be given to active teachers and recent graduates. (2) For teachers with an elementary teaching degree specializing in elementary or early childhood education, one year of teaching experience is required.	Driver's license
Washington	Elementary and secondary	Spanish, bilingual education, other areas	(1) Elementary school, elementary teaching degree with a university orientation, elementary teaching degree with a bachelor's degree, or bachelor's degree with a teaching certificate, (2) Secondary school, bachelor's degree with a teaching certificate.	Three years of experience in teaching or other education-related activities, of which at least one year must have been in an accredited institution.	Driver's license
West Virginia ^b	Elementary and secondary	Spanish, bilingual education	(1) Elementary teaching degree, or (2) Bachelor's degree in philology with a teaching certificate.	Three years of experience in teaching or other education-related activities.	Driver's license

Note: Elementary teaching degree includes a "título de maestro" — a three-year university course for primary school teachers. Teaching certificate includes the Certificado de Aptitud Pedagógica (CAP). University orientation includes the Spanish "Curso de Orientación Universitaria," a preparatory course prior to enrollment in a bachelor's degree program. The Spanish "psicopedagógica" is translated as "educational psychology." Colorado has not participated in the visiting teacher program since 2005. Missouri participated in the visiting teacher program only in 2000-01. New Jersey participated in the visiting teacher program only in 2003-04.

Sources: Some states may have not published requirements in recent years if they no longer participate in the program. The requirements included are the most recently published for each state. Unless otherwise indicated, requirements are included as published in the Boletín Oficial del Estado, Orden ECI/3542/2008, Ministerio de Educación, Política Social y Deporte (BOE 294, December 6, 2008): 48966–48975.

^aBoletín Oficial del Estado, Orden ECI/3672/2007, Ministerio de Educación y Ciencia (MEC) (BOE 301, December 17, 2007): 51871–51877

^bBoletín Oficial del Estado, Orden ECI/3393/2006, MEC (BOE 263, November 3, 2006): 38278–38288.

^cBoletín Oficial del Estado, Orden ECI/3891/2004, MEC (BOE 286, November 27, 2004): 39381–39392.

^dBoletín Oficial del Estado, Orden ECI/2876/2003, Ministerio de Educación, Cultura, y Deporte (BOE 251, October 20, 2003): 37499–37510.

^eBoletín Oficial del Estado, Resolución 23063, Secretaría General Técnica (BOE 303, December 19, 2000): 44503–44511.

APPENDIX 2. US-Spain Visiting Teacher Program Exchange Teachers by State, 1997 to 2008

AFFENDIX 2. 03-3pail	1997–98	1998–99	1999–00	2000-01	2001–02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
United States	292	505	643	970	1,140	1,220	1,147	1,137	1,046	1,186	1,169
California	275	352	342	353	383	407	320	313	286	307	314
Colorado	_	_	_	4	4	_	1	1	_	_	_
Connecticut	4	10	17	30	32	27	18	15	16	12	10
District of Columbia	1	_	-	-	10	7	10	12	17	14	10
Florida	ı	2	13	11	15	17	21	28	30	38	41
Georgia	2	19	26	39	31	31	32	24	14	13	8
Illinois	3	39	50	127	199	237	204	199	193	213	232
Indiana	1	2	1	8	9	18	23	24	16	15	18
Iowa	_	_	_	_	7	9	10	6	3	13	17
Kansas	_	_	_	_	_	7	12	18	17	27	26
Kentucky	_	_	_	9	18	19	23	19	13	21	18
Louisiana	_	3	16	22	20	17	20	22	15	18	20
Maryland	2	6	14	23	20	16	22	17	14	11	5
Massachusetts	_	_	6	27	28	28	21	17	19	24	22
Missouri	_	_	_	8	_		_	_	_	_	_
Nebraska	_	_	6	18	16	18	23	23	22	27	22
Nevada	_	_	_	_	_		_	_	14	41	23
New Jersey	_	_	_	_	_		1	_	_	_	_
New Mexico	6	21	20	23	28	22	17	11	17	26	19
New York	_	6	1	8	13	36	49	55	43	46	53
North Carolina	_	_	1	15	20	13	11	10	11	18	23
Ohio	_	_	_	_	_		_	-	-	5	9
Oregon	_	_	1	_	_	1	2	2	2	6	5
Pennsylvania	_	_	_	3	2	6	12	9	6	5	4
South Carolina	_	_	_	22	39	37	34	40	30	28	21
Tennessee	_	2	4	19	19	23	24	41	33	34	29
Texas	_	43	124	176	198	209	218	200	176	185	182
Utah	-	_	_	15	12	6	6	10	10	13	12
Virginia	_	_	_	5	6	4	2	9	15	15	17
Washington	_	_	1	5	11	5	3	4	8	9	7
Wisconsin	ı	-	-	-	ı	1	8	8	6	2	2

Note: Data for years prior to 1997-98 are not available.

Source: Ministerio de Educación, Política Social y Deporte, Subdirección General de Cooperación Internacional.

APPENDIX 3. US-Mexico Visiting Teacher Program, Exchange Teachers by State, 2002 to 2009

	2002	2003	2004	2005	2006	2007	2008	2009
United States	30	21	3	8	41	17	29	32
California	30	21	3	8	22	8	15	15
New Mexico					19	9	4	5
Utah							10	5
Illinois								7

Note: Years correspond to the academic year ending in the year designated. Source: Courtesy Secretaría de Educación Pública, Dirección General de Relaciones Internacionales.

APPENDIX 4. Acronyms

ARRA: American Recovery and Reinvestment Act of 2009

BMEP: Binational Migrant Education Program

ELL: English Language Learner ESL: English as a Second Language

IME: Instituto de los Mexicanos en el Exterior (Institute of Mexicans Abroad)

LEP: Limited English Proficient MEP: Migrant Education Program

NCELA: National Clearinghouse for English Language Acquisition and Language Instruction Educational Programs

NCLB: No Child Left Behind Act of 2001

OECD: Organisation for Economic Co-operation and Development

OME: Office of Migrant Education, US Department of Education

SEP: Secretaría de Educación Pública (Secretariat of Public Education) (Mexico)

SRE: Secretaría de Relaciones Exteriores (Secretariat of Foreign Affairs) (Mexico)

TFA: Teach for America

Works Cited

American Association for Employment in Education (AAEE). 2006. *Educator Supply and Demand in the United States, 2006.* Columbus, OH: AAEE. http://www.aaee.org/cwt/external/wcpages/files/2006execsummary.pdf.

Archibold, Randal C. 1998. "Teachers Imported from Spain to Teach Spanish in the Bronx." *The New York Times.* September 2, 1998.

August, Diane and Timothy Shanahan, eds. 2006. Developing literacy in second-language learners: Report of the National Literacy Panel on Language Minority Children and Youth. Washington, DC: Center for Applied Linguistics.

http://www.cal.org/projects/archive/nlpreports/executive summary.pdf.

Barber, Randy. 2003. Report to the National Education Association on Trends in Foreign Teacher Recruitment. Washington, DC: National Education Association.

Batalova, Jeanne and Michael Fix with Peter A. Creticos. 2008. *Uneven Progress: The Employment Trajectories of Skilled Immigrants in the United States*. Washington, DC: Migration Policy Institute.

http://www.migrationpolicy.org/pubs/BrainWasteOct08.pdf.

Boe, Erling E. 1990. Demand, Supply and Shortage of Bilingual and ESL Teachers: Models, Data and Policy Issues. *Proceedings of the First Research Symposium on Limited English Proficient Student Issues*. Washington, DC: Office of Bilingual Education and Minority Language Affairs, US Department of Education.

Bustos Flores, Belinda and Ellen Riojas Clark. 2002. El Desarrollo del Proyecto Alianza: Lessons Learned and Policy Implications. San Antonio, TX and Tempe, AZ: Intercultural Development Research Association and Arizona State University.

Capps, Randolph, Michel Fix, Julie Murray, Jason Ost, Jeffrey S. Passel, and Shinta Herwantoro. 2005. *The New Demography of America's Schools: Immigration and the No Child Left Behind Act.* Washington, DC: The Urban Institute. http://www.urban.org/Publications/311230.html.

Carrera Troyano, Miguel and José J. Gómez Asencio. 2007. "La industria de la enseñanza del Español como lengua extranjera." *Circunstancia*, vol. 5, no. 13.

Center for Applied Linguistics, Stanford University and the American Institutes for Research. 2009. The American Recovery and Reinvestment Act: Recommendations for Addressing the Needs of English Language Learners. Report of the Working Group on ELL Policy. http://www.migrationinformation.org/integration/files/ELL-Stimulus-Recommendations.pdf.

Cooper, Sharon P., Nancy F. Weller, Erin E. Fox, and Sara R. Cooper. 2005. Comparative Description of Migrant Farmworkers versus Other Students Attending Rural South Texas Schools: Substance Use, Work, and Injuries. *Journal of Rural Health*, vol. 21, no. 4.

Darling-Hammond, Linda and Gary Sykes. 2003. Wanted: A National Teacher Supply Policy for Education: The Right Way to Meet The 'Highly Qualified Teacher' Challenge. *Education Policy Analysis Archives*, vol. 11, no. 33.

Diaz-Rico, Lynne T. and Jerilynn Smith. 1994. Recruiting and Retaining Bilingual Teachers: A Cooperative School Community-University Model. *The Journal of Educational Issues of Language Minority Students*, vol. 14.

Dolton, Peter, Andrew Tremayne, and Tsung-Ping Chung. 2003. The Economic Cycle and Teacher Supply. Paper commissioned by the Education and Training Policy Division of the Organization for Economic Cooperation and Development, Paris.

Education Week and the EPE Research Center. 2009. Quality Counts 2009: Portrait of a Population. Bethesda, MD: Education Week. http://www.edweek.org/ew/toc/2009/01/08/index.html.

Feistritzer, C. Emily. 2006. *Alternative Teacher Certification: A State-by-State Analysis*. Washington, DC: National Center for Education Information. http://www.teach-now.org/overview.cfm.

Finney, Pamela B. Jess Torres, and Stephen Jurs. 2002. The South Carolina/Spain Visiting Teacher Program. *The Clearing House*, vol. 76, no. 2.

Gándara, Patricia. 2007. A Preliminary Evaluation of Mexican-sponsored Educational Programs in the United States: Strengths, Weaknesses, and Potential. In Southwest Center for Education Equity and Language Diversity. *Second Binational Symposium: Resource Book.* Tempe, Arizona: Arizona State University, March.

Gates, William H. 2008. Written Testimony before the United States House of Representatives Committee on Science and Technology. http://www.microsoft.com/presspass/download/press/2008/03-12GatesWrittenTestimony.doc.

Gelatt, Julia. 2007. Annual Immigration to the United States: The Real Numbers. Migration Policy Institute Fact Sheet No. 16.

http://www.migrationpolicy.org/pubs/FS16 USImmigration 051807.pdf.

Gelatt, Julia and Michael Fix. 2007. Federal Spending on Immigrant Families' Integration. In *Securing the Future: US Immigrant Integration Policy*, edited by Michael Fix. Washington, DC: Migration Policy Institute.

Gold, Norman C. 1992. Solving the Shortage of Bilingual Teachers: Policy Implications of California's Staffing Initiative for LEP Students. *Third National Research Symposium on Limited*

English Proficient Students: Focus on Middle and High School Issues. Washington, DC: Office of Bilingual Education and Minority Language Affairs, US Department of Education.

Gonzalez Gutierrez, Carlos, ed. 2006. Relaciones Estado-Diaspora: Approximaciones desde Cuatro Continentes. Mexico City: Miguel Ángel Porrúa.

Gorard, Stephen, Beng Huat See, Emma Smith, and Patrick White. 2006. *Teacher Supply: The Key Issues*. London: Continuum International Publishing Group.

Gutiérrez Martín, Antonio M. 2006. El Programa de Profesores Visitantes en Estados Unidos y los Programas de Enseñanza Bilingüe de la Comunidad Autónoma de Madrid. Unpublished report.

Ingersoll, Richard M. 2003. *Is There Really a Teacher Shortage?* Seattle, Washington: Center for the Study of Teaching and Policy and the Consortium for Policy Research in Education. http://depts.washington.edu/ctpmail/PDFs/Shortage-RI-09-2003.pdf.

Instituto Nacional de Estadística y Geografía e Informática. 2009. Información sobre el flujo migratorio internacional de México. June 2, 2009.

http://www.inegi.org.mx/inegi/contenidos/espanol/prensa/Boletines/Boletin/Comunicados/Especiales/2009/Junio/comunica1.pdf.

Instituto Nacional de Estadística, Geografía e Informática. 2005. *II Conteo de Población y Vivienda 2005, Porcentaje de la población de 5 y más años que asiste a la escuela por grupos de edad y sexo, 1970 a 2005*. Mexico, DF: Instituto Nacional de Estadística, Geografía e Informática. http://www.inegi.org.mx/inegi/default.aspx?s=est&c=10202.

Instituto Nacional para la Evaluación de la Educación. 2007. *Panorama Educativo de México 2007: Indicadores del Sistema Educativo Nacional 2007*. Mexico, DF: Instituto Nacional para la Evaluación de la Educación.

http://www.oei.es/noticias/spip.php?article2455.

Interagency Working Group on US Government-Sponsored International Exchanges and Training. Various years. *Inventory of Programs*. Washington, DC: IWAG. http://www.iawg.gov/reports/inventory/.

Jacob, Brian A. and Jens Ludwig. 2009. "Improving Educational Outcomes for Poor Children." In Maria Cancian and Sheldon Danziger, eds. *Changing Poverty, Changing Policies*. New York: Russell Sage Foundation.

Jalisco, Gobierno de, Secretaría de Educación, Dirección de Relaciones Internacionales. 2007. *Cooperación Internacional Educativa en Jalisco:* Reporte de Actividades 2007. Guadalajara. http://portalsej.jalisco.gob.mx.relaciones-internacionales/files/pdf/her2007.pdf.

Johnson, Nicholas, Phil Oliff, and Jeremy Koulish. 2009. An Update on State Budget Cuts: At Least 34 States Have Imposed Cuts That Hurt Vulnerable Residents, But the Federal

Economic Recovery Package is Reducing the Harm. Washington, DC: Center on Budget and Policy Priorities.

http://www.cbpp.org/cms/?fa=view&id=1214.

Kapur, Devesh and John McHale. 2005. *Give Us Your Best and Brightest: The Global Hunt for Talent and Its Impact on the Developing World.* Washington, DC: Center for Global Development.

Kirkegaard, Jacob Funk. 2005. Outsourcing and Skill Imports: Foreign High-Skilled Workers on H-1B and L-1 Visas in the United States. Peterson Institute for International Economics, Working Paper 05-15.

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=872465.

Laglagaron, Laureen D. 2009. Protection through Integration: The Mexican Government's Efforts to Aid Migrants in the United States. Washington, DC: Migration Policy Institute, forthcoming.

Lara-Alecio, Rafael, Martha Galloway, Beverly J. Irby, and Genevieve Brown. 2004. An Analysis of Texas Superintendent's Bilingual/ESL Recruitment and Retention Practices. Paper presented at the Annual Meeting of the American Educational Research Association, San Diego, California, April 13, 2004.

Madrid, Daniel. 1998. La función docente del profesorado de idiomas. In *La función docente en educación infantil y primaria desde las nuevas especialidades*, edited by C. Gómez and M. Fernández. Granada: Grupo Editorial Universitario.

McLeod Lederer, Shannon. 2009. *Importing Educators: Causes and Consequences of International Teacher Recruitment*. Washington, DC: American Federation of Teachers. http://www.aft.org/pubs-reports/intl/Teacher-Migration.pdf.

Ministerio de Educación. 2008. *Datos y Cifras: Curso Escolar 2008/09*. Madrid: Secretaría General Técnica, Subdirección General de Información y Publicaciones. http://www.mepsyd.es/dctm/mepsyd/horizontales/prensa/documentos/2008/datosycifras.pdf?documentId=0901e72b80027850.

Ministerio de Educación. 2008. *El Mundo Estudia Español, 2007*. Madrid: Ministerio de Educación, Secretaría General Técnica.'

Ministerio de Educación y Ciencia. 1970. Educación General Básica: Nuevas orientaciones. Madrid: Magisterio Español.

Ministerio de Educación y Ciencia. 1990. Ley orgánica de ordenación general del sistema educativo. Madrid: Escuela Española.

Ministerio de Educación y Ciencia. 1989. *Libro blanco para la Reforma del sistema educativo*. Madrid: Ministerio de Educación y Ciencia.

Ministerio de la Presidencia. Various years. *Boletín Oficial del Estado*. Madrid. http://www.boe.es/.

Ministerio de Trabajo e Inmigración, Secretaría de Estado de Inmigración y Emigración. 2009. *Anuario Estadístico del Año 2007*. Madrid: Ministerio de Trabajo e Inmigración.

Murray, Julie, Jeanne Batalova, and Michael Fix. 2007. Educating the Children of Immigrants. In Michael Fix, ed. *Securing the Future: US Immigrant Integration Policy*. Washington, DC: Migration Policy Institute.

Murray, Julie, Michael Fix, and Wendy Zimmermann. 2006. New Directions for Newcomers: A Roadmap to No Child Left Behind and Limited English Proficient Students. Report to the Foundation for Child Development and the Kellogg Foundation.

National Council on Teacher Quality. 2008. State Teacher Policy Yearbook: What States Can Do To Retain Effective New Teachers. Washington, DC: National Council on Teacher Quality

Organization for Economic Cooperation and Development. 2006. *Education at a Glance*. Paris: Organization for Economic Cooperation and Development.

Organization for Economic Cooperation and Development. 2008. *Economic Survey of Spain*. Paris: OECD.

Orozco, Graciela. 2001. Pasado, Presente y Futuro de Nuestra Relación con las Comunidades Mexicanas y de Origen Mexicano en Estados Unidos. *El Mercado de Valores* No. 7

http://www.ime.gob.mx/investigaciones/bibliografias/orozco.pdf.

Papademetriou, Demetrios G. and Aaron Terrazas. 2009. *Immigrants and the Current Economic Crisis:* Research Evidence, Policy Challenges, and Implication. Washington, DC: Migration Policy Institute.

http://www.migrationpolicy.org/pubs/lmi_recessionJan09.pdf.

Papademetriou, Demetrios G. and Stephen Yale-Loehr. 1996. *Balancing Interests: Rethinking the US Selection of Skilled Immigrants*. Washington, DC: Carnegie Endowment for International Peace.

Parsad, Basmat, Sheila Heaviside, Catrina Williams, and Elizabeth Farris. 2000. *Participation of Migrant Students in Title I Migrant Education Programs (MEP) Summer-Term Projects, 1998*.

National Center for Education Statistics, Statistics Analysis Report NCES-2000-023. http://nces.ed.gov/pubs2000/2000061.pdf.

Ruggles, Steven, Matthew Sobek, Trent Alexander, Catherine A. Fitch, Ronald Goeken, Patricia Kelly Hall, Miriam King, and Chad Ronnander. 2008. *Integrated Public Use Microdata Series: Version 4.0* [Machine-readable database]. Minneapolis, MN: Minnesota Population Center [producer and distributor].

Secretaría de Relaciones Exteriores, Instituto de los Mexicanos en el Exterior, and Secretaría de Educación Pública. 2007. Programa Binacional de Educación Migrante México-Estados Unidos: Evaluación 2007. Presentation provided by the Instituto de los Mexicanos en el Exterior, September.

Stark Rentner, Diane, Caitlin Scott, Nancy Kober, Naomi Chudowsky, Victor Chudowsky, Scott Joftus, and Dalia Zabala. 2006. Report on the No Child Left Behind Act, Year 4. Washington, DC: Center on Education Policy. http://www.cep-dc.org/index.cfm?fuseaction=Page.viewPage&pageId=495&parentID=481.

US Citizenship and Immigration Services. Various years. *Characteristics of Specialty Occupation Workers (H-1B): Fiscal Year 2005*. Report Mandated by Public Law 105-277, Division C, American Competitiveness and Workforce Improvement Act of 1998.

US Department of Education. Various years. *Consolidated State Performance Report.* Washington, DC: US Department of Education.

US Department of Education, Office of Innovation and Improvement. 2004. *Alternative Routes to Teacher Certification*. Washington, DC: US Department of Education. http://www.ed.gov/admins/tchrqual/recruit/altroutes/index.html.

US Department of Education, Office of Migrant Education. 2007. *Binational Migrant Education Program Annual Report 2006-07*. Annual report, US Department of Education Office of Migrant Education.

US Department of Education, Office of Postsecondary Education, Policy, and Budget Development Staff. Various years. *Teacher Shortage Areas Nationwide Listing 1990-91 through 2009-10*. Washington, DC: US Department of Education. http://www.ed.gov/about/offices/list/ope/pol/tsa.html.

Vallejo, Carlos and Ana G. García. 2001. Teacher Recruitment and Employment Practices in Selected States: Promising Prospects for Foreign-Trained Teachers. San Antonio, Texas and Tempe, Arizona: Intercultural Development Research Association and the Arizona State University Center for Bilingual Education and Research.

Veneri, Carolyn M. 1999. "Can occupational labor shortages be identified using available data?" *Monthly Labor Review*, vol. 122, No. 3.

Waller Meyers, Deborah. 2006. Temporary Worker Programs: A Patchwork Policy Response. *Independent Task Force on Immigration and America's Future, Insight No. 12*. http://www.migrationpolicy.org/ITFIAF/TFI 12 Meyers.pdf.

World Bank. 2008. The Growth Report: Strategies for Sustained Growth and Inclusive Development. Washington, DC: The World Bank.

Xu, Zeyu, Jane Hannaway, and Colin Taylor. 2008. *Making a Difference? The Effects of Teach for America in High School.* Washington, DC: Urban Institute. http://www.urban.org/publications/411642.html.

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