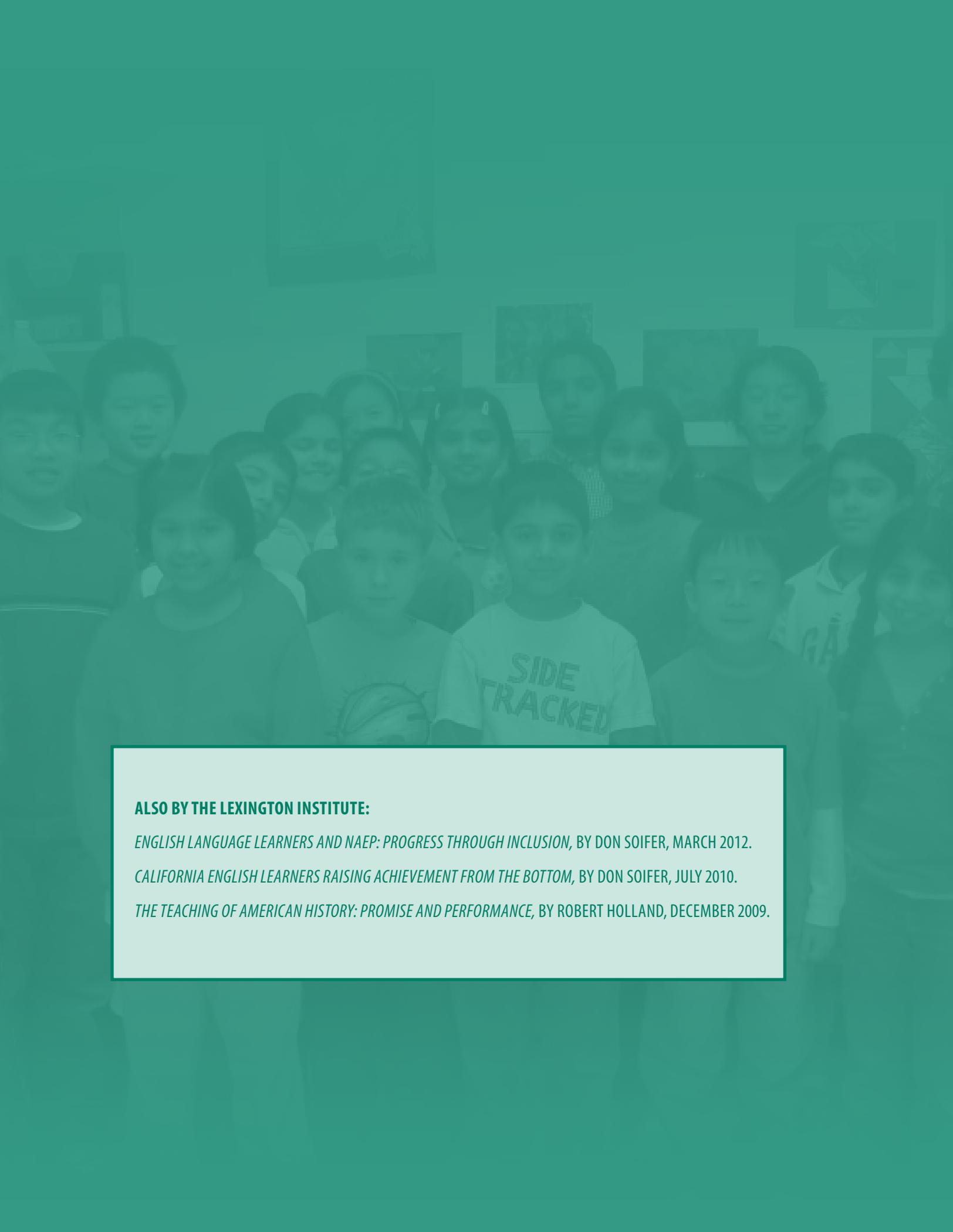


THE VALUE OF ENGLISH PROFICIENCY TO THE UNITED STATES ECONOMY

By Amber Schwartz and Don Soifer | December 2012



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EXECUTIVE SUMMARY

What is the cost to the United States economy attributable to lack of basic English skills? The nation's English learner population continues to grow dramatically. According to the 2010 Census, there are currently just over 25 million English learners living in the United States, including more than 5.3 million learners currently attending elementary and secondary schools.

To be certain, English learners are a population accustomed to confronting challenges. Dropout rates are just one of the many important educational indicators where their struggles far surpass other population groups. The economic obstacles are formidable as well: nearly 6 out of 10 English learners qualify for federal Free or Reduced Lunch programs.¹

This study specifically examines wage penalties facing the 16.5 million Spanish-speaking English learners, who research indicates are hit hardest due to poor English skills. Using wage penalty projections, data from the 2010 American Community Survey, and estimates of high school dropouts attributable to inadequate English skills, it is concluded that \$37.7 billion in annual earnings are missed by Spanish speaking English learners each year. This means that adult, Spanish-speaking English learners lost approximately \$3,000 per year in earnings, on average, as a direct result of inadequate English skills.

BACKGROUND

Rapid growth in the number of English language learners (ELLs) in the United States has continued over the past decade. This changing population dynamic has produced major impacts on schools, not just in border states or those which have historically been home to large numbers of immigrants, but across the country and in communities where schools have little experience with English learners.



There were 16.5 million limited English proficient Hispanics living in the United States in 2010, according to the Census Bureau's 2010 American Community Survey. Of this number, 3.8 million were in elementary and secondary schools.

In fact, the total number of English learners of all language backgrounds enrolled in public schools grew from 3.5 million in the 1998-1999 school year to over 5.3 million students in the 2008-2009 school year.² The Hispanic student population as of 2009 was 3.8 million students, or 73 percent of all English learners, and accounted for the largest share of English learners enrolled in schools.³

In considering education strategies for these students, it is essential to recognize that not all English learners are immigrants. In fact, only one in four English learners in public schools is foreign born. Nearly 60 percent were born into this country to immigrant parents, and nearly 20 percent are actually third-generation Americans. The challenges facing schools as they strive to serve this population are significant, and range from typically lower levels of parental involvement to higher mobility rates and less stable home situations.⁴

The success these 3.8 million Spanish-speaking students have learning English will have direct consequences on not only their future economic and educational success, but on the economic prospects for regions where their growth has been most prominent. The challenges of educating these children are enormous, since currently these students trail the rest of the population both educationally and economically. Statistics show that many Hispanic English learners drop out of high school before ever mastering English, thus hindering their chances of achieving economic goals later in life.

ENGLISH LANGUAGE LEARNER POPULATION TRENDS

Such population shifts have hardly been limited to schools. In fact, more than half of the growth in the total population of the United States between 2000 and 2010 was due to the increase in the Hispanic population. ELLs accounted for 25 million of the United States population over the age of five and Spanish speakers accounted for 66 percent of this number. Although most of these (68 percent) have continued to settle in the historic immigration-destination states such as California, Texas, New York, New Jersey, Florida and Illinois, a growing number settled in nontraditional states such as Massachusetts, Rhode Island, and Connecticut (see Figure 1). These new influxes of non-English residents in non-traditional states pose important challenges and implications for government agencies, businesses, schools, and communities.

THE U.S. HISPANIC POPULATION

It is also important to note that while the terms “Latino” and “Hispanic” are used broadly as cultural symbols of identity, in reality strong differences exist, linguistically and culturally, between Spanish speakers of different national origins.

In linguistic terms, these differences include language use according to context, individual and content, language varieties, ethnic terminology, and even new dialects and ways of speaking that occur with speakers of the same national origin living in different parts of the United States.⁵

This is particularly true among the three largest subgroups by national origin in the United States: Mexican Americans, Puerto Ricans and Cuban Americans.⁶ Members of these groups share less in common than the reliance on one term, Hispanics, implies in describing them. The very term “Spanish” as it is used in the United States refers more to a diverse family of languages than to

Figure 1
States With Large English Learner Populations, 2010

| State | ELL Population Percent Share |
|---------------|------------------------------|
| California | 19.8% |
| Texas | 14.4% |
| New York | 13.5% |
| New Jersey | 12.5% |
| Nevada | 12.3% |
| Florida | 11.9% |
| Hawaii | 11.8% |
| Arizona | 9.9% |
| Illinois | 9.6% |
| Rhode Island | 9.2% |
| New Mexico | 9.2% |
| Massachusetts | 8.8% |
| Connecticut | 8.7% |

Source: 2010 American Community Survey, Table B16001, “Language Spoken at Home by Ability to Speak English for the Population 5 Years and Over”

Since 1997, the number of English learner students in public schools has increased by 51 percent.

one language. Culturally, and educationally, each of these nationalities conveys on its U.S. populations substantial differences, which prove challenges to schools serving diverse populations of Spanish speakers.

The census reported that the Hispanic population of the United States grew by 43 percent between 2000 and 2010.⁷ Viewed from a different perspective, in one out of every four U.S. counties, the Hispanic population more than doubled in size between 2000 and 2010.⁸

But it would be a serious mistake to consider the U.S. Hispanic population as homogeneous. Certainly, Hispanics of Mexican origin comprise the largest Hispanic subgroup, totaling 31.8 million in 2010, or 63 percent of U.S. Hispanics. This represents a 54 percent increase since 2000. Hispanics of Puerto Rican descent ranked second in terms of size, comprising 9 percent. Cuban-Americans were third, making up approximately 4 percent. Hispanics whose origins were from El Salvador, the Dominican Republic and Guatemala made up the remaining subgroups whose U.S. populations numbered at least one million people.⁹

LINGUISTIC ISOLATION IN THE UNITED STATES

Even more than with individual English learners, the challenges for those in households defined as linguistically isolated are particularly acute in economic and educational terms. The Census Bureau defines a linguistically isolated household as one in which all members 14 years of age and older have at least some difficulty with English.

There was an increase of one million linguistically isolated households between 2000 and 2010 in the United States, with 14.2 million individuals living in 5.3 million households.¹⁰ As of 2010, linguistically isolated households accounted for 4.6 percent of the total United States population. This was a substantial increase from 2000, when the census reported there were 11.9 individuals in 4.4 million linguistically isolated households.

A handful of states represent the largest majority of the linguistically isolated population, with California topping the list with linguistic isolated households at 10 percent (see Figure 2). Not surprisingly, linguistic isolation tends to be concentrated in metropolitan areas given the higher number of jobs available in these areas.

Living in linguistically isolated areas has been strongly linked to lower earnings for non-English speakers. Those who live in enclaves that are linguistically isolated

frequently have less information about career opportunities in the mainstream economy, which generally offer higher wages. Simply stated, where linguistic isolation of speakers of a non-English language is the highest, earnings are lower.¹¹

EDUCATION AND ENGLISH LANGUAGE LEARNERS

Since the 1997-1998 school year, the number of English language learner students enrolled in public schools has increased by 51 percent.¹² They now account for approximately 5.3 million of the elementary and secondary school populations (see Figure 3). The staggering rate of growth of this group of students poses unique challenges for educators, especially in developing curriculum to match their specific needs.

On the 2011 National Assessment of Educational Progress (NAEP), the test known as the Nation’s Report Card, 71 percent of 8th grade English learners scored at “below basic” in reading, the test’s lowest level of achievement. Conversely, English-speaking peers scored “below basic” in reading 23 percent of the time. This gap has remained relatively unscathed since 2003. This staggering disparity deserves urgent attention from educators.

English proficiency is important not only for the present and future wages of English learners and their families, but for

Figure 2

Linguistic Isolation in the United States

| State | 2010 Linguistically Isolated Households | Percentage of Linguistically Isolated Households |
|----------------------|---|--|
| California | 1,244,910 | 10.05% |
| New York | 590,361 | 8.19% |
| Texas | 697,844 | 8.17% |
| Illinois | 344,845 | 7.23% |
| New Jersey | 227,953 | 7.18% |
| Florida | 488,027 | 6.82% |
| Nevada | 63,383 | 6.47% |
| New Mexico | 42,590 | 5.63% |
| Arizona | 119,355 | 5.13% |
| Georgia | 107,332 | 3.09% |
| Alaska | 6,680 | 2.69% |
| Arkansas | 18,374 | 1.64% |
| Tennessee | 38,475 | 1.57% |
| South Carolina | 27,104 | 1.56% |
| Louisiana | 29,573 | 1.80% |
| United States | 5,270,680 | 4.61% |

Source: Household Language by Linguistic Isolation - 2010 American Community Survey 1 year estimates - B16002

Figure 3

Number and Percentage of ELL Enrollment Students, by State (2007-2008)

| State | Total ELL Enrollment | ELL Percent of National Total |
|----------------------|----------------------|-------------------------------|
| California | 1,526,036 | 28.70% |
| Texas | 701,799 | 13.20% |
| Florida | 234,934 | 4.40% |
| New York | 213,000 | 4.00% |
| Illinois | 175,454 | 3.30% |
| Arizona | 166,572 | 3.10% |
| Nevada | 134,377 | 2.50% |
| North Carolina | 106,180 | 2.00% |
| United States | 5,318,164 | 10.70% |

Source: www.nclta.gwu.edu/stats

the prosperity of the entire United States economy as well, and especially for those regions with the largest ELL populations. It has been an unfortunate and challenging reality that many English learners drop out of school before ever becoming proficient in English. According to a 2009 study, 42 percent of adult, Spanish-speaking ELLs failed to graduate from high school, compared to only 11 percent of non-Spanish speaking ELLs.¹³ In fact, Hispanics have the highest rate of dropout of any major population group in the United States.

ENGLISH PROFICIENCY AND EARNING POWER

Little research has been done on the effects of English proficiency with regard to compensation for non-immigrant workers, largely because of the shortage of data available. According to a 2009 report on the literacy skills of adult immigrants and adult English language learners, the employment rates for immigrants are not significantly different than those for native-born adults but immigrants are generally poorer than U.S.-born adults. The extent to which they are poorer is directly related to their ethnicity. Thirty-nine percent of non-Spanish speakers had incomes below the poverty line, whereas 61 percent of immigrant Spanish speakers were below the poverty line.¹⁴ These statistics illustrate the importance of creating educational opportunities designed specifically for Spanish speakers to help provide more long-term employment.

Of the 6.3 million Spanish speaking English learner workers, most were likely to be employed in service occupations (37 percent) or production, craft and repair occupations (34 percent) followed by operators, fabricators, laborers (10 percent), sales, technical and office (9 percent), farming, fishing and forestry (8 percent) and lastly managerial and professional (2 percent).

DETERMINING LOST WAGES DUE TO INADEQUATE ENGLISH SKILLS

So given the linkages between language skills and economic status, to what extent can financial status be attributed specifically to English skills?

Libertad Gonzalez, an economist at Universitat Pompeu Fabra in Barcelona, who has also done work in the United States on the faculty at Columbia University, examined the relationship between earnings and English proficiency for Hispanic workers in the United States in a 2005 paper. “On average, LEP [*limited English proficiency*] imposes an overall wage penalty that lies between 3.8 and 38.6 percent, and reduces the probability of finding a job by 0 to 6.5 percentage points,” she found.¹⁵



Using Gonzalez’s wage penalty projections, data from the 2010 American Community Survey, and estimates of high school dropouts attributable to inadequate English skills, it is concluded that \$37.7 billion in annual earnings are missed by Spanish speaking English learners each year.

The 2010 American Community Survey included data for nearly 6.3 million Hispanic working individuals, 16 years and older, who knew English “not well” or “not at all.”¹⁶ Gonzalez’s estimated wage penalties were applied to these groups, with those who knew English “not at all” receiving a larger wage penalty than those in the “not well” category. A calculation that takes account of these individuals’ occupations yields the result that every year these Hispanic working adults lose \$31.1 billion as a result of limited English proficiency (see Figure 4).

Since the detailed findings of the American Community Survey accounted for only 6.3 million of the 16.5 million limited English proficient Hispanics in the workforce,

Only one in four English learners in public schools is foreign born.

a conservative approach was taken to determine the wage penalty for the remaining population. The survey included those who were over 16 years of age, and defined employment as having held a job at some point in the last five years, whether part-time or full-time. After subtracting the Spanish-

Figure 4

Wage Penalties Across Occupations, Spanish-speaking English Learners Categorized as “Not well” and “Not at all” (in thousands of dollars)

| Occupation Group | Median Income | Wage Penalty “Not well” | # LEP Employed “Not Well” | Missed Earnings “Not Well” | Wage Penalty “Not at all” | #LEP Employed “Not at all” | Missed Earnings “Not at all” | Total Missed Earnings |
|----------------------------------|---------------|-------------------------|---------------------------|----------------------------|---------------------------|----------------------------|------------------------------|-----------------------|
| Managerial and professional | \$55,877 | 0.293 | 90,073 | \$1,457,174 | 0.449 | 53,857 | \$1,351,807 | \$2,826,982 |
| Service Occupations | \$17,178 | 0.102 | 1,577,082 | \$2,765,928 | 0.167 | 731,482 | \$2,099,621 | \$4,865,550 |
| Sales, technical and office | \$32,582 | 0.148 | 434,522 | \$2,096,712 | 0.215 | 141,135 | \$989,115 | \$3,085,828 |
| Production, craft and repair | \$28,817 | 0.231 | 1,488,544 | \$9,904,507 | 0.362 | 651,103 | \$6,795,875 | \$16,700,382 |
| Farming, fishing and forestry | \$16,032 | -0.002 | 221,250 | -\$6,739 | 0.131 | 252,707 | \$530,723 | \$523,984 |
| Operators, fabricators, laborers | \$24,656 | 0.137 | 452,158 | \$1,522,845 | 0.307 | 205,445 | \$1,557,092 | \$3,079,937 |
| Total | | | 4,263,629 | | | 2,035,729 | TOTAL MISSED EARNINGS | \$31,082,663 |

Source: Gonzalez, 2005; American Community Survey 2010

speaking English learner student population (since it is assumed they are not yet in the workforce), 6.5 million Spanish-speaking adult English learners remained that were not accounted for in the survey.

Of these 6.5 million adults, 2.7 million (42 percent) did not complete high school. It is assumed that 1.6 million (60 percent) of this group did not complete high school because of limited English skills. Last, Hispanics over the age of 65 accounted for 18 percent of the Hispanic population. Thirteen percent was subtracted from the total to account for those who were retired. This left an additional 1.4 million Hispanics who were in the workforce and were non-high school graduates.

An Hispanic without a high school diploma earns an average of \$24,357 per year and an Hispanic high-school graduate earns an average of \$29,100 per year.¹⁷ That is an additional \$4,743 per year for having a high school diploma. The total missed earnings per year for Hispanics who did not finish high school is \$6.6 billion.

Interestingly, the disparity of income for a Hispanic person without a high school diploma compared to a Hispanic high-school graduate is lower compared to other

ethnicities. While Hispanic high-school graduates earn \$4,743 more per year over their lifetimes, African-American high-school graduates earn \$5,313 more, and Caucasian graduates earn an additional \$6,034 per year.

ENGLISH PROFICIENCY AND HIGH SCHOOL GRADUATION

The attainment of a higher level of education is widely linked by researchers to better jobs and higher earnings. Unfortunately, 42 percent of Spanish-speaking ELLs do not complete high school and only 9 percent have at least a college degree (see Figure 5). English language proficiency is a significant predictor of dropping out among Hispanics, especially if English proficiency is very low (10th percentile). It is a larger factor if the student is in the second generation in his/her family in this country (17 percent chance of causing dropout), and highest if he/she is in the third generation or higher (30 percent chance).¹⁸ Nearly half of first generation students speak English with difficulty, compared with 20 percent of second-generation students and 5 percent of the third and higher generations.¹⁹



High-school dropout rates for Hispanics are extremely high compared to any other ethnic group. A 2008 report by Russell Rumberger and Sun Ah Lim from the University of California, Santa Barbara analyzes the reasons why English learners drop out.²⁰ One possible reason can be attributed to immigration status, which is an important determinant of English literacy. Foreign-born students have a higher dropout rate than native-born students. Of Hispanic immigrants, second-generation students

tend to have better English skills than their immigrant counterparts. Along with better English skills, they often have more positivity and motivation than third-generation students. A student's outside social influences, including family, school, and community, can positively or adversely affect his/her educational attainment as well.

Adult, Spanish-speaking English learners lost approximately \$3,000 per year in earnings as a direct result of poor English skills.

Figure 5**Educational Attainment by Spanish-Speaking Status**

| Educational attainment | Spanish Speaking ELLs | Non-Spanish Speaking ELLs |
|----------------------------------|-----------------------|---------------------------|
| Still in high school | 6 | 2 |
| Less than/some high school | 42 | 11 |
| GED/high school graduate | 24 | 25 |
| Vocational/trade/business school | 5 | 6 |
| Some college | 7 | 9 |
| Associate's/2 year degree | 7 | 13 |
| College degree or above | 9 | 33 |

Source: Wiley InterScience. *Assessing the Literacy Skills of Adult Immigrants and Adult English Language Learners*.

CONCLUSION AND POLICY IMPLICATIONS

Hispanics in the United States lose an estimated \$37.7 billion in earnings each year as a result of inadequate English skills. It is extremely likely that this estimate underscores actual figures, due to the conservative assumptions described in this paper.

It is also important to note that only Spanish-speaking English learners are considered in this figure. Census data indicates 73 percent of U.S. English learners are Spanish speakers, with Chinese (combined), Vietnamese and French/Haitian Creole accounting for the only other languages whose speakers comprise more than 2 percent of the total.²¹ So while surely some wage penalty can be assigned to non-English speakers of languages other than Spanish, a variety of factors suggest there is insufficient basis to apply comparable wage penalties across different language groups.

English language proficiency among parents is an important economic asset that is associated with increased workforce participation, significantly higher earnings, and economic mobility, and thus contributes to the amount of family resources available to invest in children.

These projections mean, on average, working-age Spanish-speaking English learners lose just under \$3,000 per year in earnings as a direct result of their poor English skills. Other factors, notably relative educational attainment, carry their own wage penalties.

While few, if any, would dispute that stronger English skills place anyone living in the U.S. in an advantageous position for employment and earnings, this pricetag indicates just how much of an advantage.

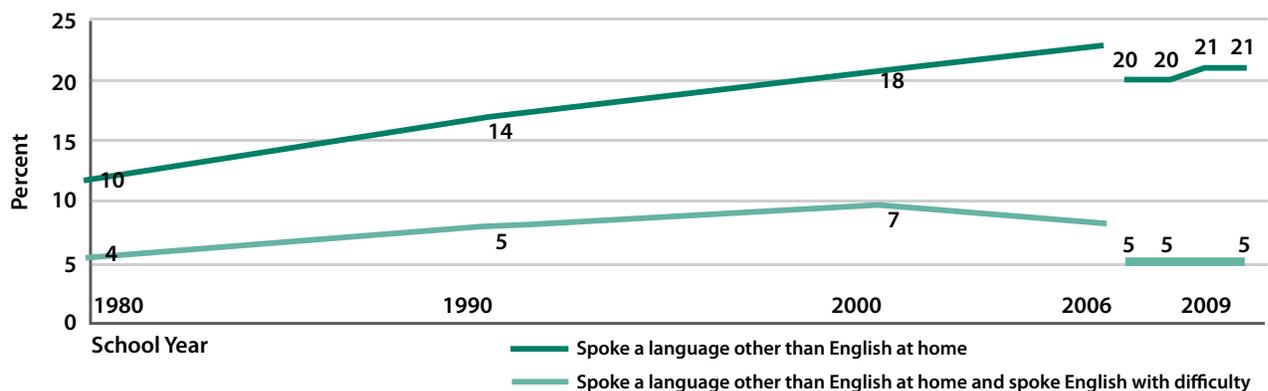
Because most English learners are not immigrants, but in fact represent the second or third generations in their family to live in the United States, it is essential that education strategies focus on breaking these cycles of linguistic isolation.

For example, while dozens of federal funding streams (in addition to state and local programs) provide resources for teaching English to adults who lack English skills, measures for evaluating the effectiveness of these programs are scarce. A 2009 report by the federal Government Accountability Office noted that of the 25 federal programs that provide funding for such functions, only two collected any data to indicate their effectiveness. Employer-based programs, in addition to faith-based and community-based nonprofit organizations, represent useful strategies with the ability to reach English learners. Identifying which of these are the most effective and targeting support to increase their reach should be essential strategies to leverage their effectiveness.

Meanwhile, elementary and secondary education programs have made important gains refocusing programs for English learners with meaningful accountability. But progress nationally in reducing language gaps and improving English proficiency

Figure 6

Percentage of children ages 5-17 who spoke a language other than English at home and percentage who spoke a language other than English at home and spoke English with difficulty: Selected years, 1980-2009



Source: U.S. Department of Commerce, Census Bureau, Long Form Decennial Census, 1980, 1990, and 2000, and American Community Survey (ACS), 2006-2009

skills, while improving, continues to vary widely and demonstrate the least growth in the high-poverty communities where strong English skills can be most important. Shortages of high-quality teachers with strong oral and written English and Spanish language skills continue to be reported in many of these same communities, especially in states including Arizona and Illinois where their work is particularly important. While current national trajectories are encouraging, progress must continue to improve at an accelerated pace.



ENDNOTES

- 1 *Educating English Language Learner: Building Teacher Capacity Roundtable Report*, National Clearinghouse for English Language Acquisition, 2008, p. 7, available at <http://www.ncele.gwu.edu/files/uploads/3/EducatingELLsBuildingTeacherCapacityVol1.pdf>.
- 2 *The Growing Numbers of English Learner Students*, National Clearinghouse for English Language Acquisition, 2011, available at http://www.ncele.gwu.edu/files/uploads/9/growingLEP_0809.pdf.
- 3 *The Condition of Education*, U.S. Department of Education and IES National Center for Education Statistics, NCES 2011-033, May 2011. pp. 30-31.
- 4 Porter, Rosalie Pedalino and Kevin Clark, *Language and Literacy for English Learners: Grades 7-12*. Sopris West Educational Services, 2004, pages 6-9.
- 5 Arrieta, Olivia, "Language Use and Culture Among Hispanics in the United States," *Handbook of Hispanic Cultures in the United States*, Arte Publico Press, 1994.
- 6 Ennis, Sharon, Merarys Rios-Vargas and Nora Albert, *The Hispanic Population: 2010*, United States Census Bureau, May 2011, available at <http://www.census.gov/prod/cen2010/briefs/c2010br-04.pdf>
- 7 "2010 Census Shows Nation's Hispanic Population Grew Four Times Faster Than Total U.S. Population," U.S. Census Bureau News, May 26, 2011.
- 8 Ennis, p. 13.
- 9 *Ibid.*
- 10 "Household Language by Linguistic Isolation," American Community Survey 2009, U.S. Census Bureau Chart B16002.
- 11 Chiswick, B.R. and P.W. Miller, P.W. (2002). "Immigrant Earnings: Language Skills, Linguistic Concentrations, and the Business Cycle," *Journal of Population Economics*, 2002.
- 12 *The Growing Numbers of English Learner Students*.
- 13 Wrigley, Heide Spruck, Jing Chen, Sheida White, and Jaleh Soroui, *Assessing the Literacy Skills of Adult Immigrants and Adult English Language Learners*, John Wiley & Sons, Inc. 2009, p. 13.
- 14 *Ibid.*
- 15 Gonzalez, L., "Nonparametric Bounds on the Returns of Language Skills," *Journal of Applied Econometrics*, 2005, pp. 771-795.

- 16 United States Census Bureau. DataFerrett, *U.S. Employment – Specific Jobs – English Proficiency – Hispanics*. (accessed 2012 April).
 - 17 *Education and Synthetic Work-Life Earnings Estimates* United States Census Bureau. American Community Survey Reports, September 2011, p. 6.
 - 18 Fry, Richard and Felisa Gonzales, *One-in-Five and Growing Fast: A Profile of Hispanic Public School Students*, Pew Hispanic Center, August 26, 2008.
 - 19 Perreira K. M., K.M. Harris and D. Lee, *Making it in America: High School Completion by Immigrant and Native Youth*. Published by Springer on behalf of the Population Association of America, 2006, p. 532
 - 20 Rumberger, Russell and Sun Ah Lim, *Why Students Drop out of School: A Review of 25 Years of Research*, University of California, Santa Barbara, California Dropout Research Project Report #15, October 2008, p. 40.
 - 21 “Top Languages Spoken by English Language Learners Nationally and by State,” Migration Policy Institute, ELL Information Center Fact Sheet No 3, 2010.
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Amber Schwartz is Adunct Fellow and **Don Soifer** is Executive Vice President of the Lexington Institute.



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1600 Wilson Boulevard, #900
Arlington, VA 22209

Telephone: 703-522-5828
Fax: 703-522-5837

Web: www.lexingtoninstitute.org
mail@lexingtoninstitute.org