

# Language Minorities and Their Educational and Labor Market Indicators—Recent Trends







U.S. Department of Education  
Institute of Education Sciences  
NCES 2004-009

# Language Minorities and Their Educational and Labor Market Indicators—Recent Trends

## Statistical Analysis Report

June 2004

Steven Klein  
Rosio Bugarin  
Renee Beltranena  
**MPR Associates, Inc.**

Edith McArthur  
**National Center for  
Education Statistics**

**U.S. Department of Education**

Rod Paige  
Secretary

**Institute of Education Sciences**

Grover J. Whitehurst  
Director

**National Center for Education Statistics**

Robert Lerner  
Commissioner

The National Center for Education Statistics (NCES) is the primary federal entity for collecting, analyzing, and reporting data related to education in the United States and other nations. It fulfills a congressional mandate to collect, collate, analyze, and report full and complete statistics on the condition of education in the United States; conduct and publish reports and specialized analyses of the meaning and significance of such statistics; assist state and local education agencies in improving their statistical systems; and review and report on education activities in foreign countries.

NCES activities are designed to address high priority education data needs; provide consistent, reliable, complete, and accurate indicators of education status and trends; and report timely, useful, and high quality data to the U.S. Department of Education, the Congress, the states, other education policymakers, practitioners, data users, and the general public.

We strive to make our products available in a variety of formats and in language that is appropriate to a variety of audiences. You, as our customer, are the best judge of our success in communicating information effectively. If you have any comments or suggestions about this or any other NCES product or report, we would like to hear from you. Please direct your comments to:

National Center for Education Statistics  
Institute of Education Sciences  
U.S. Department of Education  
1990 K Street NW  
Washington, DC 20006-5651

June 2004

The NCES World Wide Web Home Page is: <http://nces.ed.gov>

The NCES World Wide Web Electronic Catalog is: <http://nces.ed.gov/pubsearch>

**Suggested Citation**

U.S. Department of Education, National Center for Education Statistics. *Language Minorities and Their Educational and Labor Market Indicators—Recent Trends*, NCES 2004-009, by Steven Klein, Rosio Bugarin, Renee Beltranena, and Edith McArthur. Washington, DC: 2004.

**For ordering information on this report, write:**

U.S. Department of Education  
ED Pubs  
P.O. Box 1398  
Jessup, MD 20794-1398

call toll free 1-877-4ED-Pubs; or order online at [www.edpubs.org](http://www.edpubs.org)

**Content Contact:**

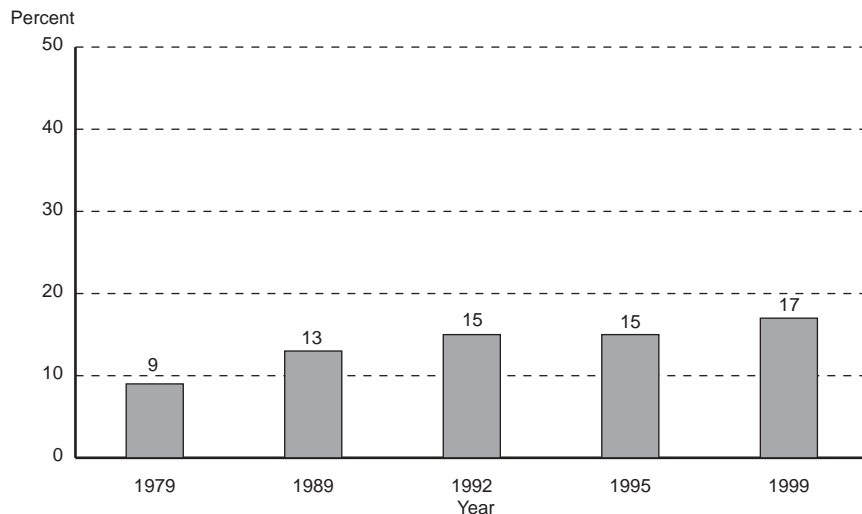
Edith McArthur  
(202) 502-7393  
Edith.McArthur@ed.gov

## Executive Summary

---

The number and percentage of language minority youth and young adults—that is, individuals who speak a language other than English at home—increased steadily in the United States between 1979 and 1999. Of those individuals ages 5–24 in 1979, 6 million spoke a language other than English at home. By 1999, that number had more than doubled, to 14 million. Accordingly, of all 5- to 24-year-olds in the United States, the percentage who were language minorities increased from 9 percent in 1979 to 17 percent in 1999 (figure A).

Figure A. Percentage of 5- to 24-year-olds who spoke a language other than English at home: Selected years: 1979–99



SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), November 1979, November 1989, October 1992, October 1995, and October 1999.

This report documents the growth between 1979 and 1999 in the number and percentage of youth and young adults in the United States who speak languages other than English at home. The report describes these individuals in terms of the languages they speak and their English-speaking ability. This information is based on household responses to the monthly Current Population Survey and supplemental questions asked in 1979, 1989, 1992, 1995, and 1999. The language data used in this report are based on individuals' responses to a series of questions on language ability included in the monthly survey. Household respondents were asked whether each qualifying household member spoke a language other than English at home. If so, respondents were asked to indicate which language that person spoke at home and how well that person spoke English ("very well," "well," "not well," or "not at all").

The report compares language minority youth and young adults with those who speak only English at home according to several education indicators: elementary/secondary school enrollment, grade retention, high school completion, postsecondary enrollment, and highest educational level attained. In addition to these education indicators, language minority youth and young adults also are compared with

youth and young adults who speak only English at home in terms of three economic indicators: family income, employment status, and type of occupation. Finally, because language minorities' English-speaking ability (speaking English "very well" as opposed to speaking with difficulty, i.e., less than "very well") and the languages spoken at home may be associated with education and economic indicators, this report makes comparisons both within individual language minority groups and between these groups and those who spoke only English at home.

The results of the study offer mixed findings for language minorities. In general, language minority youth and young adults lagged behind their counterparts who spoke only English at home on most education and economic indicators. However, among those who finished high school, no differences were found by English-speaking ability in the percentage that enrolled in postsecondary education. Among language minority groups, those speaking Spanish fared less well than those speaking other languages.

### **Language Minorities' Characteristics**

In 1999, the majority (63 percent) of all language minorities (aged 5–24) were native-born—that is, they were born in the United States or its outlying areas. Language minorities were more likely to be Hispanic (65 percent) than to be members of any other racial/ethnic group. Within racial/ethnic groups, 74 percent of Hispanics and 60 percent of Asians/Pacific Islanders spoke languages other than English at home. Among all 5- to 17-year-olds (described here as "youth"), those living in the western United States were more likely than those living in other regions to speak a language other than English at home (29 percent vs. 18 percent in the Northeast, 14 percent in the South, and 8 percent in the Midwest).

No significant changes in English language ability among language minorities were detected between 1979 and 1999. Overall in 1999, 33 percent of language minorities spoke English with difficulty, compared with 34 percent in 1979. However, over this time, English-speaking ability did change among speakers of some language groups. Between 1979 and 1999, no significant differences in the proportion reporting being able to speak English "very well" were detected for Spanish-speaking language minorities, but this proportion has changed for all other language minority groups.<sup>1</sup> In particular, for those who spoke Asian languages at home there was a decrease in persons who reported speaking English "very well." Among speakers of European languages other than Spanish, the proportion who reported speaking English "very well" increased.

Additional differences in English-speaking ability were found by nativity. Fifty-one percent of foreign-born language minorities spoke English with difficulty, whereas 22 percent of their native-born counterparts did so. Among foreign-born language minorities, those who had lived in the United States longer were less likely to experience difficulty with English. Similarly, among native-born language minorities, those whose parents had entered the United States before 1970 or whose parents were born in the United States were less likely than those whose parents had entered the United States after 1970 to speak English with difficulty (15 percent vs. 34 percent).

---

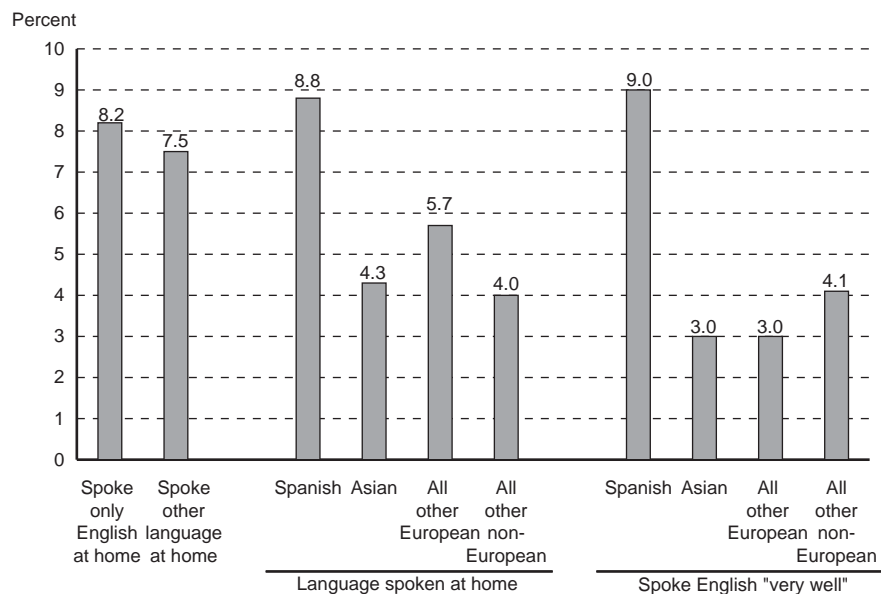
<sup>1</sup>For purposes of this report, other than Spanish, languages are grouped into three geographically based groupings: Asian languages (for example, Chinese, Japanese, Vietnamese), other European languages (for example, French, German, Polish), and all other languages (for example, Arabic and American Indian languages).

## Education Indicators

### *Elementary and Secondary Enrollment*

Language minorities enroll and are retained in elementary/secondary school at rates that are not measurably different from those of their counterparts who speak only English at home. However, there were differences among language minority groups. Youth who spoke Spanish at home were more likely than youth who spoke Asian or other languages to have repeated a grade (figure B). Among language minority youth who spoke English very well, Spanish speakers were more likely to have repeated a grade than other language minorities.

Figure B. Percentage of 5- to 17-year-olds enrolled in school who had ever repeated a grade, by language characteristics: 1999



SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

### *High School Completion*

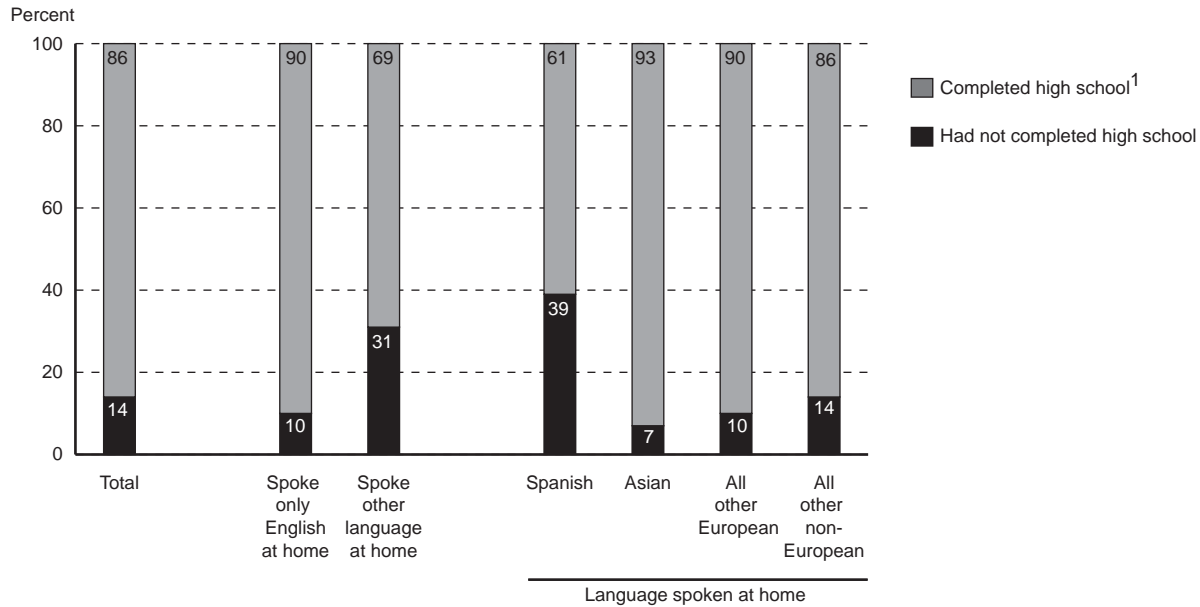
Compared with their counterparts who spoke only English at home, language minority 18- to 24-year-olds (described here as "young adults"), were less likely to have completed high school (10 percent vs. 31 percent). However, speaking English very well was associated with a higher likelihood of high school completion among the language minority group. Language minority young adults who spoke English very well were more likely than those who spoke English with difficulty to have completed high school (51 percent vs. 18 percent).

Among language minority groups, Spanish-speaking young adults were less likely than members of any other group to have completed high school. Among language minorities who spoke English very well, Spanish speakers graduated at lower rates than did speakers of other languages (figure C).

### *Postsecondary Enrollment*

Overall, language minority 18- to 24-year-olds were less likely than their peers who spoke only English at home to be enrolled in a postsecondary institution in 1999 (28 percent vs. 37 percent). However,

Figure C. Percentage distribution of 18- to 24-year olds who were not enrolled according to their high school completion status, by language characteristics: 1999



<sup>1</sup>High School completers include those who completed high school by means of an equivalency test such as a General Education Development (GED) credential.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

there were no detectable differences in enrollment between language minority young adults who spoke English very well and those who spoke only English at home (38 percent and 37 percent, respectively).

Among language minority groups, Spanish-speaking young adults were less likely than all other groups to be enrolled in a postsecondary institution. However, enrollment rates for Spanish speakers were associated with their English-speaking ability. For example, 31 percent of Spanish-speaking young adults who spoke English very well were enrolled in a postsecondary institution, compared with 6 percent of their counterparts who spoke English with difficulty.

Among high school completers, disparities in postsecondary enrollment between language minority young adults and persons who spoke only English at home diminish. Approximately 43 percent of language minority young adults and 44 percent of persons who spoke only English at home reported being enrolled in a postsecondary institution. Furthermore, among language minorities, those who spoke English very well were substantially more likely than those who spoke English with difficulty to be enrolled (49 percent vs. 29 percent).

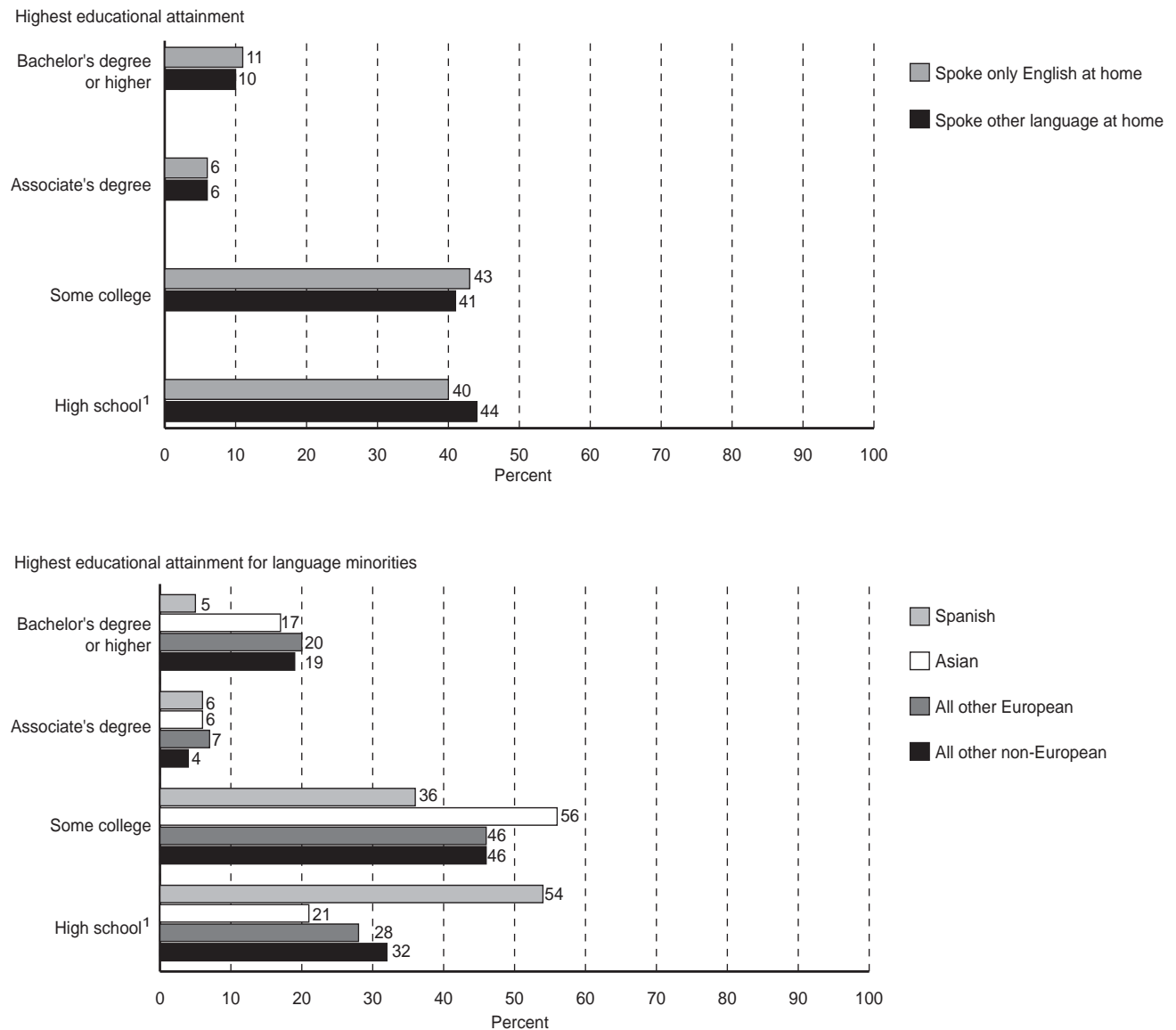
### ***Educational Attainment***

Among those 18- to 24-year-olds who completed high school and enrolled in postsecondary education, there were no detectable differences in educational attainment by whether a person spoke a language other than English at home. For example, 11 percent of those who spoke only English and 10 percent of language minorities received a bachelor’s degree or higher.

However, differences in educational attainment persisted among language minority groups. Young adults who spoke Spanish were less likely than those from all other language minority groups to have attained either some college or a bachelor’s degree or more (figure D).



Figure D. Percentage distribution of 18- to 24-year-olds who completed high school, by highest educational attainment and by language characteristics: 1999



<sup>1</sup>High school completers include those who completed high school by means of an equivalency test such as the GED.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

## Economic Indicators

### Family Income

Of 18- to 24-year-olds who lived with family members, language minorities were more likely than those who spoke only English at home to be in a low-income family. For example, 32 percent of language minority young adults resided in low-income homes in 1999, compared with 18 percent of those who spoke only English at home. In addition, among language minorities speaking English very well was associated with a greater likelihood of living in a high-income family. For instance, 14 percent of language minority young adults who spoke English very well lived in a high-income family, compared with 5 percent of their counterparts who spoke English with difficulty.

Spanish-speaking language minorities were generally less likely than all other language minority groups to live in a high-income family. This difference between Spanish speakers and other language minorities was observed among those who spoke English very well as well as among the other English language ability groups.

### ***Employment and Occupation***

Although there were no detectable differences between 1979 and 1999 in the percent of employed 18- to 24-year-olds (61 percent in 1979 and 60 percent in 1999), the number who were employed doubled (1.4 million and 2.9 million, respectively). Nevertheless, language minority 18- to 24-year-olds were less likely than their peers who spoke only English at home to be employed (60 percent vs. 67 percent). In addition, language minority young adults were more likely than other young adults to find work in such traditionally low-wage occupations as operator/fabricator occupations. These findings were especially true for those who spoke English with difficulty and for those who spoke Spanish at home.

### **Conclusions**

This analysis indicates that language minorities trail behind their English-speaking counterparts in high school completion, enrollment in postsecondary institutions, and educational attainment. However, there were no detectable differences in postsecondary enrollment rates and in educational attainment between language minorities who completed high school and reported speaking English very well and persons who spoke only English.

The data also indicate that language minority young adults are more likely than other young people to live in low-income families and work in traditionally lower paying occupations. Employment rates and income were higher among language minority persons who spoke English very well.

## Acknowledgments

---

The authors wish to thank John Ralph, Program Director of the Data Development Program, and Val Plisko, Associate Commissioner of the Early Childhood, International, and Crosscutting Studies Division, for their constant support and valuable reviews throughout the development of this report. Shelley Burns provided crucial assistance in technical and statistical issues. Mary Frase, formerly of NCES and now at the National Science Foundation, reviewed early drafts of the report. Phil Kaufman of MPR Associates provided technical and statistical expertise in the preparation of the statistical analyses. We greatly appreciate the careful reviews by Marilyn Seastrom, Chief Statistician of NCES, and Bruce Taylor of NCES, who served as adjudicator of the report. The report was reviewed by a panel of internal and external experts and benefited greatly by their input. Members of the panel were Jorge Chapa, Professor and Director of Latino Studies at Indiana University; Chris Chapman of NCES; Rebecca Clark, National Institutes of Health/National Institute of Child and Human Development of the U.S. Department of Health and Human Services; Carolyn S. Lee, Office of Vocational and Adult Education, U.S. Department of Education; and Calvin Veltman, University of Montreal. Thanks also to Carol Rohr of Pinkerton Computer Consultants, Inc. who desktopped the report.



# Contents

---

Executive Summary .....	iii
Acknowledgments .....	ix
List of Tables .....	xiii
List of Figures .....	xvi
Chapter 1: Introduction .....	1
Background .....	1
Language Use and School Success .....	3
Data Sources and Measures .....	4
Language Characteristics .....	5
Demographic and Nativity Characteristics .....	6
Educational Characteristics .....	6
Income and Employment .....	6
Organization of the Report .....	6
Chapter 2: Changes in the Distribution of English Language Use .....	7
Changes in English Language Use and Proficiency .....	7
Nativity and English Language Use .....	13
Chapter 3: School and Labor Market Indicators .....	19
Elementary/Secondary Indicators: 5- to 17-Year-Olds .....	19
High School Completion: 18- to 24-Year-Olds .....	21
Postsecondary Enrollment Status: 18- to 24-Year-Olds .....	24
Income and Employment .....	27
Chapter 4: Summary .....	35
References .....	37
Appendix A: Standard Error Tables .....	39
Appendix B: Glossary .....	55
Demographic Characteristics .....	56
Educational Characteristics .....	56
Family Income Characteristics .....	58
Language Characteristics .....	58
Nativity Characteristics .....	59
Labor Force Characteristics .....	60

Appendix C: Survey Methodology and Data Reliability .....	63
Overview of the CPS Survey .....	63
Response Rates .....	63
Data Reliability .....	64
Accuracy of Estimates .....	64
Methodology and Statistical Procedures .....	65

## List of Tables

---

Table 1.	Among 5- to 24-year-olds in the United States, number and percentage who spoke a language other than English at home, and percentage distribution by race/ethnicity: 1999 .....	10
Table 2.	Number and percentage distribution of 5- to 24-year-olds who spoke a language other than English at home, by language spoken and age group: 1979 and 1999 .....	11
Table 3.	Number and percentage distribution of 5- to 24-year-olds who spoke a language other than English at home, by language spoken and by reported English-speaking ability: 1979 and 1999 .....	12
Table 4.	Number and percentage of 5- to 17-year-olds who spoke a language other than English at home by language characteristics and region: 1999 .....	13
Table 5.	Number and percentage distribution of 5- to 24-year-olds who spoke a language other than English at home, by English-speaking ability and by place of birth and age group: 1999 .....	15
Table 6.	Among 5- to 24-year-olds who spoke a language other than English at home, number and percentage who spoke English with difficulty, by youth's place of birth, parents' year of entry into the United States, and age group: 1999 .....	16
Table 7.	Number and percentage distribution of foreign-born 5- to 24-year-olds who spoke a language other than English at home, by year of entry into the United States and by age group: 1999 .....	16
Table 8.	Number of 5- to 17-year-olds, and number and percentage enrolled in school, by language characteristics: 1999 .....	20
Table 9.	Number of 5- to 17-year-olds who were enrolled in school, and of those, number and percentage who had ever repeated a grade, by language characteristics: 1999 .....	21
Table 10.	Number of 18- to 24-year-olds who were not enrolled in any grades K–12, and of those, percentage distribution according to high school completion status, by language characteristics: 1999 .....	22
Table 11.	Number of 18- to 24-year-olds who were not enrolled in any grades K–12, and of those, percentage distribution according to whether they had ever attended school in the United States, by language spoken at home: 1999 .....	23
Table 12.	Number of 18- to 24-year-olds, and of those, percentage and number enrolled in postsecondary institutions, by language characteristics and age group: 1999 .....	25
Table 13.	Number of 18- to 24-year-olds who had completed high school, and percentage distribution according to postsecondary enrollment status, by language characteristics: 1999 .....	26
Table 14.	Number of 18- to 24-year-olds who had completed high school, and percentage distribution according to highest educational attainment, by language characteristics: 1999 .....	27
Table 15.	Number of 5- to 24-year-olds and percentage distribution according to whether they lived with family, by age group and language spoken at home: 1999 .....	28

Table 16.	Among 5- to 24-year-olds who lived with family, percentage distribution according to family income, by age group and language characteristics: 1999 .....	29
Table 17.	Number of 18- to 24-year-olds, and number and percentage who were employed, by language spoken at home: Selected years: 1979–99 .....	30
Table 18.	Number of employed 18- to 24-year-olds, and percentage distribution according to occupational category, by language spoken at home: Selected years 1979–99 .....	32
Table 19.	Number of 18- to 24-year-olds who spoke a language other than English at home, number and percentage who were employed, and of those employed, percentage distribution according to occupational category, by language characteristics: 1999 .....	33
 Standard Error Tables		
Table A1.	Standard errors for table 1: Among 5- to 24-year-olds in the United States, number and percentage who spoke a language other than English at home, and percentage distribution by race/ethnicity: 1999 .....	41
Table A2.	Standard errors for table 2: Number and percentage distribution of 5- to 24-year-olds who spoke a language other than English at home, by language spoken and age group: 1979 and 1999 .....	41
Table A3.	Standard errors for table 3: Number and percentage distribution of 5- to 24-year-olds who spoke a language other than English at home, by language spoken and by reported English-speaking ability: 1979 and 1999 .....	42
Table A4.	Standard errors for table 4: Number and percentage of 5- to 17-year-olds who spoke a language other than English at home by language characteristics and region: 1999 .....	42
Table A5.	Standard errors for table 5: Number and percentage distribution of 5- to 24-year-olds who spoke a language other than English at home, by English-speaking ability and by place of birth and age group: 1999 .....	43
Table A6.	Standard errors for table 6: Among 5- to 24-year-olds who spoke a language other than English at home, number and percentage who spoke English with difficulty, by youth's place of birth, parents' year of entry into the United States, and age group: 1999 .....	43
Table A7.	Standard errors for table 7: Number and percentage distribution of foreign-born 5- to 24-year-olds who spoke a language other than English at home, by year of entry into the United States and by age group: 1999 .....	44
Table A8.	Standard errors for table 8: Number of 5- to 17-year-olds, and number and percentage enrolled in school, by language characteristics: 1999 .....	44
Table A9.	Standard errors for table 9: Number of 5- to 17-year-olds who were enrolled in school, and of those, number and percentage who had ever repeated a grade, by language characteristics: 1999 .....	45
Table A10.	Standard errors for table 10: Number of 18- to 24-year-olds who were not enrolled in any grades K–12, and of those, percentage distribution according to high school completion status, by language characteristics: 1999 .....	46
Table A11.	Standard errors for table 11: Number of 18- to 24-year-olds who were not enrolled in any grades K–12, and of those, percentage distribution according to whether they had ever attended school in the United States, by language spoken at home: 1999 .....	46
Table A12.	Standard errors for table 12: Number of 18- to 24-year-olds, and of those, percentage and number enrolled in postsecondary institutions, by language characteristics and age group: 1999 .....	47



Table A13. Standard errors for table 13: Number of 18- to 24-year-olds who had completed high school, and percentage distribution according to postsecondary enrollment status, by language characteristics: 1999 .....	48
Table A14. Standard errors for table 14: Number of 18- to 24-year-olds who had completed high school, and percentage distribution according to highest educational attainment, by language characteristics: 1999 .....	48
Table A15. Standard errors for table 15: Number of 5- to 24-year-olds and percentage distribution according to whether they lived with family, by age group and language spoken at home: 1999 .....	49
Table A16. Standard errors for table 16: Among 5- to 24-year-olds who lived with family, percentage distribution according to family income, by age group and language characteristics: 1999 .....	49
Table A17. Standard errors for table 17: Number of 18- to 24-year-olds, and number and percentage who were employed, by language spoken at home: Selected years: 1979–99 .....	50
Table A18. Standard errors for table 18: Number of employed 18- to 24-year-olds, and percentage distribution according to occupational category, by language spoken at home: Selected years 1979–99 .....	51
Table A19. Standard errors for table 19: Number of 18- to 24-year-olds who spoke a language other than English at home, number and percentage who were employed, and of those employed, percentage distribution according to occupational category, by language characteristics: 1999 .....	52
Table A20. Standard errors for figure 3: Number of 5- to 24-year-olds who spoke only English and who spoke a language other than English at home, by age group: Selected years 1979–99 .....	52
Table A21. Standard errors for figure 4: Percentage of 5- to 24-year-olds who spoke a language other than English at home, by age group: Selected years: 1979–99 .....	53
Table A22. Standard errors for figure 5: Of 5- to 24-year-olds who spoke a language other than English at home, percentage distribution according to place of birth, by age group: 1999 .....	53
Table A23. Standard errors for figure 6: Percentage distribution of 5- to 24-year-olds who spoke a language other than English at home according to English-speaking ability, by youth's year of entry into the United States: 1999 .....	53
Table A24. Standard errors for figure 7: Among 18- to 24-year-olds who were not enrolled in school, percentage who did not complete high school, by language spoken at home and enrollment status in U.S. schools: 1999 .....	53

## List of Figures

---

Figure A.	Percentage of 5- to 24-year-olds who spoke a language other than English at home: Selected years: 1979–99 .....	iii
Figure B.	Percentage of 5- to 17-year-olds enrolled in school who had ever repeated a grade, by language characteristics: 1999 .....	v
Figure C.	Percentage distribution of 18- to 24-year olds who were not enrolled according to their high school completion status, by language characteristics: 1999 .....	vi
Figure D.	Percentage distribution of 18- to 24-year-olds who completed high school, by highest educational attainment and by language characteristics: 1999 .....	vii
Figure 1.	Number of immigrants to the United States: 1983–98 .....	2
Figure 2.	Number and percentage distribution of U.S. immigrants by place of origin: 1998 .....	3
Figure 3.	Number of 5- to 24-year-olds who spoke only English and who spoke a language other than English at home, by age group: Selected years 1979–99 .....	7
Figure 4.	Percentage of 5- to 24-year-olds who spoke a language other than English at home, by age group: Selected years: 1979–99 .....	9
Figure 5.	Of 5- to 24-year-olds who spoke a language other than English at home, percentage distribution according to place of birth, by age group: 1999 .....	14
Figure 6.	Percentage distribution of 5- to 24-year-olds who spoke a language other than English at home according to English-speaking ability, by youth’s year of entry into the United States: 1999 .....	17
Figure 7.	Among 18- to 24-year-olds who were not enrolled in school, percentage who did not complete high school, by language spoken at home and enrollment status in U.S. schools: 1999 .....	23
Figure 8.	Median annual earnings of year-round, full-time workers, by occupation category and sex: March 1997 .....	31

## Chapter 1: Introduction

---

The number of Americans speaking a language other than English at home has more than doubled since 1979. This increase may be traced, in part, to population flows that have brought large numbers of immigrants to the United States. If recent trends persist, the U.S. population in the new millennium will be increasingly multicultural and linguistically diverse.

This report compiles recent national estimates on language minority children, youth, and young adults in the United States (defined as individuals speaking a language other than English in the home) based on data collected using the Current Population Survey (CPS), a national survey of about 50,000 households conducted monthly by the U.S. Department of Commerce, Bureau of the Census. Language data, collected during one monthly interview in 1979, 1989, 1992, 1995, and most recently in 1999, are used to track changes in English language ability among 5- to 24-year-old language minority speakers, and to clarify the relationship between their language use and subsequent life experiences.<sup>2</sup> In particular, this report details the educational and economic indicators of language minority youth and examines how these indicators are associated with their English language use and proficiency.

### Background

Since the late 1980s, the number of immigrants (defined as aliens admitted for permanent legal residence in the United States) has increased. Before the enforcement of the Immigration Reform and Control Act (IRCA) of 1986, which granted certain groups of illegal aliens permanent resident status beginning in October 1988, the number of U.S. immigrants averaged 587,000 per year from 1983 to 1988 (U.S. Department of Justice 2000).

A continuing influx of new immigrants, coupled with the sudden eligibility for residency of illegal aliens under the IRCA legislation, contributed to a dramatic increase in the number of individuals admitted for permanent legal residence beginning in October 1988. Immigration peaked during the period of October 1, 1990 through September 30, 1991 (the 1991 fiscal year of the U.S. government), when a total of 1.8 million individuals (three-quarters of 1 percent of the total U.S. population) were granted permanent resident status (figure 1) (U.S. Department of Justice 2000).

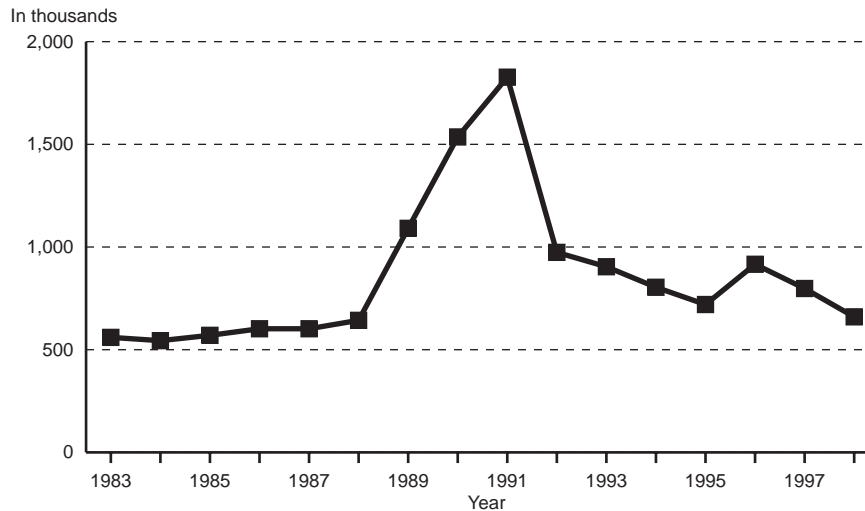
These figures do not suggest that all immigrants admitted between October 1988 and September 1991 were recent entrants to the United States: about three-quarters (76 percent) of all reported immigrants in 1991 were either already residing or working on a seasonal basis in the country. Also, these figures do not account for those persons residing illegally in the United States.<sup>3</sup> As such, the social impact of

---

<sup>2</sup>The CPS collected information on language usage only in those five interviews between 1979 and 1999. The Census Bureau's Decennial Censuses of 1980, 1990, and 2000 are also good sources for information about language minorities. However, CPS data on language usage were used in this report because these data were collected along with some information that was not collected in the Decennial Census. For example, the CPS collected information used in this report on retention in grade, ever attended school in the United States, and enrollment status in the prior year.

<sup>3</sup>The CPS does not ask about legal status of sample members. Illegal aliens are not excluded from the sample.

Figure 1. Number of immigrants to the United States: 1983–98



NOTE: Graph tick marks represent 100,000 immigrants. "Immigrants" are defined as aliens admitted for permanent legal residence in the United States.

SOURCE: U.S. Department of Justice, Immigration and Naturalization Service. *1998 Statistical Yearbook*. Washington, DC: U.S. Government Printing Office.

increased immigration observed over the IRCA time period may be somewhat diluted for many individuals who resided in the United States before they were granted permanent residency status. (U.S. Department of Justice 2000).

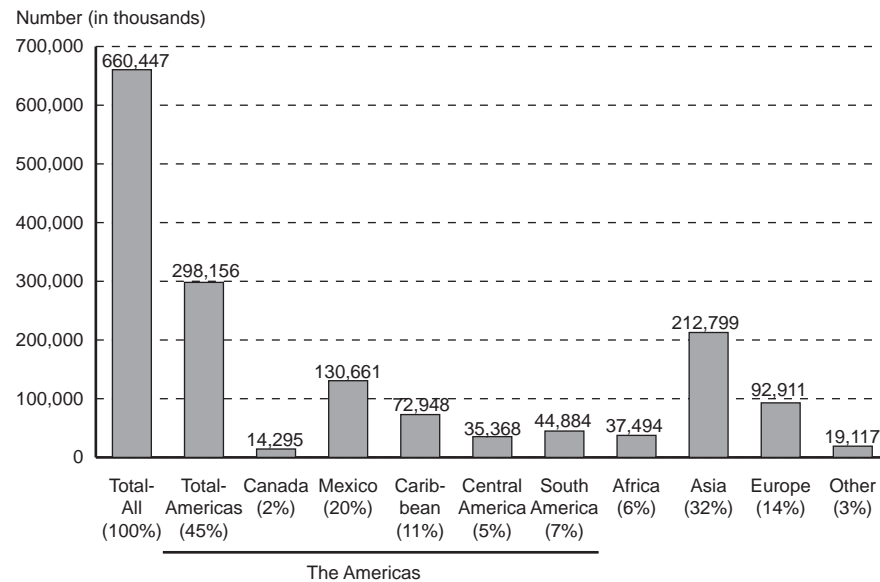
Although reported immigration rates have fallen sharply since the highest immigration years of 1989, 1990 and 1991 (figure 1), revised eligibility criteria for highly skilled individuals and a relatively strong American economy continue to attract new applicants for residency (U.S. Department of Justice 2000). Indeed, in 1998 more than 660,000 immigrants were granted permanent residence status in the country, a 3 percent increase over the total number granted such status in 1988, the year before the IRCA legislation took effect.<sup>4</sup>

Increased immigration can affect language use in the United States considerably, in part because only a small proportion of immigrants who arrive in this country come from English-speaking countries. For example, of the 654,000 legal immigrants who entered the United States in 1998, only 21,000 (4 percent) were from the United Kingdom, Canada, Australia, or New Zealand, countries where English is the primary language.<sup>5</sup> Although there is no way of using immigration data to determine the English fluency of immigrants who entered the country in 1998, it is clear that a majority came from countries where English is not the primary language (figure 2).

<sup>4</sup>From fiscal years 1994 through 1998, the number of applications for status changes pending approval increased from 121,000 to 811,000. Had there been no increase in this caseload, it is estimated that the number of individuals granted legal immigration status would have been 450,000 to 550,000 higher during the 4-year period. Assuming this lower estimate was accurate, more than 770,000 immigrants would have been granted permanent residence status in 1998, a 20 percent increase from 1988 (U.S. Department of Justice, Immigration and Naturalization Service. *1998 Statistical Yearbook*. Washington, DC: U.S. Government Printing Office).

<sup>5</sup>Ibid.

Figure 2. Number and percentage distribution of U.S. immigrants by place of origin: 1998



NOTE: "Immigrants" are defined as aliens admitted for permanent legal residence in the United States.

SOURCE: U.S. Department of Justice, Immigration and Naturalization Service. *1998 Statistical Yearbook*. Washington, DC: U.S. Government Printing Office.

## Language Use and School Success

Federal law requires that schools provide services to speakers of languages other than English who need instructional assistance. According to the bilingual education provisions within the No Child Left Behind Act of 2001 (NCLB), a person is "limited English proficient,"—

- (A) who is aged 3 through 21;
- (B) who is enrolled or preparing to enroll in an elementary school or secondary school;
- (C) (i) who was not born in the United States or whose native language is a language other than English;
  - (ii) (I) who is a Native American or Alaska Native, or a native resident of the outlying areas; and
    - (II) who comes from an environment where a language other than English has had a significant impact on the individual's level of English language proficiency; or
  - (iii) who is migratory, whose native language is a language other than English, and who comes from an environment where a language other than English is dominant; and
- (D) whose difficulties in speaking, reading, writing, or understanding the English language may be sufficient to deny the individual—
  - (i) the ability to meet the State's proficient level of achievement on State assessments described in section 1111(b)(3);

- (ii) the ability to successfully achieve in classrooms where the language of instruction is English; or
- (iii) the opportunity to participate fully in society.<sup>6</sup>

According to the Schools and Staffing Survey of 1999–2000, 54 percent of all public elementary and secondary schools enrolled limited-English proficient (LEP) students in that school year. To increase the likelihood of academic success for these students, schools usually offer a variety of special services and instructional strategies to help them learn English (Moss and Puma 1995). For example, a large number of those schools with LEP students (87 percent) reported providing a variety of types of language instruction for LEP students: English-as-a-Second-Language (ESL) programs that provide intensive instruction in English to LEP students; bilingual education, an alternative instructional approach that emphasizes subject matter instruction in a student’s first language; or another type of structured immersion program (data not shown).

Even with additional education support, studies have demonstrated that students who have difficulty speaking English often have persistently lower academic achievement than native English speakers. For example, language minority students and those with limited English proficiency have lower performance results in achievement tests for reading and mathematics and have lower aspirations for further education after high school (Brady, Owings, and Quinn 1992). Further, reading and mathematics assessment results of language minority students and those who are classified as limited English proficient are below those of English only speakers (unpublished tabulation from NAEP data, 2000 4th graders). Moreover, language difficulties may contribute to the significantly higher dropout rates observed among foreign-born students in general and Hispanic students in particular. In 1992, among young adults who speak Spanish at home, 32 percent had not completed high school compared to 14 percent of young adults who speak only English at home (McMillen, Kaufman, and Klein 1997). Educators of language minority students face many challenges in preparing these students to meet the educational objectives expected of native English speakers.

## Data Sources and Measures

This report is based on the November 1979 and 1989 and October 1992, 1995, and 1999 Current Population Surveys (CPS).<sup>7</sup> These CPS monthly surveys gathered supplementary information regarding school enrollment in addition to general demographic and labor force information. An adult member of each surveyed household served as the household respondent for each member of the household. The household respondent was asked to identify the age of each household member. This analysis focuses on persons aged 5–24. For purposes of this study, “youth” are those aged 5–17 and “young adults” are those aged 18–24. An overview of CPS measures used in this analysis follows. More detailed descriptions regarding measures used in the analyses can be found in the glossary (appendix B).

---

<sup>6</sup>No Child Left Behind Act of 2001 (NCLB), Title IX, General Provisions, Sec. 9101, Definitions, (25) Limited English Proficient.

<sup>7</sup>Between 1979 and 1999, CPS made changes in data collection methodology and sample design. These changes may have resulted in some amount of immeasurable change in the data that were collected over this time. For more information about CPS methodology, refer to U.S. Department of Labor, Bureau of Labor Statistics and U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau (2002), *Design and Methodology* (Technical Paper 63RV), Current Population Survey. Washington, DC: Author. Also available at <http://www.bls.census.gov/cps/tp/tp63.htm>.

## Language Characteristics

The language data used in this report is based on a series of questions on language ability included in the CPS monthly survey. Statistics are based on information provided by a household respondent who was asked to report on English language use and proficiency for each household member who was age 5 or older. Household respondents were asked the following questions about each qualifying household member:

- Do you (others) speak a language other than English at home?
- If a language other than English was reported, respondents were asked the following two questions:
  - ◆ What is that language? (Response categories included “Spanish,” “Asian,” “Other European,” and “Other”); and
  - ◆ How well do you (others) speak English? (Response categories included “very well,” “well,” “not well,” and “not at all.”)

These questions, in particular the question on English-speaking ability, are subjective; it is not possible to apply an objective standard to a person’s report of his or her own English-speaking ability or the ability of other household members. For the purpose of this report, all persons who were reported to speak a language other than English at home and to speak English “well,” “not well,” or “not at all” (i.e., less than “very well”) were defined as having at least some difficulty speaking English.<sup>8</sup> Although this definition differs from that established in Title IX of No Child Left Behind, it does provide national estimates that can be compared with those that might be developed from school data. In this report the CPS language category “Other” is referred to as “Other non-European languages” in order to better distinguish from the “Other European” category used by the CPS.<sup>9</sup>

---

<sup>8</sup>To validate the English-speaking ability question as a measure of total language proficiency, in 1982, the U.S. Department of Education sponsored the English Language Proficiency Survey (ELPS), which included a lengthy set of questions covering the wide spectrum of English language proficiency. The results of the survey revealed a strong correlation between responses on the English-speaking ability question and test scores of English proficiency. Moreover, in 1986, the U.S. Department of Education used the ELPS data to develop an estimate of the school-age LEP population. The ELPS estimate of the number of LEP children aged 5–17 corresponded to 70 percent of the number of persons reported to speak a language other than English at home and to speak English less than “very well.” For a more detailed description of the ELPS, see McArthur (1993). Hopstock and Bucaro (1993) state that the measure of English-speaking ability used in the Census and the CPS has the strength of being the only nationally consistent measure available but they caution that it may have the following weaknesses: it is only a measure of speaking ability (someone may be able to speak English fluently but may have poor skills on other dimensions of language proficiency, i.e., understanding, reading, and writing). They also assert that reports of language ability may vary by cultural or language background.

<sup>9</sup>Prior to 1979, the U.S. Census Bureau had asked questions about mother tongue or language spoken in childhood home. Research using these original questions has addressed issues of language transition and language maintenance, see for example, Calvin Veltman (1988), Modeling the Language Shift Process of Hispanic Immigrants (USA). *International Migration Review*, 22, pp. 545–562. Beginning in the 1979 CPS and the 1980 Decennial Census, questions about current home language were introduced. This was in response to legislation which required current information about language spoken and English ability in order to ascertain access to voting and to education and social services, for example, the Voting Rights Act of 1965 as amended in 1975 and the Bilingual Education Act of 1968.



### ***Demographic and Nativity Characteristics***

Information was also collected on household members race/ethnicity and residence by region of the United States. In addition, information regarding the citizenship status of each member was also gathered. For those foreign-born, additional questions were asked about their country of birth, their parents' country of origin and their year of entry to the United States as well as their parents' year of entry.

### ***Educational Characteristics***

Several questions were asked about household members' educational characteristics. Information was collected on whether each household member was attending or enrolled in regular school. Respondents were also asked about whether household members 6 years old or older had repeated a grade. For those not enrolled in school, questions were asked about the last or most recent year the person had attended school. For persons 15 years or older, information was also collected on the highest level of school completed, high school completion, last or most recent year attending school, postsecondary enrollment and enrollment status (part-time or full-time). For those foreign-born persons 15 years or older, respondents were asked to indicate whether they had ever attended a school in the United States.

### ***Income and Employment***

CPS collected information regarding annual household income. Information was also collected on current employment status and occupation.

### **Organization of the Report**

This report, the second in a series (the first report was McArthur 1993), updates information about changes in the number and characteristics of U.S. residents aged 5–24 who speak languages other than English at home. Chapter 2 includes a review of trends in English language use between 1979 and 1999. Summary data on the demographic characteristics and nativity of language minority youth and young adults are used to document changes in the number and characteristics of individuals speaking languages other than English at home. Then, to assess the extent to which English language ability is associated with education, chapter 3 presents data that compare speakers of languages other than English with those who speak only English at home in terms of their educational progress and labor market indicators.



## Chapter 2: Changes in the Distribution of English Language Use

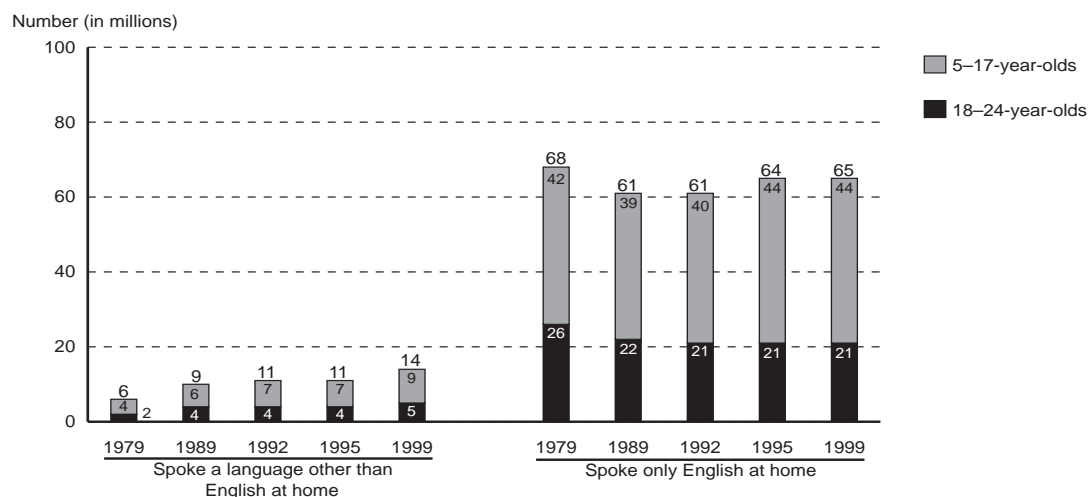
This chapter opens with a profile of how English language use by youth and young adults aged 5–24 changed between 1979 and 1999. Specifically, demographic and trend data are used to document the number and characteristics of individuals who spoke languages other than English at home, taking into account such factors as race/ethnicity and the geographic distribution of language minority speakers. Particular emphasis is placed on quantifying linguistic practices in 1999, the most recent year for which language data are available. This chapter also presents data on the language skills of native- and foreign-born individuals, and takes into account length of residency among the foreign-born.

### Changes in English Language Use and Proficiency

- ◆ *The number and percentage of children, youth, and young adults who spoke a language other than English at home increased substantially between 1979 and 1999.*

Between 1979 and 1999, the number of 5- to 24-year-olds who spoke a language other than English at home increased by 118 percent, climbing from 6.3 million in 1979 to 13.7 million in 1999 (figure 3). In comparison, there was no detectable difference over the time period in the number speaking only English. In 1979, 68.0 million spoke English at home, compared with 65.0 million in 1999. The number of youth and young adults speaking a language other than English at home has also risen within the last decade—climbing from 10.5 million in 1992 to 13.7 million in 1999 (figure 3).

Figure 3. Number of 5- to 24-year-olds who spoke only English and who spoke a language other than English at home, by age group: Selected years 1979–99



NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), November 1979, November 1989, October 1992, October 1995, and October 1999.

The proportion of all 5- to 24-year-olds who spoke a language other than English at home increased from about 9 percent in 1979 to 17 percent in 1999 (figure 4). In addition, the proportion of youth and young adults who were reported to speak languages other than English increased between 1995 and 1999. In 1999, 17 percent of 5- to 24-year-olds were identified as speaking a language other than English at home, compared with roughly 15 percent in both 1992 and 1995. Patterns of English language use may have increasingly important implications for society in the coming years (Garcia 1999).

Among 5- to 17-year-olds, there were no detectable differences in the proportion speaking a language other than English at home between 1989 and 1995. However, since then, the proportion speaking another language at home has risen: in 1999, nearly 17 percent of youth aged 5–17 were language minorities, compared with 14 percent in 1995. While there was no detectable change in the proportion of language minorities among those of traditional postsecondary school age (18- to 24-year-olds) between 1989 and 1992, the proportion began to increase after 1992. The percentage of these young adults speaking languages other than English increased from 15 percent in 1992 to 19 percent in 1999.

Changes in the number and proportion of language minority speakers may have implications for the education of all youth, and these effects may be greatest at the elementary and secondary levels. For example, greater numbers of language minority speakers aged 5–17 might translate into an added fiscal burden for public school systems, given that the costs of educating LEP youth may often be higher than those of educating native speakers (Baker and Markham 2002) and that students in public schools are more likely than those in private schools to be LEP.<sup>10</sup> In addition, an increase in the number and proportion of LEP students may increase the demand for qualified LEP teachers (Han, Baker, and Rodriguez 1997; Henke et al. 1996).

While increasing numbers of language minority youth might influence the delivery of postsecondary education, the impact may vary by institution type. As chapter 2 documents, not all language minority youth pursue postsecondary schooling, and those who do often have more developed language skills than those who do not. Moreover, highly competitive institutions, which often admit students partly on the basis of standardized test scores, may be least likely to be affected by increases in the number or proportion of language minorities because students who are less fluent in English may not perform as well as others on admission tests. On the other hand, less competitive institutions, such as community colleges and other less than 4-year institutions, are more likely to be affected and may respond by scheduling remedial or adult ESL coursework. For example, Stearns and Watanabe (2002) reported that 55 percent of Hispanics were enrolled in 2-year institutions compared to 36 percent of White, non-Hispanics. If providing such services requires additional faculty, specialized equipment, or services, then increases in the population of language minority youth could potentially affect the cost of education for all students attending these institutions or could result in institutional cost containment measures such as reduced course offerings.

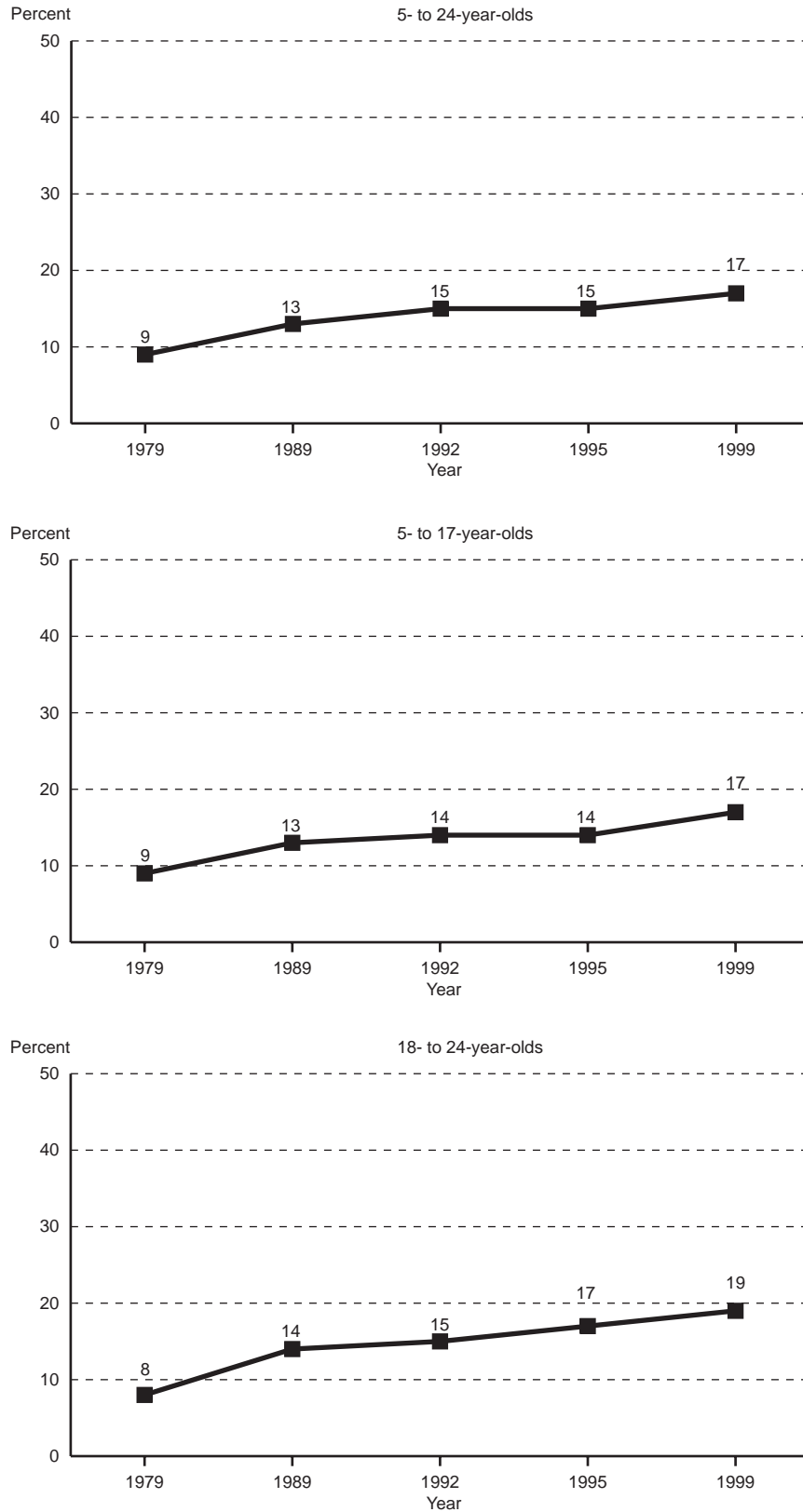
◆ *A high percentage of Hispanics and Asians/Pacific Islanders speak a language other than English at home.*

While English language use varies within all racial/ethnic groups in the United States, large proportions of certain groups, particularly Hispanics and Asians/Pacific Islanders, speak languages other than English at home. Specifically, about three-quarters (74 percent) of Hispanics and three-fifths (60 per-

---

<sup>10</sup>See, for example, Prince and Hubert (1994). In 1999–2000, 6 percent of public school students were identified as limited-English proficient, compared with 1 percent of private school students (1999–2000 Schools and Staffing Survey, Public and Private School Surveys, unpublished tabulations).

Figure 4. Percentage of 5- to 24-year-olds who spoke a language other than English at home, by age group: Selected years: 1979–99



SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), November 1979, November 1989, October 1992, October 1995, and October 1999.

cent) of Asians/Pacific Islanders aged 5–24 spoke a language other than English at home in 1999 (table 1). Hispanics, furthermore, account for a large proportion of language minority individuals: in 1999, about two-thirds (65 percent) of those speaking a language other than English at home were Hispanic, compared with 16 percent who were White, non-Hispanic and 15 percent who were Asian/Pacific Islander. Due to the predominance of Hispanic youth and young adults among persons speaking a language other than English, this report places particular emphasis on describing the educational, economic, and occupational indicators of Hispanics.

Table 1. Among 5- to 24-year-olds in the United States, number and percentage who spoke a language other than English at home, and percentage distribution by race/ethnicity: 1999

Race/ethnicity	Total number (in thousands)	Spoke language other than English at home		
		Number (in thousands)	As a percentage of population group <sup>1</sup>	Percentage distribution of speakers <sup>2</sup>
Total	78,742	13,729	17.4	100.0
Race/ethnicity				
White, non-Hispanic	50,650	2,183	4.3	15.9
Black, non-Hispanic	11,983	555	4.6	4.0
Hispanic <sup>3</sup>	11,977	8,860	74.0	64.5
American Indian/Alaska Native	715	99	13.8	0.7
Asian/Pacific Islander	3,417	2,032	59.5	14.8

<sup>1</sup>Percentage derived by dividing the number of speakers of languages other than English by the total number of 5- to 24-year-olds in each race/ethnicity group.

<sup>2</sup>Percentage derived by dividing the number of speakers of languages other than English in each race/ethnicity group by the total number of speakers of languages other than English.

<sup>3</sup>Those of Hispanic ethnicity could be of any race.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

◆ *In 1999, speakers of Spanish account for at least 71 percent of all language minorities.*

In addition to collecting data on the race/ethnicity of language minorities, the 1979 and 1999 CPS also gathered information on which foreign language was spoken in the home. The CPS asked respondents to choose from the following four categories: Spanish, Asian, other European, and other non-European languages. The other non-European languages category includes such diverse languages as African languages, Arabic, Native American languages, and Persian.<sup>11</sup>

In both 1979 and 1999, youth and young adults who spoke a language other than English at home most frequently reported Spanish as the language they spoke at home (table 2). Moreover, the number of Spanish-speaking individuals more than doubled during this 20-year time span—climbing from 4.0 million in 1979 to 9.8 million in 1999 (data not shown). This increase, coupled with relatively small changes in the numbers of youth and young adults speaking other languages, has meant that the proportion of 5- to 24-year-old language minority individuals who speak Spanish has also increased—rising from 64 percent in 1979 to nearly 72 percent of those aged 5–24 speaking languages other than English in 1999.

The number of speakers of Asian languages increased from 1.3 million in 1979 to 1.7 million in 1999. In 1979, speakers of Asian languages made up the second largest language minority group (21 percent), followed by individuals speaking other European languages (10 percent), and by those speaking other

<sup>11</sup>See the glossary (appendix B) for languages included in Asian and European language categories.

Table 2. Number and percentage distribution of 5- to 24-year-olds who spoke a language other than English at home, by language spoken and age group: 1979 and 1999

Language spoken at home	Total (5- to 24-year-olds)		5- to 17-year-olds		18- to 24-year-olds	
	1979	1999	1979	1999	1979	1999
	Percentage distribution					
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Spanish	64.2	71.7	66.7	71.9	60.0	71.4
Asian	21.1	12.6	19.9	13.4	23.0	11.1
Other European	9.5	5.8	9.0	4.9	10.3	7.3
Other non-European	5.3	9.9	4.4	9.8	6.7	10.2
	In thousands					
Total number	6,308	13,729	3,950	8,815	2,357	4,914
Spanish	4,048	9,849	2,633	6,339	1,415	3,509
Asian	1,329	1,723	787	1,177	542	546
Other European	598	793	355	433	243	359
Other non-European	333	1,365	176	865	157	499

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), November 1979 and October 1999.

non-European languages (5 percent). While the proportion of all language minorities speaking Asian languages has declined over time, in 1999 the proportion of those speaking Asian languages (13 percent) was still greater than that of individuals speaking other European (6 percent) and other non-European languages (10 percent).

- ◆ *Over the last one and a half decades about one-third of language minorities were reported to have difficulty speaking English.*

As part of the CPS data collection, the household respondents were asked to describe their own English-speaking ability as well as that of other household members. While subjective assessments have obvious flaws—different people have different assessments of what constitutes “English language fluency”—this report assumes that all persons who speak a language other than English at home and who were reported to speak English less than “very well” (i.e., “well,” “not well,” or “not at all”) have some difficulty speaking English.

In 1999, one-third (33 percent) of 5- to 24-year-olds who spoke a language other than English at home had difficulty speaking English (table 3). In 1979, 34 percent of those who spoke languages other than English at home had difficulty speaking English. Even as the numbers of language minority speakers have increased there is no detectable difference in the proportion of the language minority speakers that has difficulty speaking English.

- ◆ *The proportion of Asian language speakers with difficulty speaking English increased between 1979 and 1999.*

Asian language speakers aged 5–24 were more likely to report difficulty speaking English in 1999 than in 1979 (24 percent vs. 15 percent). In contrast, youth and young adults speaking European languages other than Spanish were less likely to have had difficulty speaking English in 1999 than in 1979: 28 percent reported problems in 1999, compared with 43 percent in 1979.<sup>12</sup> Over the period, there were no

<sup>12</sup>Although speakers of other non-European languages appeared less likely to report having difficulty speaking English in 1999 than in 1979 (29 percent vs. 43 percent), these numbers are associated with large standard errors, making the estimates imprecise and the apparent difference not statistically significant.

Table 3. Number and percentage distribution of 5- to 24-year-olds who spoke a language other than English at home, by language spoken and by reported English-speaking ability: 1979 and 1999

Reported English-speaking ability by year	Total		Language spoken at home			
	Number (in thousands)	Percent	Spanish	Asian <sup>1</sup>	Other European	Other non-European <sup>2</sup>
Total persons who spoke a language other than English at home						
1979	6,308	100.0	4,048	1,329	598	333
1999	13,729	100.0	9,849	1,723	793	1,365
1979						
English-speaking ability <sup>3</sup>						
Spoke English "very well"	4,145	65.7	61.3	85.2	56.7	57.2
Spoke English with difficulty	2,163	34.3	38.7	14.8	43.3	42.8
Spoke English "well"	1,214	19.2	21.2	9.9	22.2	27.1
Spoke English "not well"	661	10.5	11.3	4.0	19.8	9.2
Spoke English "not at all"	288	4.6	6.1	0.8	1.2	6.5
1999						
English-speaking ability <sup>3</sup>						
Spoke English "very well"	9,195	67.0	64.3	76.1	72.4	71.3
Spoke English with difficulty	4,535	33.0	35.6	23.8	27.6	28.7
Spoke English "well"	2,517	18.3	18.1	19.5	18.0	18.6
Spoke English "not well"	1,529	11.1	13.0	3.8	6.4	9.6
Spoke English "not at all"	489	3.6	4.5	0.5	3.2	0.5

<sup>1</sup>Asian language spoken at home includes Asian and Pacific Islander languages.

<sup>2</sup>Other non-European languages includes African, Arabic, Native American, and Persian languages.

<sup>3</sup>Individuals who spoke English with difficulty include those who spoke English less than "very well." This category includes those who spoke English "well," "not well," and "not at all." All nonresponses to the language questions are excluded from the tabulations.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), November 1979 and October 1999.

detectable differences in the proportion of Spanish-speaking youth who had difficulty speaking English.

In 1999, Spanish speakers remain the group most likely to have difficulty with English. Among language groups, approximately 36 percent of Spanish speakers had difficulty speaking English, compared with 24 percent of Asian, 28 percent of other European, and 29 percent of other non-European language speakers. Spanish speakers were also more likely than Asian and other non-European language speakers not to speak English at all (5 percent vs. 1 and 1 percent, respectively).

◆ *The school-age language minority population is concentrated in the West.*

Although language minority individuals live throughout the United States, they are heavily concentrated in certain regions, especially concentrated in a few states.<sup>13</sup> Areas where there are higher proportions of students who are language minority and not proficient in English may need more programs

<sup>13</sup>In the 2000 Decennial Census, 18 percent of the U.S. population 5 years old and over reported speaking a language other than English at home. In 10 states, at least 20 percent of the population reported speaking a language other than English: California, 40 percent; New Mexico, 37 percent; Texas, 31 percent; New York, 28 percent; Hawaii, 27 percent; Arizona, 26 percent; New Jersey, 26 percent; Florida, 23 percent; Nevada, 23 percent; and Rhode Island, 20 percent. For more information on language results from the 2000 Decennial Census, go to <http://www.census.gov/prod/2003pubs/c2kbr-29.pdf> and <http://www.census.gov/population/www/cen2000/phc-t20.html>.

designed for these students and teachers with training for teaching English language learners. In recognition of this potential impact, this section focuses on the geographic distribution of 5- to 17-year-olds.

In 1999, the highest concentrations of language minority youth of school age were in the West, where 29 percent of all 5- to 17-year-olds spoke a language other than English at home (table 4). Youth living in the Northeast also were more likely than those living in the Midwest or South to speak another language at home (18 percent vs. 8 and 14 percent, respectively).

Table 4. Number and percentage of 5- to 17-year-olds who spoke a language other than English at home by language characteristics and region: 1999

Region	Total 5- to 17-year-olds (in thousands)	Spoke a language other than English at home		Spoke English with difficulty <sup>1</sup>		Percent of those who spoke a language other than English at home
		Number (in thousands)	Percent of total	Number (in thousands)	Percent of total	
Total	52,701	8,815	16.7	2,630	5.0	29.8
Northeast	9,981	1,763	17.7	435	4.4	24.7
Midwest	12,357	931	7.5	253	2.0	27.2
South	18,047	2,578	14.3	653	3.6	25.3
West	12,316	3,544	28.8	1,289	10.5	36.4

<sup>1</sup>Individuals who spoke English with difficulty include those who spoke English less than “very well.” This category includes those who spoke English “well,” “not well,” and “not at all.” All nonresponses to the language questions are excluded from the tabulations.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Compared with other regions, the West not only had a higher proportion of 5- to 17-year-olds who spoke languages other than English at home but also had a higher proportion of youth with English language difficulty. Among all youth, those in the West were at least twice as likely as those living in any other region to have had difficulty speaking English (11 percent vs. 2 to 4 percent). Furthermore, of youth who spoke a language other than English at home, those in the West were more likely than those in any other region to have had difficulty speaking English.

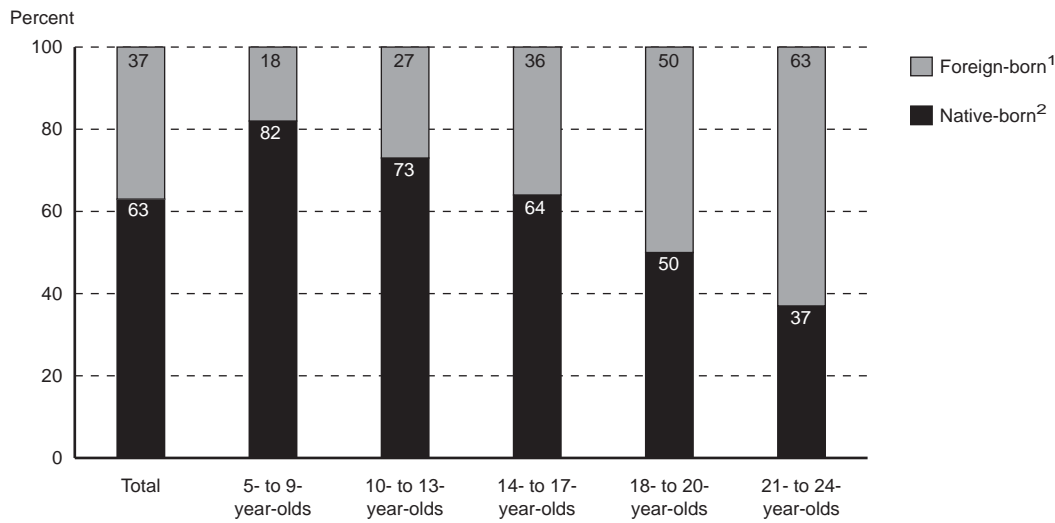
## Nativity and English Language Use

◆ *A majority of language minority youth and young adults were born in the United States.*

While high rates of immigration during the last decade are likely to have contributed to increases in the proportion of 5- to 24-year-olds who spoke a language other than English at home, in 1999, native-born individuals (defined as those born within the 50 states and the District of Columbia and U.S. Territories) made up 63 percent of all language minority speakers (figure 5). This relatively high rate of use of languages other than English among native-born youth and young adults may be due to several factors. One factor may be that these persons had immigrant, language minority parents who had difficulty speaking English. Also, they may live in communities with many language minority residents that support the daily use of languages other than English. Alternatively, these native-born children may have parents who have little or no difficulty speaking English, but who have opted to use a foreign language at home to ensure that their children retain their cultural heritage. Language minority youth may also be fluent in English, even though they speak a language other than English at home.



Figure 5. Of 5- to 24-year-olds who spoke a language other than English at home, percentage distribution according to place of birth, by age group: 1999



<sup>1</sup>Foreign-born includes those who were born in a country other than the United States, Puerto Rico, or other U.S. outlying areas and includes those who were born of American parents abroad.

<sup>2</sup>Native-born includes those who were born in the 50 states and the District of Columbia only.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

In 1999, language minority youth (5- to 17-year-olds) were more likely to be native-born than foreign born. Within that broader age group, 5- to 9-year-old language minority youth were more likely to be native-born than 14- to 17-year-olds (82 percent compared to 64 percent) (data not shown). Furthermore, language minority youth were more likely than language minority young adults to be native-born. For example, 74 percent of language minority youth aged 5–17 were native-born, compared with 42 percent of those aged 18–24.

◆ *Language minority 5- to 24-year-olds born in the United States were less likely than their counterparts born in foreign countries to have difficulty speaking English.*

Among persons who spoke a language other than English at home, native-born youth and young adults were less likely than their foreign-born peers to have difficulty speaking English. Specifically, in 1999, 22 percent of native-born 5- to 24-year-olds had difficulty with English, compared with one-half (51 percent) of their foreign-born counterparts (table 5).

When data were disaggregated by age, differences in English ability were noted between foreign- and native-born language minorities. Among the foreign-born, 18- to 24-year-olds were more likely than their younger peers to have difficulty speaking English (58 percent vs. 43 percent) In contrast, among the native-born, about 13 percent of the older group reported having difficulty speaking English, compared with 25 percent of those ages 5–17.

◆ *The English language proficiency of native-born, language minority 5- to 24-year-olds is related to their parents' nativity and year of entry into the United States.*

Parents' year of immigration can provide some insight into the relationship between residency and language ability. Generally, native-born, language minority 5- to 24-year-olds whose parents were either born in the United States or had entered the country before 1970 were less likely than those whose



Table 5. Number and percentage distribution of 5- to 24-year-olds who spoke a language other than English at home, by English-speaking ability and by place of birth and age group: 1999

Place of birth and age group	Number (in thousands)	Spoke English "very well"		Spoke English with difficulty	
		Number (in thousands)	Percent	Number (in thousands)	Percent
Total					
5- to 24-year-olds	13,729	9,195	67.0	4,534	33.0
5- to 17-year-olds	8,815	6,185	70.2	2,630	29.8
18- to 24-year-olds	4,914	3,010	61.3	1,904	38.7
Native-born <sup>1</sup>					
5- to 24-year-olds	8,611	6,695	77.7	1,916	22.3
5- to 17-year-olds	6,526	4,876	74.7	1,650	25.3
18- to 24-year-olds	2,085	1,819	87.2	266	12.8
Foreign-born <sup>2</sup>					
5- to 24-year-olds	5,119	2,500	48.8	2,619	51.2
5- to 17-year-olds	2,290	1,309	57.2	981	42.8
18- to 24-year-olds	2,829	1,191	42.1	1,638	57.9

<sup>1</sup>Native-born includes persons who were born in the 50 states, the District of Columbia, and the U.S. outlying areas.

<sup>2</sup>Foreign-born are those born in a country other than the United States, Puerto Rico, or other U.S. outlying areas and includes those who were born of American parents abroad.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

parents entered after 1979 to have difficulty speaking English (table 6).<sup>14</sup> Specifically, among native-born youth and young adults, 15 percent of both those whose parents were born in the United States and those whose parents had been living in the country before 1970 had difficulty speaking English. In comparison, about 31–34 percent of those whose parents had come to the United States after 1980 had difficulty speaking English.

In general, the later a parent entered the United States, the more likely that a child had difficulty speaking English. When native-born youth were disaggregated by parents' year of entry, this finding was evident for those aged 5–9, 10–13, and 21–24 (data not shown).<sup>15</sup>

◆ *The English language proficiency of foreign-born 5- to 24-year-olds is related to the length of time they have spent in the United States.*

Nearly three-quarters of language minority youth and young adults who were foreign-born entered the United States in the 1990s: 40 percent entered between 1990 and 1995, and 32 percent entered between 1996 and 1998 (table 7). Furthermore, among foreign-born 5- to 24-year-olds who spoke a language other than English at home, those who entered the United States in 1996 or later were more likely than any other group of immigrants to have difficulty speaking English (76 percent) (figure 6). One-half of foreign-born youth and young adults who entered the United States between 1990 and 1995 had difficulty with English, compared with one-quarter who entered between 1980 and 1985. However, there was no detectable difference in English language ability between foreign-born language minorities who entered the United States before 1986 and those who were native born.

<sup>14</sup>Given that parents of youth may not enter the country at the same time, parents' year of entry was coded using mother's year of entry first. If data on mother's year of entry were coded as missing, then father's year of entry was the default. Individuals who had missing parent data for both variables (2,985 cases, or 35 percent of all native-born youth who spoke a language other than English) were excluded from the analysis.

<sup>15</sup>It is important to note that while in general the later a parent entered the United States, the more likely that a child aged 10–13 had difficulty speaking English, this trend drops slightly in the 1990s.

Table 6. Among 5- to 24-year-olds who spoke a language other than English at home, number and percentage who spoke English with difficulty, by youth's place of birth, parents' year of entry into the United States, and age group: 1999

Spoke English with difficulty	Youth's place of birth			Parents' year of entry <sup>2</sup>				
	Foreign-born	Native-born		1990 or later	1980–89	1970–79	Before 1970	Native-born parent
	Total	Total	With parent information <sup>1</sup>					
<b>Total 5- to 24-year olds</b>								
Number (in thousands)	5,118	8,611	5,626	470	1,992	1,573	586	1,005
Percent	51.2	22.3	23.8	34.1	30.6	21.1	15.2	14.9
<b>5- to 9-year-olds</b>								
Number (in thousands)	633	2,896	2,219	312	1,065	467	116	259
Percent	57.0	36.2	36.6	45.6	38.2	31.7	35.0	28.7
<b>10- to 13-year-olds</b>								
Number (in thousands)	713	1,922	1,413	‡	595	407	90	224
Percent	41.2	19.7	19.5	‡	26.2	18.7	13.4	11.6
<b>14- to 17-year-olds</b>								
Number (in thousands)	944	1,708	1,142	41	265	382	149	306
Percent	34.6	13.1	11.9	30.1	11.2	13.8	6.0	10.7
<b>18- to 20-year-olds</b>								
Number (in thousands)	1,040	1,020	511	‡	55	186	105	150
Percent	51.0	12.2	13.1	‡	22.4	16.6	10.9	8.0
<b>21- to 24-year-olds</b>								
Number (in thousands)	1,789	1,065	341	‡	‡	132	127	65
Percent	61.9	13.3	14.5	‡	‡	18.9	12.9	6.7

‡Did not meet reporting standards.

<sup>1</sup>This category does not include the 34.7 percent of native-born 5- to 24-year-olds who had missing parent data. Youth aged 18–24 whose parents entered in 1990 or later may reflect parents who were illegally in the country when the youth was born and later received legal residence.

<sup>2</sup>Parents' year of entry for native-born youth and young adults.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table 7. Number and percentage distribution of foreign-born 5- to 24-year-olds who spoke a language other than English at home, by year of entry into the United States and by age group: 1999

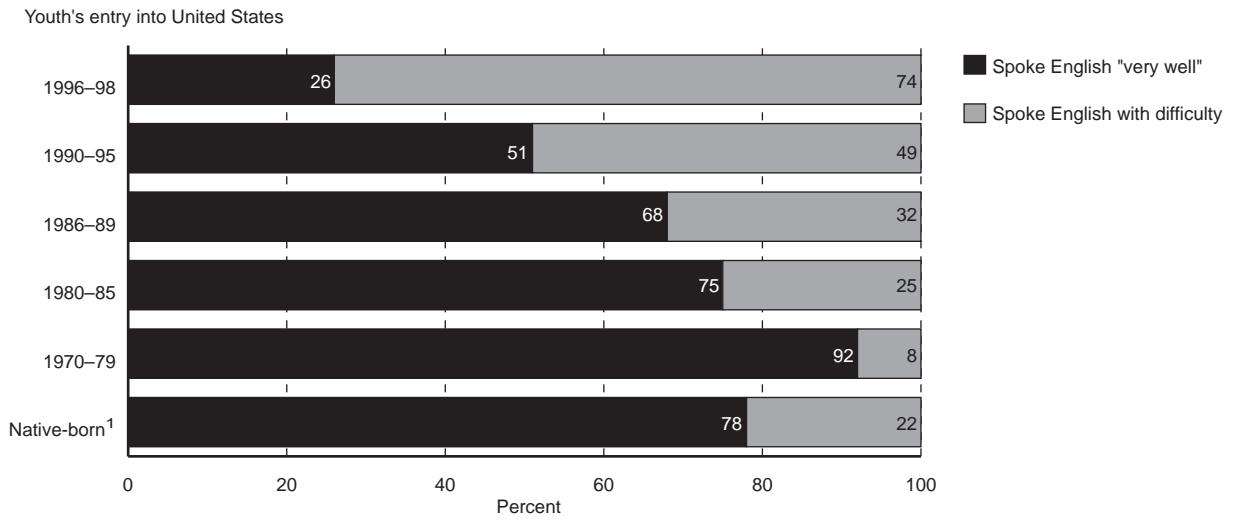
Age group	Total foreign-born	Year of entry				
		1996–98	1990–95	1986–89	1980–85	1975–79
<b>5- to 24-year-olds who spoke language other than English at home</b>						
Number (thousands)	5,118	1,623	2,054	856	470	116
Percentage distribution	100.0	31.7	40.1	16.7	9.2	2.3
<b>Percentage distribution according to year of entry, by age</b>						
5- to 9-year-olds	100.0	45.6	54.4	†	†	†
10- to 13-year-olds	100.0	25.2	47.3	27.1	0.4	†
14- to 17-year-olds	100.0	21.8	37.0	27.1	14.1	†
18- to 20-year-olds	100.0	37.4	33.2	16.1	12.1	1.2
21- to 24-year-olds	100.0	31.3	37.9	13.4	11.6	5.7

†Not applicable.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Figure 6. Percentage distribution of 5- to 24-year-olds who spoke a language other than English at home according to English-speaking ability, by youth's year of entry into the United States: 1999



<sup>1</sup>Native-born includes those who were born in the 50 states and the District of Columbia only.

NOTE: Statistics for foreign-born include only those youth and young adults for which complete parent data exist. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.



## Chapter 3: School and Labor Market Indicators

---

Students who have difficulty speaking English often enter school at a disadvantage (Hakuta 1986; August and Hakuta 1997; Hakuta, Goto-Butler, and Witt 2000), and may have difficulty completing high school and continuing on to postsecondary education. To examine how home language and English language proficiency are associated with education and labor market indicators, this chapter documents the school progress and the occupational experiences of language minority youth and young adults in the 1990s.

### Elementary/Secondary Indicators: 5- to 17-Year-Olds

- ◆ *With the exception of those who spoke no English, nearly all youth were enrolled in school in 1999, regardless of their use of English at home.*

Although the ages for compulsory school attendance vary by state, nearly all states require youth aged 6–16 to attend school.<sup>16</sup> Data on school enrollment for school-aged youth—5- to 17-year-olds—confirm that nearly all youth, regardless of their use of English at home, were enrolled in school in 1999 (98 percent of those who spoke English and 97 percent who spoke a language other than English at home) (table 8).

Language minority youth aged 5–17 who spoke English “very well” were slightly more likely than those who spoke English with difficulty to be enrolled in school (98 percent vs. 95 percent). Among Spanish speakers, those who spoke English very well were also slightly more likely than those who spoke English with difficulty to be enrolled in school (97 percent vs. 95 percent).<sup>17</sup> However, language minority youth who did not speak English at all were less likely than their English-speaking counterparts to be enrolled (53 percent vs. 93 to 98 percent).

- ◆ *Spanish speakers are more likely than Asian language speakers to repeat a grade.*

The proportion of students who repeat a grade provides an important indicator of children’s progress in school. There were no detectable differences in likelihood of ever repeating a grade as of 1999 between language minority students and those speaking only English at home. Approximately 8 percent of language minority elementary and secondary students in 1999 had ever repeated a grade, as had 8 percent of students who spoke only English at home (table 9).

---

<sup>16</sup>While there were some minor exceptions to state law, in March 2000, 7 states required youth to begin school by age 5, 22 states required youth to begin by age 6, 18 states required youth to begin by age 7, and 2 states required youth to begin by age 8. Regarding the earliest age for leaving school, 28 states mandated school attendance until age 16 for all youth, 7 states mandated attendance until age 17, and 14 mandated attendance until age 18. No information was available for the District of Columbia or the State of Colorado (U.S. Department of Education 2003, table 150). [*Digest of Education Statistics 2002*] Table titled: Ages for compulsory school attendance, special education services for students, policies for year-round schools and kindergarten programs, by state: 1997 and 2000.

<sup>17</sup>Among the language groups, there is no detectable difference in the percentages of language minorities who speak English with difficulty and those who speak English very well. However, subgroup estimates for Asian languages, European languages other than Spanish, and other non-European languages are based on smaller sample sizes and have larger standard errors that can affect statistical significance.

Table 8. Number of 5- to 17-year-olds, and number and percentage enrolled in school, by language characteristics: 1999

Language characteristics	Total number (in thousands)	Enrolled in school	
		Number (in thousands)	Percent
Total	48,663	47,531	97.7
Spoke only English at home	40,675	39,781	97.8
Spoke other language at home	7,988	7,750	97.0
English-speaking ability			
Spoke English "very well"	5,838	5,713	97.9
Spoke English with difficulty	2,150	2,037	94.8
Spoke English "well"	1,539	1,503	97.7
Spoke English "not well"	527	489	92.9
Spoke English "not at all"	84	45	53.1
Language spoken at home			
Spanish	5,721	5,521	96.5
Asian	1,074	1,062	98.9
Other European	399	388	97.2
Other non-European	794	779	98.1
		Spoke English "very well"	
Language spoken at home			
Spanish	4,081	3,975	97.4
Asian	840	837	99.6
Other European	320	312	97.5
Other non-European	597	589	98.7
		Spoke English with difficulty	
Language spoken at home			
Spanish	1,640	1,546	94.3
Asian	233	225	96.5
Other European	79	76	96.1
Other non-European	197	190	96.3

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

English language ability was generally not associated with grade retention among language minority students. About 7 percent of those who spoke English with difficulty were held back a grade, not detectably different from the 8 percent retained among language minority students who spoke English very well.<sup>18</sup> Language minority students who spoke English with difficulty may be advanced at the same rate as other students for a variety of reasons. One such reason is that until fairly recently, many schools emphasized social promotion in order to keep students of a given age cohort together.<sup>19</sup>

When language minorities were disaggregated by language spoken, Spanish speakers were more likely than those who spoke an Asian language and those who spoke other non-European languages at home to repeat a grade. About 9 percent of Spanish speakers had repeated a grade, compared with about 4 percent each of Asian language speakers and those who spoke other non-European languages at home.

<sup>18</sup>While 22 percent of those who spoke English "not at all" repeated a grade compared with those who spoke English "very well" (8 percent), this difference was not statistically significant.

<sup>19</sup>See Roderick et al. 2000, Denton 2001, and Karweit 1999.

Table 9. Number of 5- to 17-year-olds who were enrolled in school, and of those, number and percentage who had ever repeated a grade, by language characteristics: 1999

Language characteristics	Total enrolled in school (in thousands)	Ever repeated grade	
		Number (in thousands)	Percent
Total	47,531	3,834	8.1
Spoke only English at home	39,781	3,254	8.2
Spoke other language at home	7,750	581	7.5
English-speaking ability			
Spoke English "very well"	5,713	430	7.5
Spoke English with difficulty	2,037	151	7.4
Spoke English "well"	1,503	113	7.5
Spoke English "not well"	489	28	5.7
Spoke English "not at all"	45	10	21.9
Language spoken at home			
Spanish	5,521	484	8.8
Asian	1,062	46	4.3
Other European	388	22	5.7
Other non-European	779	28	3.7
		Spoke English "very well"	
Language spoken at home			
Spanish	3,975	368	9.3
Asian	837	29	3.4
Other European	312	9	2.9
Other non-European	589	24	4.1
		Spoke English with difficulty	
Language spoken at home			
Spanish	1,546	117	7.5
Asian	225	17	7.5
Other European	76	13	17.3
Other non-European	190	4	2.2

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

## High School Completion: 18- to 24-Year-Olds

- ◆ *Among young adults, language minorities are less likely than those who speak only English at home to complete high school. Furthermore, among language minority young adults, English language ability is strongly associated with high school completion.*

In 1999, among 18- to 24-year-olds not enrolled in a secondary school, 31 percent of language minority 18- to 24-year-olds who were not enrolled in secondary school had not completed high school compared with 10 percent of their counterparts who spoke only English at home (table 10).<sup>20</sup>

Failure to complete high school was associated with English language ability. Among language minorities, about 51 percent of language minorities who spoke English with difficulty had not completed high school, compared with about 18 percent who spoke English very well. Furthermore, among those with difficulty speaking English, the lower the level of English proficiency, the lower the probability of completing high school.

<sup>20</sup>The high school completion rate is based on both reported educational attainment and the population of young adults aged 18–24 who are not still enrolled in grades 7 through 12. Individuals who completed high school are defined as those who had attained at least a high school diploma or completed a high school equivalency certificate or diploma (for example, the General Educational Development (GED) credential).

Table 10. Number of 18- to 24-year-olds who were not enrolled in any grades K–12, and of those, percentage distribution according to high school completion status, by language characteristics: 1999

Language characteristics	Total number (in thousands)	High school completion status	
		Had not completed high school (percent)	Completed high school (percent) <sup>1</sup>
Total <sup>2</sup>	24,540	14.1	85.9
Spoke only English at home	19,950	10.2	89.8
Spoke other language at home	4,590	30.7	69.3
English-speaking ability			
Spoke English "very well"	2,800	17.9	82.1
Spoke English with difficulty	1,790	50.7	49.3
Spoke English "well"	702	28.9	71.1
Spoke English "not well"	733	59.3	39.4
Spoke English "not at all"	355	76.1	23.9
Language spoken at home			
Spanish	3,275	38.9	61.1
Asian	503	7.2	93.0
Other European	342	9.6	90.4
Other non-European	470	14.0	86.0
		Spoke English "very well"	
Language spoken at home			
Spanish	1,858	22.2	77.8
Asian	382	7.1	92.9
Other European	234	11.5	88.5
Other non-European	327	11.3	88.7
		Spoke English with difficulty	
Language spoken at home			
Spanish	1,417	60.9	39.1
Asian	122	7.4	92.6
Other European	108	6.5	93.5
Other non-European	143	20.3	79.7

<sup>1</sup>High school completers include those who completed high school by means of an equivalency test such as the GED.

<sup>2</sup>Includes 9,259 (in thousands) who are enrolled in postsecondary institutions.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Compared to young adult speakers of languages other than Spanish, those who spoke Spanish at home were less likely than members of any other language minority group to have completed high school, regardless of how well these individuals spoke English. However, when the focus is on Spanish speakers only, those who spoke English very well were nearly twice as likely as those who spoke English with difficulty to have completed high school (78 percent vs. 39 percent).<sup>21</sup>

It is not clear from these data why Spanish-speaking young adults were less likely to have completed high school than those from other language minority groups. While language ability and cultural differences may help explain some of these differences, other factors may contribute to the relatively high proportion of high school noncompleters among the Spanish-speaking population. In particular, 30 percent of 18- to 24-year-olds who spoke Spanish at home had never enrolled in a United States school, compared with 8 percent of Asian language speakers, 14 percent of speakers of other European languages, and 12 percent of speakers of other non-European languages (table 11). The high rates of noncompletion among Spanish speakers may be due at least in part to the fact that they had already

<sup>21</sup>Due to small sample sizes, estimates for other language groups are associated with large standard errors, making interpretation of these other data difficult.



Table 11. Number of 18- to 24-year-olds who were not enrolled in any grades K–12, and of those, percentage distribution according to whether they had ever attended school in the United States, by language spoken at home: 1999

Language spoken at home	Total number (in thousands)	Ever attended a U.S. school <sup>1</sup>	
		Had not attended a U.S. school (percent)	Had attended a U.S. school (percent)
Total <sup>2</sup>	24,540	4.9	95.1
Spoke only English at home	19,950	0.5	99.5
Spoke other language at home	4,590	24.3	75.7
Language spoken at home			
Spanish	3,275	29.8	70.2
Asian	503	7.8	92.2
Other European	342	13.5	86.5
Other non-European	470	11.5	88.5

<sup>1</sup>School refers to elementary or secondary school or grades K–12.

<sup>2</sup>Includes 9,259 (in thousands) who are enrolled in postsecondary institutions.

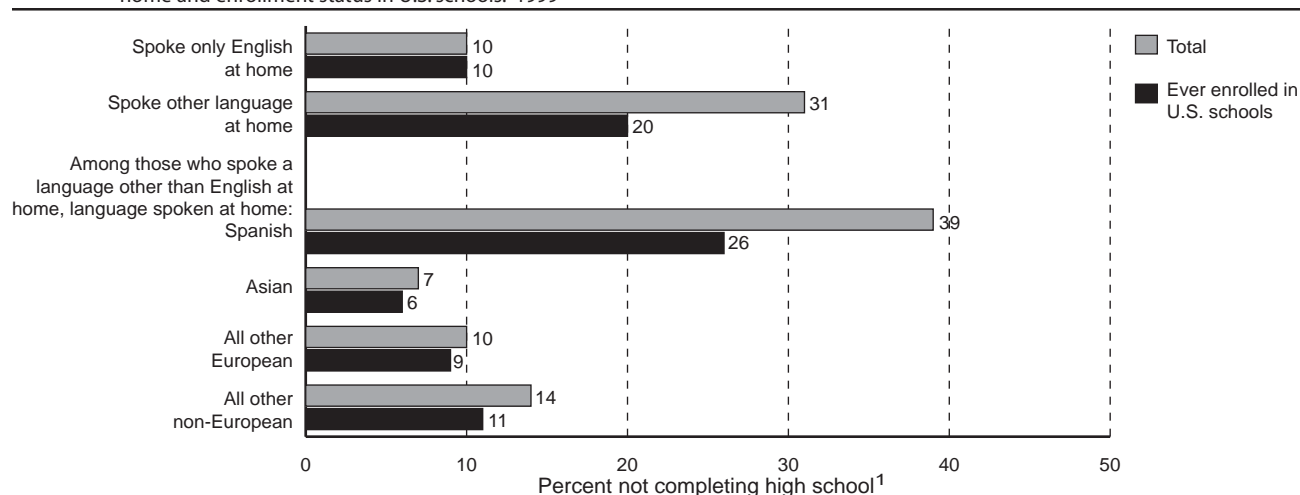
NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

completed the minimum years of school required in their country of birth before entering the United States (e.g., 8 years in Mexico), or that they had entered the United States when they were older than the age of compulsory school attendance in the United States.

Indeed, among those young adults who were not currently enrolled in school, regardless of what language they reported speaking at home, those who had never been enrolled in a U.S. school were less likely to have completed high school in their country of birth prior to coming to the United States than those persons who had ever been enrolled in U.S. schools (figure 7).<sup>22</sup> Among those persons who had never been enrolled in a U.S. school, language minority persons were almost twice as likely not to have

Figure 7. Among 18- to 24-year-olds who were not enrolled in school, percentage who did not complete high school, by language spoken at home and enrollment status in U.S. schools: 1999



<sup>1</sup>High school completers include those who completed high school by means of an equivalency test such as the GED.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

<sup>22</sup>As discussed in McMillen, Kaufman, and Klein (1997), the data confirm that Hispanic immigrants often have high dropout rates. However, immigration does not entirely account for the higher dropout rates of Hispanic youth because native-born Hispanic youth are more likely to be dropouts than their native-born non-Hispanic peers.

completed high school than persons who spoke only English at home (63 percent vs. 34 percent). Similarly, among persons who had ever attended school in the United States, language minority persons were about twice as likely not to have completed high school (20 percent vs. 10 percent).

Among language minority young adults, the rates for high school noncompletion varied by language spoken. Among language minorities who had ever been enrolled in U.S. schools, Spanish speakers were less likely to have completed high school than other language minority young adults (26 percent vs. 6–11 percent). Also among those who had never enrolled in a U.S. school, Spanish speakers were less likely to have completed high school compared to other language minority young adults.

### **Postsecondary Enrollment Status: 18- to 24-Year-Olds**

The following section examines the 1999 postsecondary enrollment status of young adults aged 18–24.

- ◆ *For 18- to 24-year-olds in most language minority groups, postsecondary enrollment is associated with English language use and ability.*

Young adults who spoke English at home were more likely than those speaking other languages to be enrolled in a postsecondary institution in 1999 (37 percent vs. 28 percent) (table 12). In turn, language minority 18- to 24-year-olds who spoke English very well were more likely than those who spoke English with difficulty to be enrolled that year (38 percent vs. 14 percent). Moreover, there were no detectable differences between the enrollment of language minorities who spoke English very well and those speaking only English at home (38 percent and 37 percent, respectively).

As with 18- to 24-year-olds overall, language minority 21- to 24-year-olds who spoke English very well were about as likely as those who spoke only English at home to be enrolled (32 percent and 29 percent, respectively). Additionally, among 21- to 24-year-olds, those who spoke English with difficulty were less likely than those who spoke English very well or those who spoke only English at home to be enrolled (13 percent vs. 32 and 29 percent, respectively). Among 18- to 20-year-olds, 15 percent of those who spoke English with difficulty were enrolled compared with 44 percent of those who spoke English very well.

Spanish-speaking 18- to 24-year-olds, overall and within both age subgroups, were less likely than other language minority young adults to be enrolled in postsecondary education. Lower rates of postsecondary enrollment for Spanish speakers versus Asian, other European and other non-European language minority groups are not surprising given the former group's relatively higher rates of high school noncompletion (table 10).

Among Spanish speakers, the probability of being enrolled in postsecondary education was related to their English language ability, at each age subgroup. For example, 35 percent of 18- to 20-year-old Spanish speakers who spoke English very well were enrolled in some level of postsecondary schooling in 1999, compared with 11 percent of those who spoke English with difficulty (table 12). Among 21- to 24-year-olds, the corresponding proportions were 27 percent and 4 percent, respectively.

- ◆ *Among language minority high school graduates, enrollment in postsecondary education is associated with reported English-speaking ability.*

Aggregate statistics on oral English proficiency may conceal the educational progress of language minorities who possess the academic background necessary for postsecondary matriculation. Among

Table 12. Number of 18- to 24-year-olds, and of those, percentage and number enrolled in postsecondary institutions, by language characteristics and age group: 1999

Language characteristics	18- to 24-year-olds			18- to 20-year-olds			21- to 24-year-olds		
	Total number (in thousands)	Currently enrolled in postsecondary institutions (in thousands)	Percent currently enrolled	Total number (in thousands)	Currently enrolled in postsecondary institutions (in thousands)	Percent currently enrolled	Total number (in thousands)	Currently enrolled in postsecondary institutions (in thousands)	Percent currently enrolled
Total <sup>1</sup>	26,041	9,259	35.6	11,700	5,264	45.0	14,342	3,995	27.9
Spoke only English at home	21,128	7,869	37.2	9,639	4,546	47.2	11,488	3,323	28.9
Spoke other language at home	4,914	1,390	28.3	2,060	718	34.8	2,853	672	23.6
English-speaking ability									
Spoke English "very well"	3,010	1,133	37.7	1,405	617	43.9	1,604	516	32.1
Spoke English with difficulty	1,904	257	13.5	655	100	15.3	1,249	157	12.5
Language spoken at home									
Spanish	3,509	713	20.3	1,514	396	26.2	1,995	317	15.9
Asian	546	309	56.6	227	145	63.8	319	164	51.4
Other European	359	173	48.3	137	82	59.6	222	92	41.3
Other non-European	499	196	39.2	183	96	52.4	317	100	31.6
Language spoken at home									
Spoke English "very well"									
Spanish	2,010	618	30.8	967	336	34.7	1,043	283	27.1
Asian	417	237	56.7	190	121	63.4	227	116	51.0
Other European	245	133	54.3	116	77	65.8	129	57	44.0
Other non-European	337	145	43.0	132	84	63.9	205	61	29.6
Language spoken at home									
Spoke English with difficulty									
Spanish	1,500	94	6.3	548	60	11.0	952	34	3.6
Asian	128	72	56.2	36	24	65.9	92	48	52.5
Other European	114	40	35.2	21	5	24.5	93	35	37.6
Other non-European	162	51	31.3	51	11	22.5	112	39	35.2

<sup>1</sup>Includes 1,501 (in thousands) who were enrolled in grades 7–12.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

high school completers, there were no detectable differences between language minority 18- to 24-year-olds and those who spoke only English at home to be enrolled in college in 1999 (43 percent and 44 percent, respectively) (table 13). However, among high school completers, language minorities who spoke English very well were more likely than their counterparts who spoke English with difficulty to be enrolled in postsecondary education (49 percent vs. 29 percent). Furthermore, among high school completers, language minorities who spoke English very well were slightly more likely than those who spoke only English at home to be enrolled (49 percent vs. 44 percent).

Table 13. Number of 18- to 24-year-olds who had completed high school, and percentage distribution according to postsecondary enrollment status, by language characteristics: 1999

Language characteristics	Total number (in thousands)	Enrollment status	
		Percent enrolled in college (percent)	Percent not enrolled in college (percent)
Total	21,179	43.5	56.5
Spoke only English at home	17,978	43.6	56.4
Spoke other language at home	3,200	43.1	56.9
English-speaking ability			
Spoke English "very well"	2,304	48.7	51.3
Spoke English with difficulty	897	28.7	71.3
Language spoken at home			
Spanish	2,012	35.3	64.7
Asian	468	64.7	35.3
Other European	309	55.3	44.7
Other non-European	412	47.5	52.5
		Spoke English "very well"	
Language spoken at home			
Spanish	1,451	42.4	57.6
Asian	355	65.0	35.0
Other European	207	63.0	37.0
Other non-European	291	49.9	50.1
		Spoke English with difficulty	
Language spoken at home			
Spanish	561	16.8	83.2
Asian	113	64.0	36.0
Other European	101	39.5	60.5
Other non-European	121	41.8	58.2

NOTE: Detail may not sum to totals because of rounding. High school completers include those who completed high school by means of an equivalency test such as the GED.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

◆ *Among high school completers, the language spoken at home appears to be associated with enrollment in postsecondary education.*

As table 13 shows, the language that 18- to 24-year-old high school completers spoke at home may be associated with whether they were enrolled in postsecondary education in 1999. Specifically, among high school graduates, those who spoke an Asian language at home were more likely than those who spoke either Spanish or those who spoke only English at home to be enrolled in postsecondary education (65 percent vs. 35 and 44 percent, respectively). Even among those who spoke English with difficulty, Asians were more likely to be enrolled in postsecondary education than other language minority

groups (64 percent compared with 17 percent of Spanish speakers and 42 percent of speakers of other non-European languages).<sup>23</sup>

- ◆ *When disaggregated by English-speaking ability, language minorities who speak English with difficulty are less likely than their counterparts to attain more than a high school education.*

Among those who completed high school and pursued postsecondary education, there were no detectable differences between language minority young adults and those speaking only English at home in attainment of various levels of postsecondary education (table 14). For example, the proportion of language minority 18- to 24-year-olds who had completed a bachelor's degree or higher was not detectably different from that of English speakers: about 10 percent of those speaking a language other than English had completed a bachelor's degree or higher, compared with 11 percent of English speakers.

Table 14. Number of 18- to 24-year-olds who had completed high school, and percentage distribution according to highest educational attainment, by language characteristics: 1999

Language characteristics	High school completers <sup>1</sup> (in thousands)	Percentage distribution by highest educational attainment			
		Completed high school	Some college	Associate's degree	Bachelor's degree or higher
Total	21,179	40.9	42.8	5.8	10.5
Spoke only English at home	17,978	40.4	43.1	5.8	10.6
Spoke other language at home	3,200	43.7	41.0	5.5	9.8
English-speaking ability					
Spoke English "very well"	2,304	39.3	44.6	5.3	10.8
Spoke English with difficulty	897	55.1	31.6	6.2	7.2
Spoke English "well"	505	47.6	35.1	8.8	8.5
Spoke English "not well"	307	66.9	27.3	2.7	3.2
Spoke English "not at all"	85	‡	‡	‡	‡
Language spoken at home					
Spanish	2,012	54.0	35.6	5.6	4.8
Asian	468	20.8	56.4	5.8	17.0
Other European	309	27.9	45.8	6.8	19.6
Other non-European	412	31.6	46.0	3.7	18.8

‡Did not meet reporting standards.

<sup>1</sup>High school completers include those who completed high school by means of an equivalency test such as the GED.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Language minority young adults who spoke English with difficulty were less likely than their counterparts who spoke English very well (including those who spoke only English at home) to have completed some level of education beyond a high school diploma or its equivalent. About one-half (55 percent) of those who spoke English with difficulty had attained no more than a high school education, compared with 39 to 40 percent of their counterparts who spoke English very well.

## Income and Employment

As the preceding section showed, the English language ability of 5- to 24-year-olds is associated with their educational attainment. The next section explores the relationship between English language ability and economic indicators by analyzing such measures as family income, employment status, and occupation with respect to the English language ability of youth and young adults.

<sup>23</sup>Please see Appendix C: Survey Methodology and Data Reliability for a discussion of issues of potential bias.

- ◆ *Language minority youth and young adults have lower family incomes than those who speak only English at home. In addition, Spanish-speaking youth were more likely than those who spoke Asian and other European languages to live in low-income families.*

A majority (90 percent) of 5- to 24-year-olds lived with family members in 1999. Among young adults (aged 18–24), approximately 70 percent lived with family members (table 15).<sup>24</sup> Family income data reported in the CPS provide valuable information about the relationship between socioeconomic status and home language use for individuals in these age groups.

Table 15. Number of 5- to 24-year-olds and percentage distribution according to whether they lived with family, by age group and language spoken at home: 1999

Age group and language spoken at home	Total number (in thousands)	Living with family <sup>1</sup> (percent)	Did not live with family (percent)
Total	78,742	89.5	10.5
5- to 17-year-olds	52,701	99.0	1.0
Spoke only English at home	43,885	99.1	0.9
Spoke other language at home	8,815	98.5	1.5
18- to 24-year-olds	26,041	70.3	29.7
Spoke only English at home	21,128	69.9	30.1
Spoke other language at home	4,914	72.1	27.9

<sup>1</sup>To be considered as “living with family,” the reference person who responded to the survey had to define the 5- to 24-year-old as their child, grandchild, brother/sister, spouse, or other relative, or as a nonrelative living with relatives in the household.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Among youth and young adults in each age group who lived with family members, those who spoke a language other than English at home were more likely than those who spoke only English to live in a low-income family (table 16).<sup>25</sup> Conversely, among youth and young adults who lived with family members, those who spoke a language other than English at home were about half as likely as those who spoke only English to live in a high-income family (9–13 percent vs. 22–28 percent). Among all age groups, language minorities who spoke English very well were more likely than those who spoke English with difficulty to live in a high-income family.

Among those who lived with their family and spoke a language other than English, family income was associated with the language spoken at home. Among 5- to 13-year-olds, for example, Spanish-speaking children were generally less likely than children from all other language minority groups to live in a high-income family (5 percent vs. 19–29 percent). About 7 percent of 18- to 24-year-old Spanish speakers were in high-income families, compared with 20 percent of those speaking Asian languages, 30 percent of other European language speakers, and 17 percent of speakers of other non-European languages. Conversely, Spanish speakers aged 5–13 and 18–24 were more likely than other language minorities to live in low income families.

<sup>24</sup>Because financial dependency status could not be determined from the CPS survey, the “living with family” measure was created. To be considered “living with family,” the survey respondent had to define the 5- to 24-year-old as his or her child, grandchild, brother/sister, spouse, or other relative. The respondent could also define the 5- to 24-year-old as his or her nonrelative who had relatives in the household. This approach does not ensure that the person responding for the youth or young adult represents the family of origin of the youth or young adult.

<sup>25</sup>Families with annual incomes of less than \$19,999 were classified as low-income, families with incomes between \$20,000 and \$74,999 as middle income, and families with incomes of \$75,000 or more as high income.



Table 16. Among 5- to 24-year-olds who lived with family, percentage distribution according to family income, by age group and language characteristics: 1999

Language characteristics	Total <sup>1</sup> number (in thousands)	Family income								
		5- to 13-year-olds			14- to 17-year-olds			18- to 24-year-olds		
		Low	Middle	High	Low	Middle	High	Low	Middle	High
Total	62,173	21.6	58.7	19.7	18.8	57.4	23.8	20.1	55.6	24.3
Spoke only English at home	51,572	18.5	59.6	21.9	15.7	58.5	25.9	17.5	55.1	27.5
Spoke other language at home	10,600	37.2	53.9	9.0	34.9	52.1	13.1	31.6	57.8	10.7
English-speaking ability										
Spoke English "very well"	7,315	32.5	56.7	10.9	31.1	54.3	14.6	26.4	59.9	13.7
Spoke English with difficulty	3,285	46.5	48.3	5.2	49.7	43.3	7.0	41.2	53.8	5.0
Spoke English "well"	1,940	43.7	49.4	6.9	47.0	43.5	9.5	37.7	56.2	6.1
Spoke English "not well"	1,053	51.4	47.0	1.6	54.2	45.8	†	46.2	48.4	5.4
Spoke English "not at all"	292	54.1	41.3	4.7	†	†	†	38.8	59.9	†
Language spoken at home										
Spanish	7,787	40.3	55.2	4.5	37.7	52.6	9.7	36.1	57.1	6.8
Asian	1,289	29.8	50.9	19.4	25.5	57.6	16.9	21.5	58.4	20.1
Other European	538	16.5	54.7	28.8	26.0	43.4	30.6	13.8	56.3	30.0
Other non-European	985	32.7	46.7	20.6	29.8	46.6	23.7	19.2	63.7	17.1
					Spoke English "very well"					
Language spoken at home										
Spanish	5,233	36.0	58.3	5.6	34.3	54.7	11.0	31.1	60.2	8.7
Asian	971	27.3	54.2	18.6	23.0	61.0	16.0	17.6	60.5	21.9
Other European	397	10.7	56.6	32.7	18.0	49.2	32.9	9.2	54.1	36.8
Other non-European	715	23.5	47.7	28.7	24.8	47.7	27.6	16.1	61.4	22.5
					Spoke English with difficulty					
Language spoken at home										
Spanish	2,554	48.1	49.5	2.5	50.7	44.6	4.7	44.3	52.0	3.7
Asian	318	36.9	41.5	21.6	33.8	46.6	19.6	34.8	51.1	14.1
Other European	142	28.7	50.7	20.6	80.2	†	†	26.6	62.2	11.2
Other non-European	271	54.1	44.3	1.7	54.1	41.2	†	25.9	68.6	5.5

†Did not meet reporting standards.

<sup>1</sup>Based on 88.2 percent of respondents reporting valid income data.

NOTE: Detail may not sum to totals because of rounding. To be considered as "living with family," the reference person who responded to the survey had to define the 5- to 24-year-old as their child, grandchild, brother/sister, or other relative, or as a nonrelative living with relatives in the household. "Low income" is defined as the bottom 20 percent of all family incomes (with 5- to 24-year-old members) for 1999; "middle income" is between 20 and 80 percent of all family incomes; and "high income" is the top 20 percent of all family incomes.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

◆ *Language minority young adults are less likely than those speaking only English at home to be employed.*

In addition to family income, the employment status of youth and young adults provides another measure of their economic status. Between 1979 and 1999, the number of 18- to 24-year-olds who lived in the United States and spoke a language other than English at home nearly doubled, climbing from 2.36 million in 1979 to 4.91 million in 1999 (table 17). Consistent with this increase, the number of employed 18- to 24-year-olds who spoke a language other than English also doubled in this time frame. About 1.4 million language minority young adults were working in 1979, compared with 2.9 million in 1999. While the number of those who were employed increased in absolute terms between 1979 and 1999, no significant differences were detected in the proportion employed over the period: in 1999, 60 percent of language minority young adults were employed, compared with 61 percent in 1979.

Table 17. Number of 18- to 24-year-olds, and number and percentage who were employed,<sup>1</sup> by language spoken at home: Selected years: 1979–99

Language spoken at home	Total number (in thousands)	Employed	
		Number (in thousands)	Percent
<b>1979</b>			
Total	27,979	18,488	66.1
Spoke only English at home	25,622	17,051	66.5
Spoke other language at home	2,357	1,437	61.0
<b>1989</b>			
Total	25,202	16,649	66.1
Spoke only English at home	21,630	14,460	66.9
Spoke other language at home	3,572	2,189	61.3
<b>1992</b>			
Total	24,278	15,339	63.2
Spoke only English at home	20,531	13,303	64.8
Spoke other language at home	3,747	2,036	54.3
<b>1995</b>			
Total	24,900	15,850	63.7
Spoke only English at home	20,684	13,460	65.1
Spoke other language at home	4,216	2,390	56.7
<b>1999</b>			
Total	26,041	17,168	65.9
Spoke only English at home	21,128	14,218	67.3
Spoke other language at home	4,914	2,949	60.0

<sup>1</sup>“Employed” include all civilians who during the survey week did any work at all as a paid employee or in their own business or profession or on their own farm, or who work 15 hours or more as unpaid workers on a farm or a business operated by a member of the family; and all of those who have jobs but who are not working because of illness, bad weather, vacation, or a labor management dispute or because they are taking time off for personal reasons, whether or not they are seeking other jobs.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), November 1979, November 1989, October 1992, October 1995, and October 1999.

Over the last two decades, language minority young adults were less likely than other young adults to be employed. For example, in 1999, 60 percent of language minority young adults held jobs, compared with 67 percent of their counterparts who only spoke English at home.

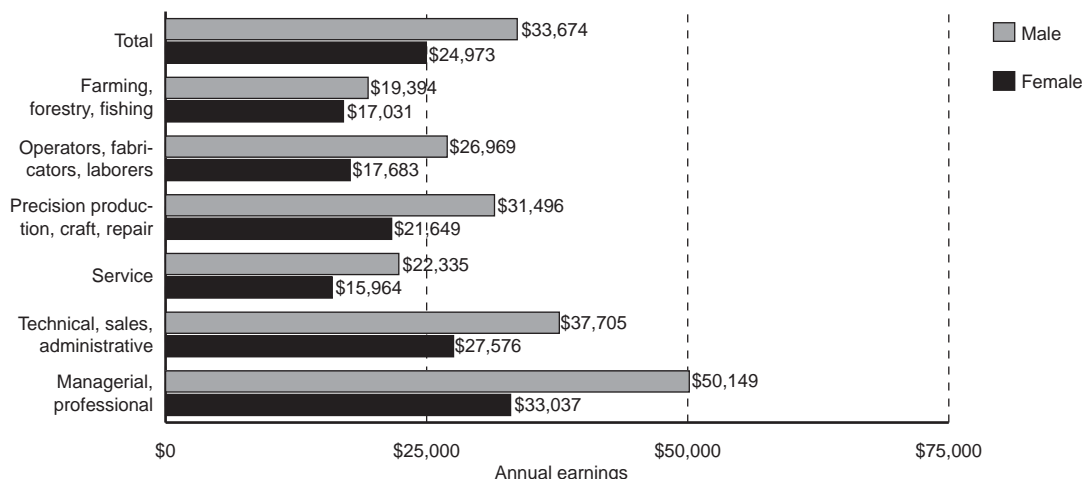
- ◆ *Language minority young adults are more likely than other young adults to find work in traditionally low-wage occupations. However, among language minorities who spoke Spanish, those who spoke English very well were more likely than those who spoke English with difficulty to be employed in higher paying occupations.*

The occupation classification system used in the CPS is organized around six broad categories—managerial, professional; technical, sales, administrative; service; precision production, craft, repair; operators, fabricators, laborers; and farming, forestry, fishing—each of which includes many occupation areas. The occupation area in which a person works indicates labor market status, in part because workers in different occupations are compensated at different rates. As figure 8 shows, median annual earnings vary widely among different occupation categories for both males and females.

Among young adults employed in 1999, language minorities were employed in specific occupations at rates that varied from those of their counterparts whose home language was English. Generally, lan-



Figure 8. Median annual earnings of year-round, full-time workers, by occupation category and sex: March 1997



SOURCE: U.S. Bureau of the Census, *Statistical Abstract of the United States*, 1999. Washington, DC: United States Government Printing Office.

guage minority young adults were slightly more likely than their English-speaking counterparts to be employed in lower paying occupation categories such as operators, fabricators, laborers jobs (21 percent vs. 18 percent), and they were somewhat less likely to be working in higher paying managerial, professional (10 percent vs. 14 percent) or technical, sales, administrative fields (32 percent vs. 36 percent) (table 18).

Among language minority young adults, individuals who spoke English with difficulty were more likely than those who spoke English very well to be employed in farming, forestry, fishing; precision production, craft, repair; or as operators, fabricators, laborers. About 11 percent of 18- to 24-year-olds who spoke English with difficulty were working in the farming, forestry, fishing industries, compared with 3 percent of those who spoke English very well (table 19). About 18 percent of those who spoke English with difficulty were working in precision production, craft, repair and 30 percent as operators, fabricators, laborers; compared with 7 percent and 15 percent, respectively, of those with facility in English.

In contrast, 18- to 24-year-olds who spoke English very well were more likely than those who spoke English with difficulty to be working in the higher paying managerial, professional or technical, sales, administrative fields. About 13 percent of those who spoke English very well were working in managerial, professional occupations and 43 percent in technical, sales, administrative fields, compared with 3 percent and 14 percent, respectively, of those who spoke English with difficulty.

As with the total population of 18–24 year olds, Spanish speakers who spoke English very well were more likely than Spanish speakers who spoke English with difficulty to be employed in white-collar occupations, including managerial, professional or technical, sales, administrative fields. Spanish speakers who spoke English with difficulty were more likely than their counterparts who spoke English very well to be employed in lower paying jobs, including those in precision production, craft, repair as operators, fabricators, laborers. While there appear to be similar relationships among speakers of Asian and other non-European languages, these differences are associated with large standard errors, making the estimates somewhat unreliable and the differences not statistically significant.

Table 18. Number of employed<sup>1</sup> 18- to 24-year-olds, and percentage distribution according to occupational category, by language spoken at home: Selected years 1979–99

Language spoken at home	Number employed (in thousands)	Percent in occupation					
		Managerial, professional	Technical, sales, administrative	Service	Precision production, craft, repair	Operators, fabricators, laborers	Farming, forestry, fishing
1979							
Total	27,979	14.0	29.8	14.3	11.8	25.1	5.0
Spoke only English	25,622	14.2	29.9	14.1	12.1	24.9	4.9
Spoke other language	2,357	11.8	28.6	16.5	8.7	27.5	6.9
1989							
Total	25,202	12.1	37.8	18.3	10.0	19.1	2.8
Spoke only English	21,630	12.8	38.3	17.9	10.0	18.8	2.3
Spoke other language	3,572	7.7	34.7	20.7	10.0	21.0	5.9
1992							
Total	24,278	11.2	37.3	21.1	8.4	18.7	3.3
Spoke only English	20,531	11.6	38.0	20.8	8.4	18.1	3.0
Spoke other language	3,747	8.0	32.9	22.9	8.3	22.3	5.5
1995							
Total	24,900	12.0	34.5	20.8	8.5	20.8	3.3
Spoke only English	20,684	12.7	35.0	20.5	8.5	20.2	3.0
Spoke other language	4,216	7.9	31.7	22.5	8.4	24.6	5.0
1999							
Total	26,041	13.6	35.1	20.9	9.4	18.1	3.0
Spoke only English	21,128	14.4	35.8	20.9	9.1	17.5	2.3
Spoke other language	4,914	9.5	31.8	20.9	10.7	20.8	6.3

<sup>1</sup>“Employed” include all civilians who during the survey week did any work at all as a paid employee or in their own business or profession or on their own farm, or who work 15 hours or more as unpaid workers on a farm or a business operated by a member of the family; and all of those who have jobs but who are not working because of illness, bad weather, vacation, or a labor management dispute or because they are taking time off for personal reasons, whether or not they are seeking other jobs.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), November 1979, November 1989, October 1992, October 1995, and October 1999.

Table 19. Number of 18- to 24-year-olds who spoke a language other than English at home, number and percentage who were employed, and of those employed, percentage distribution according to occupational category, by language characteristics: 1999

Language characteristics	Total number (in thousands)	Employed <sup>1</sup>		Occupation category of those employed					
		Number (in thousands)	Percent	Managerial, professional	Technical, sales, administrative	Service	Precision production, craft, repair	Operators, fabricators, laborers	Farming, forestry, fishing
Total	4,914	2,949	60.0	9.5	31.8	20.9	10.7	20.8	6.3
English-speaking ability									
Spoke English "very well"	3,010	1,826	60.7	13.4	42.8	18.7	7.2	15.0	2.8
Spoke English with difficulty	1,904	1,124	59.0	3.2	13.5	23.6	18.1	30.3	11.3
Spoke English "well"	774	415	53.7	5.7	23.1	24.8	17.0	27.2	2.2
Spoke English "not well"	771	512	66.5	0.7	8.5	24.4	18.9	32.1	15.5
Spoke English "not at all"	359	196	54.5	4.4	6.0	19.2	18.5	32.1	19.8
Language spoken at home									
Spanish	3,509	2,177	62.0	6.5	28.2	21.3	13.1	23.2	7.7
Asian	546	281	51.5	18.4	38.5	22.0	6.4	13.7	1.1
Other European	359	205	57.1	17.2	45.2	15.6	6.1	13.7	2.3
Other non-European	499	286	57.3	18.5	41.0	17.5	7.4	14.7	0.9
Spoke English "very well"									
Language spoken at home									
Spanish	2,010	1,250	62.2	9.9	40.9	19.7	9.0	17.2	3.3
Asian	417	226	54.2	21.6	41.9	21.8	2.1	11.3	1.3
Other European	245	156	63.8	19.5	52.8	10.9	2.9	11.0	3.0
Other non-European	337	193	57.2	21.9	48.3	14.7	5.5	8.3	1.3
Spoke English with difficulty									
Language spoken at home									
Spanish	1,500	926	61.8	1.9	11.2	23.4	18.5	31.3	13.7
Asian	128	55	43.0	‡	24.4	22.9	24.2	23.4	0.0
Other European	114	49	42.9	‡	‡	‡	‡	‡	‡
Other non-European	162	93	57.4	‡	26.1	23.1	‡	28.0	‡

‡Did not meet reporting standards.

<sup>1</sup>"Employed" include all civilians who during the survey week did any work at all as a paid employee or in their own business or profession or on their own farm, or who work 15 hours or more as unpaid workers on a farm or a business operated by a member of the family; and all of those who have jobs but who are not working because of illness, bad weather, vacation, or a labor management dispute or because they are taking time off for personal reasons, whether or not they are seeking other jobs.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.



## Chapter 4: Summary

---

The percentage of 5- to 24-year-olds who speak a language other than English at home has increased over the past two decades, climbing from 9 percent in 1979 to 17 percent in 1999. The percentage of these language minority youth and young adults speaking Spanish has increased disproportionately, rising from 64 percent in 1979 to 72 percent in 1999. Although immigration rates have increased over this 20-year period, in 1999 nearly two-thirds of all 5- to 24-year-olds who spoke a language other than English at home were born in the United States.

While overall there were no detectable differences in the English language ability among all youth and young adults who spoke a language other than English at home over the last two decades, the proportion who spoke English with difficulty changed for some language groups. Specifically, 5- to 24-year-old speakers of Asian languages were more likely to be reported as speaking English with difficulty in 1999 than they had been in 1979. While there were no detectable differences in the proportion reporting difficulty speaking English among Spanish speakers; among speakers of European languages other than Spanish, there was a decrease in the proportion reporting speaking English with difficulty over this time. Moreover, the proportion who spoke English with difficulty varied with nativity; foreign-born youth were more likely than native-born language minorities to report speaking English with difficulty. The CPS data also revealed that parental length of residency was associated with English language ability for native-born youth; that is, the language ability of youth improved the longer a parent had resided in the United States.

In school, language minority youth were no more likely than those who spoke only English at home to repeat a grade. Among 5- to 17-year-olds, there was no association between repeating a grade and either language minority status or the ability to speak English. However, as others have found, language minority youth, and particularly Spanish speakers, were less likely than those who spoke only English at home to complete high school.<sup>26</sup> Conversely, the better a young person spoke English, the more likely he or she was to have completed high school.

Among 18- to 24-year-olds who had completed high school, English-speaking ability was associated with enrollment at the postsecondary level. In fact, language minority young adults who reported speaking English very well were more likely than young adults whose home language was English to enroll in postsecondary institutions.

With respect to economic status, family income was associated with the language spoken at home. Among young adults who lived with family members, those who spoke a language other than English at home were more likely than their counterparts who spoke only English to live in low-income families. Furthermore, Spanish speakers were generally less likely than those in any other language group to live in high-income families.

---

<sup>26</sup>See McMillen, Kaufman, and Klein. (1997). *Dropout Rates in the United States: 1995*.

Consistent with the increased number of language minorities in the population, there also has been an increase in the number of 18- to 24-year-old language minorities who were employed. However, language minorities were less likely than their counterparts whose home language was English to be employed. Furthermore, language ability was associated with specific occupational areas, with those speaking English very well being more likely than those speaking English with difficulty to be employed in higher paying occupations.

## References

---

- August, D. and Hakuta, K. (Eds.) (1997). *Improving Schooling for Language-Minority Children: A Research Agenda*, Washington, DC: National Research Council and Institute of Medicine, The National Academies Press.
- Baker, B. and Markham, P. (2002). State School Funding Policies and Limited English Proficient Students. *Bilingual Research Journal*, 26: 3 (Fall 2002, Arizona State University).
- Brady, D., Owings, J., and Quinn, P. (1992). *Language Characteristics and Academic Achievement: A Look at Asian and Hispanic Eighth Graders in NELS:88*. (NCES 92-479). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Denton, D.R. (2001). *Finding Alternative to Failure: Can States End Social Promotion and Reduce Retention Rates?* Atlanta, GA: Southern Regional Education Board.
- Garcia, E. (1999). *Student Cultural Diversity: Understanding and Meeting the Challenge*. Boston, MA: Houghton Mifflin Co.
- Hakuta, K. (1986). *Mirror of Language: The Debate on Bilingualism*. New York: Basic Books.
- Hakuta, K., Goto-Butler, Y., and Witt, D. (2000). *How Long Does it Take English Learners to Attain Proficiency?* University of California Linguistic Minority Research Institute: Policy Report 2000-1.
- Han, M., Baker, D., and Rodriguez, C. (1997). *A Profile of Policies and Practices for Limited English Proficient Students: Screening Methods, Program Support, and Teacher Training (SASS 1993-94)* (NCES 97-472). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Henke, R.R., Choy, S.P., Geis, S., and Broughman, S.P. (1996). *Schools and Staffing in the United States: A Statistical Profile, 1993-94* (NCES 96-124). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Hopstock, P.J. and Bucaro, B.J. (1993, December). *A Review and Analysis of Estimates of the LEP Student Population*. Arlington, VA: Development Associates, Inc., Special Issues Analysis Center.
- Karweit, N.L. (1999, March). *Grade Retention: Prevalence, Timing, and Effects*. Report No. 33. Baltimore/Washington, DC: Johns Hopkins University and Howard University, Center for Research on the Education of Students Placed At Risk (CRESPAR).
- McArthur, E. (1993). *Language Characteristics and Schooling in the United States, A Changing Picture: 1979 and 1989* (NCES 93-699). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

- McMillen, M., Kaufman, P., and Klein, S. (1997). *Dropout Rates in the United States: 1995* (NCES 97-473). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Moss, M. and Puma, M. (1995). *Prospects: The Congressionally Mandated Study of Educational Growth and Opportunity: First Year Report on Language-Minority and Limited English Proficient Students*. Washington, DC: U.S. Department of Education.
- Prince, C. and Hubert, J. (1994, Spring). Measuring the Cost of Bilingual Education. *The Journal of Educational Issues of Language-Minority Students*, 13: 121–135.
- Roderick, M., Nagaoka, J., Bacon, J., and Easton, J.Q. (2000). *Update: Ending Social Promotion—Passing, Retention, and Achievement Trends Among Promoted and Retained Students 1995–1999*. Charting Reform in Chicago: Data Brief. Chicago: Consortium on Chicago School Research.
- Stearns, C. and Watanabe, S. (2002). *Hispanic Serving Institutions: Statistical Trends From 1990 to 1999* (NCES 2002-051). U.S. Department of Education, National Center for Education Statistics. Washington, DC.
- U.S. Department of Education. (2003). *Digest of Education Statistics, 2002* (NCES 2003-060). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Justice, Immigration and Naturalization Service. (2000). *1998 Statistical Yearbook of the Immigration and Naturalization Service* (M-367). Washington, DC: U.S. Government Printing Office.



## Appendix A: Standard Error Tables

---



Table A1. Standard errors for table 1: Among 5- to 24-year-olds in the United States, number and percentage who spoke a language other than English at home, and percentage distribution by race/ethnicity: 1999

Race/ethnicity	Total number (in thousands)	Spoke language other than English at home		
		Number (in thousands)	As a percentage of population group	Percentage distribution of speakers
Total	†	186.0	0.24	†
Race/ethnicity				
White, non-Hispanic	206.9	70.3	0.14	0.48
Black, non-Hispanic	165.0	35.4	0.31	0.28
Hispanic	176.0	73.9	0.70	0.71
American Indian/Alaska Native	46.5	14.2	2.26	0.13
Asian/Pacific Islander	99.9	44.2	1.47	0.53

†Not applicable.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table A2. Standard errors for table 2: Number and percentage distribution of 5- to 24-year-olds who spoke a language other than English at home, by language spoken and age group: 1979 and 1999

Language spoken at home	Total (5- to 24-year-olds)		5- to 17-year-olds		18- to 24-year-olds	
	1979	1999	1979	1999	1979	1999
Total percent	†	†	†	†	†	†
Spanish	1.20	0.67	1.49	0.84	2.00	1.13
Asian	1.02	0.49	1.26	0.63	1.72	0.78
Other European	0.73	0.35	0.90	0.40	1.24	0.65
Other non-European	0.56	0.45	0.65	0.55	1.02	0.75
			In thousands			
Total number	150.7	186.0	119.5	149.7	92.2	110.3
Spanish	122.7	162.1	99.0	130.4	72.7	96.2
Asian	71.7	71.7	55.2	59.3	45.7	40.4
Other European	48.3	48.9	37.2	36.2	30.8	32.9
Other non-European	36.1	64.0	26.2	50.9	24.8	38.6

†Not applicable.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), November 1979 and October 1999.

Table A3. Standard errors for table 3: Number and percentage distribution of 5- to 24-year-olds who spoke a language other than English at home, by language spoken and by reported English-speaking ability: 1979 and 1999

Reported English-speaking ability by year	Total		Language spoken at home			
	Number (in thousands)	Percent	Spanish	Asian	Other European	Other non-European
Total persons who spoke a language other than English at home						
1979 (thousands)	150.7	†	75.6	64.3	46.2	35.2
1999 (thousands)	186.0	†	92.2	67.8	47.7	61.2
1979						
English-speaking ability						
Spoke English "very well"	124.1	1.19	1.52	1.93	4.02	5.38
Spoke English with difficulty	90.9	1.19	1.52	1.93	4.02	5.38
Spoke English "well"	68.6	0.98	1.27	1.63	3.37	4.83
Spoke English "not well"	50.8	0.77	0.99	1.07	3.23	3.14
Spoke English "not at all"	33.6	0.52	0.75	0.48	0.88	2.68
1999						
English-speaking ability						
Spoke English "very well"	157.4	0.70	0.84	1.79	2.77	2.14
Spoke English with difficulty	114.2	0.70	0.84	1.79	2.77	2.14
Spoke English "well"	86.2	0.58	0.68	1.67	2.38	1.84
Spoke English "not well"	67.6	0.47	0.59	0.80	1.52	1.39
Spoke English "not at all"	38.5	0.28	0.36	0.30	1.09	0.33

†Not applicable.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), November 1979 and October 1999.

Table A4. Standard errors for table 4: Number and percentage of 5- to 17-year-olds who spoke a language other than English at home by language characteristics and region: 1999

Region	Total 5- to 17-year-olds (in thousands)	Spoke a language other than English at home		Spoke English with difficulty		
		Number (in thousands)	Percent of total	Number (in thousands)	Percent of total	Percent of those who spoke a language other than English at home
Total	†	149.7	0.28	87.3	0.17	0.85
Northeast	138.4	66.5	0.67	35.6	0.36	1.79
Midwest	149.7	51.2	0.41	27.5	0.22	2.54
South	167.7	82.1	0.45	43.8	0.24	1.50
West	149.5	87.8	0.71	59.3	0.48	1.41

†Not applicable.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table A5. Standard errors for table 5: Number and percentage distribution of 5- to 24-year-olds who spoke a language other than English at home, by English-speaking ability and by place of birth and age group: 1999

Place of birth and age group	Number (in thousands)	Spoke English "very well"		Spoke English with difficulty	
		Number (in thousands)	Percent	Number (in thousands)	Percent
Total					
5- to 24-year-olds	186.0	157.4	0.70	114.2	0.70
5- to 17-year-olds	149.7	129.1	0.85	87.3	0.85
18- to 24-year-olds	110.3	90.1	1.21	73.4	1.21
Native-born					
5- to 24-year-olds	153.0	136.7	0.78	75.5	0.78
5- to 17-year-olds	132.1	116.2	0.94	69.8	0.94
18- to 24-year-olds	76.5	71.8	1.28	28.3	1.28
Foreign-born					
5- to 24-year-olds	120.8	85.9	1.22	87.9	1.22
5- to 17-year-olds	81.8	62.4	1.81	54.2	1.81
18- to 24-year-olds	87.7	58.9	1.62	68.4	1.62

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table A6. Standard errors for table 6: Among 5- to 24-year-olds who spoke a language other than English at home, number and percentage who spoke English with difficulty, by youth's place of birth, parents' year of entry into the United States, and age group: 1999

Spoke English with difficulty	Youth's place of birth			Parents' year of entry				
	Foreign-born	Native-born		1990 or later	1980-89	1970-79	Before 1970	Native-born parent
	Total	Total	With parent information					
Total 5- to 24-year olds								
Number (in thousands)	120.8	153.0	126.2	37.8	77.0	68.6	42.1	55.0
Percent	1.22	0.78	0.99	1.10	1.07	0.95	0.84	0.83
5- to 9-year-olds								
Number (in thousands)	43.3	87.1	77.7	30.6	55.5	37.3	18.8	27.9
Percent	3.44	1.56	1.79	4.93	2.60	3.76	7.74	4.91
10- to 13-year-olds								
Number (in thousands)	45.6	71.9	62.7	‡	41.8	34.8	16.5	26.0
Percent	3.22	1.58	1.84	‡	3.15	3.38	6.27	3.74
14- to 17-year-olds								
Number (in thousands)	52.1	68.2	56.9	11.2	28.2	33.7	21.2	30.3
Percent	2.70	1.43	1.67	12.51	3.38	3.08	3.40	3.09
18- to 20-year-olds								
Number (in thousands)	53.8	53.3	38.6	‡	12.9	23.6	17.8	21.3
Percent	2.71	1.79	2.61	‡	9.82	4.77	5.31	3.87
21- to 24-year-olds								
Number (in thousands)	69.1	54.8	31.9	‡	‡	20.0	19.6	14.1
Percent	2.01	1.82	3.33	‡	‡	5.95	5.20	5.42

‡Did not meet reporting standards.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table A7. Standard errors for table 7: Number and percentage distribution of foreign-born 5- to 24-year-olds who spoke a language other than English at home, by year of entry into the United States and by age group: 1999

Age group	Total foreign-born	Year of entry				
		1996-98	1990-95	1986-89	1980-85	1970-79
5- to 24-year-olds who spoke language other than English at home						
Number (thousands)	120.8	69.6	78.1	50.8	37.8	18.8
Percentage distribution	†	1.14	1.20	0.91	0.71	0.36
Percentage distribution according to year of entry, by age						
5- to 9-year-olds	†	3.46	3.46	†	†	†
10- to 13-year-olds	†	2.84	3.27	2.91	0.41	†
14- to 17-year-olds	†	2.35	2.74	2.53	1.98	†
18- to 20-year-olds	†	2.62	2.55	1.99	1.77	0.59
21- to 24-year-olds	†	1.91	2.00	1.41	1.32	0.96

†Not applicable.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table A8. Standard errors for table 8: Number of 5- to 17-year-olds, and number and percentage enrolled in school, by language characteristics: 1999

Language characteristic	Total number (in thousands)	Enrolled in school	
		Number (in thousands)	Percent
Total	94.0	105.1	0.11
Spoke only English at home	148.3	152.0	0.11
Spoke other language at home	143.8	142.0	0.33
English-speaking ability			
Spoke English "very well"	125.9	124.7	0.33
Spoke English with difficulty	79.3	77.3	0.84
Spoke English "well"	67.5	66.7	0.67
Spoke English "not well"	39.9	38.4	1.95
Spoke English "not at all"	16.0	11.7	9.51
Language spoken at home			
Spanish	124.7	122.8	0.42
Asian	56.7	56.3	0.56
Other European	34.8	34.3	1.44
Other non-European	48.8	48.4	0.85
Spoke English "very well"			
Language spoken at home			
Spanish	78.0	105.9	0.44
Asian	47.9	50.1	0.38
Other European	30.6	30.8	1.52
Other non-European	41.1	42.2	0.81
Spoke English with difficulty			
Language spoken at home			
Spanish	63.1	67.7	1.00
Asian	26.3	26.1	2.10
Other European	15.4	15.2	3.80
Other non-European	24.2	24.0	2.35

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table A9. Standard errors for table 9: Number of 5- to 17-year-olds who were enrolled in school, and of those, number and percentage who had ever repeated a grade, by language characteristics: 1999

Language characteristic	Total enrolled in school (in thousands)	Ever repeated grade	
		Number (in thousands)	Percent
Total	105.1	91.8	0.19
Spoke only English at home	152.0	85.0	0.21
Spoke other language at home	142.0	41.9	0.52
English-speaking ability			
Spoke English "very well"	124.7	36.1	0.61
Spoke English with difficulty	77.3	21.4	1.01
Spoke English "well"	66.7	18.5	1.19
Spoke English "not well"	38.4	9.2	1.83
Spoke English "not at all"	11.7	5.5	10.77
Language spoken at home			
Spanish	122.8	38.3	0.67
Asian	56.3	11.8	1.09
Other European	34.3	8.2	2.06
Other non-European	48.4	9.2	1.18
		Spoke English "very well"	
Language spoken at home			
Spanish	105.9	33.4	0.80
Asian	50.1	9.4	1.09
Other European	30.8	5.2	1.66
Other non-European	42.2	8.6	1.43
		Spoke English with difficulty	
Language spoken at home			
Spanish	67.7	18.9	1.17
Asian	26.1	7.2	3.07
Other European	15.2	6.3	7.58
Other non-European	24.0	3.5	1.86

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table A10. Standard errors for table 10: Number of 18- to 24-year-olds who were not enrolled in any grades K–12, and of those, percentage distribution according to high school completion status, by language characteristics: 1999

Language characteristic	Total number (in thousands)	High school completion status	
		Had not completed high school (percent)	Completed high school (percent)
Total	57.9	0.34	0.34
Spoke only English at home	105.1	0.33	0.33
Spoke other language at home	107.4	1.19	1.19
English-speaking ability			
Spoke English “very well”	87.3	1.27	1.27
Spoke English with difficulty	71.3	2.06	2.06
Spoke English “well”	45.7	2.99	2.99
Spoke English “not well”	46.6	3.17	3.15
Spoke English “not at all”	32.7	3.96	3.96
Language spoken at home			
Spanish	93.5	1.49	1.49
Asian	38.8	2.01	1.98
Other European	32.1	2.79	2.79
Other non-European	37.5	2.80	2.80
		Spoke English “very well”	
Language spoken at home			
Spanish	72.6	1.68	1.68
Asian	33.9	2.29	2.29
Other European	26.6	3.65	3.65
Other non-European	31.4	3.06	3.06
		Spoke English with difficulty	
Language spoken at home			
Spanish	63.9	2.26	2.26
Asian	19.2	4.13	4.13
Other European	18.1	4.14	4.14
Other non-European	20.8	5.87	5.87

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table A11. Standard errors for table 11: Number of 18- to 24-year-olds who were not enrolled in any grades K–12, and of those, percentage distribution according to whether they had ever attended school in the United States, by language spoken at home: 1999

Language spoken at home	Total number (in thousands)	Ever attended a U.S. school	
		Had not attended a U.S. school (percent)	Had attended a U.S. school (percent)
Total	57.9	0.21	0.21
Spoke only English at home	105.1	0.07	0.07
Spoke other language at home	107.4	1.11	1.11
Language spoken at home			
Spanish	93.5	1.40	1.40
Asian	38.8	2.09	2.09
Other European	32.1	3.23	3.23
Other non-European	37.5	2.57	2.57

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.





Table A13. Standard errors for table 13: Number of 18- to 24-year-olds who had completed high school, and percentage distribution according to postsecondary enrollment status, by language characteristics: 1999

Language characteristics	Total number (in thousands)	Enrollment status	
		Percent enrolled in college (percent)	Percent not enrolled in college (percent)
Total	109.9	0.52	0.52
Spoke only English at home	130.3	0.57	0.57
Spoke other language at home	92.5	1.53	1.53
English-speaking ability			
Spoke English "very well"	80.0	1.82	1.82
Spoke English with difficulty	51.4	2.64	2.64
Language spoken at home			
Spanish	75.3	1.86	1.86
Asian	37.4	3.86	3.86
Other European	30.5	4.94	4.94
Other non-European	35.2	4.30	4.30
		Spoke English "very well"	
Language spoken at home			
Spanish	64.7	2.27	2.27
Asian	32.7	4.42	4.42
Other European	25.0	5.86	5.86
Other non-European	29.6	5.12	5.12
		Spoke English with difficulty	
Language spoken at home			
Spanish	40.9	2.75	2.75
Asian	18.5	7.89	7.89
Other European	17.5	8.50	8.50
Other non-European	19.2	7.83	7.83

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table A14. Standard errors for table 14: Number of 18- to 24-year-olds who had completed high school, and percentage distribution according to highest educational attainment, by language characteristics: 1999

Language characteristics	High school completers (in thousands)	Highest educational attainment			
		Completed high school	Some college	Associate's degree	Bachelor's degree or higher
Total	109.9	0.59	0.59	0.28	0.37
Spoke only English at home	130.3	0.64	0.65	0.30	0.40
Spoke other language at home	92.5	1.53	1.52	0.70	0.92
English-speaking ability					
Spoke English "very well"	80.0	1.78	1.81	0.82	1.13
Spoke English with difficulty	51.4	2.90	2.71	1.41	1.51
Spoke English "well"	38.9	3.88	3.71	2.20	2.17
Spoke English "not well"	30.4	4.69	4.44	1.62	1.75
Spoke English "not at all"	16.1	‡	‡	‡	‡
Language spoken at home					
Spanish	75.3	1.94	1.86	0.90	0.83
Asian	37.4	3.28	4.00	1.89	3.03
Other European	30.5	4.46	4.95	2.50	3.94
Other non-European	35.2	4.00	4.29	1.62	3.36

‡Did not meet reporting standards.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table A15. Standard errors for table 15: Number of 5- to 24-year-olds and percentage distribution according to whether they lived with family, by age group and language spoken at home: 1999

Age group and language spoken at home	Total number (in thousands)	Living with family (percent)	Did not live with family (percent)
Total	†	0.17	0.17
5- to 17-year-olds	†	0.07	0.07
Spoke only English at home	131.9	0.07	0.07
Spoke other language at home	149.7	0.23	0.23
18- to 24-year-olds	†	0.44	0.44
Spoke only English at home	97.2	0.49	0.49
Spoke other language at home	110.3	1.12	1.12

†Not applicable.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table A16. Standard errors for table 16: Among 5- to 24-year-olds who lived with family, percentage distribution according to family income, by age group and language characteristics: 1999

Language characteristics	Total number (in thousands)	Family income								
		5- to 13-year-olds			14- to 17-year-olds			18- to 24-year-olds		
		Low	Middle	High	Low	Middle	High	Low	Middle	High
Total	176.1	0.35	0.42	0.34	0.51	0.65	0.56	0.49	0.61	0.52
Spoke only English at home	205.3	0.36	0.46	0.39	0.52	0.71	0.63	0.52	0.67	0.61
Spoke other language at home	167.3	1.15	1.19	0.68	1.76	1.84	1.24	1.48	1.58	0.98
English-speaking ability										
Spoke English "very well"	142.3	1.37	1.45	0.91	1.91	2.06	1.46	1.74	1.93	1.36
Spoke English with difficulty	98.0	2.06	2.06	0.91	4.10	4.06	2.09	2.66	2.70	1.18
Spoke English "well"	76.0	2.55	2.57	1.30	4.76	4.72	2.79	3.99	4.09	1.97
Spoke English "not well"	56.3	3.67	3.67	0.92	9.61	9.61	‡	4.32	4.33	1.96
Spoke English "not at all"	29.8	10.33	10.21	4.38	‡	‡	‡	6.26	6.29	‡
Language spoken at home										
Spanish	146.3	1.36	1.38	0.58	2.10	2.16	1.28	1.78	1.84	0.94
Asian	62.2	3.00	3.27	2.59	4.74	5.37	4.07	4.01	4.81	3.91
Other European	40.4	4.19	5.61	5.10	7.34	8.29	7.71	4.38	6.30	5.82
Other non-European	54.5	3.79	4.03	3.27	5.16	5.62	4.79	4.13	5.04	3.94
Language spoken at home										
Spanish	122.1	1.66	1.70	0.80	2.31	2.42	1.52	2.17	2.30	1.32
Asian	54.1	3.39	3.79	2.96	5.21	6.04	4.54	4.24	5.44	4.61
Other European	34.7	4.23	6.78	6.42	6.88	8.96	8.42	4.27	7.38	7.14
Other non-European	46.5	4.10	4.82	4.37	5.34	6.18	5.53	4.67	6.19	5.31
Language spoken at home										
Spanish	86.8	2.34	2.34	0.73	4.74	4.72	2.01	3.02	3.03	1.15
Asian	31.1	6.20	6.33	5.29	10.67	11.25	8.96	9.74	10.22	7.11
Other European	20.8	9.01	9.95	8.05	18.60	‡	‡	10.91	11.98	7.80
Other non-European	28.7	7.36	7.33	1.88	13.59	13.42	‡	8.11	8.59	4.22

‡Did not meet reporting standards.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table A17. Standard errors for table 17: Number of 18- to 24-year-olds, and number and percentage who were employed, by language spoken at home: Selected years: 1979–99

Language spoken at home	Total number (in thousands)	Employed	
		Number (in thousands)	Percent
1979			
Total	†	114.3	0.41
Spoke only English at home	67.1	117.8	0.43
Spoke other language at home	92.2	73.3	1.87
1989			
Total	†	124.1	0.49
Spoke only English at home	91.4	129.6	0.53
Spoke other language at home	151.7	122.5	2.23
1992			
Total	†	119.6	0.49
Spoke only English at home	89.6	123.5	0.53
Spoke other language at home	135.2	103.7	1.95
1995			
Total	†	112.1	0.45
Spoke only English at home	87.4	116.1	0.49
Spoke other language at home	99.1	77.9	1.28
1999			
Total	†	117.7	0.45
Spoke only English at home	97.2	123.7	0.50
Spoke other language at home	110.3	89.3	1.22

†Not applicable.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), November 1979, November 1989, October 1992, October 1995, and October 1999.

Table A18. Standard errors for table 18: Number of employed 18- to 24-year-olds, and percentage distribution according to occupational category, by language spoken at home: Selected years 1979–99

Language spoken at home	Number employed (in thousands)	Percent in occupation					
		Managerial, professional	Technical, sales, administrative	Service	Precision production, craft, repair	Operators, fabricators, laborers	Farming, forestry, fishing
1979							
Total	†	0.30	0.39	0.30	0.28	0.37	0.19
Spoke only English	67.1	0.31	0.41	0.31	0.29	0.39	0.19
Spoke other language	92.2	1.32	1.85	1.52	1.15	1.82	1.04
1989							
Total	†	0.34	0.50	0.40	0.31	0.41	0.17
Spoke only English	91.4	0.37	0.55	0.43	0.34	0.44	0.17
Spoke other language	151.7	1.22	2.18	1.86	1.38	1.87	1.08
1992							
Total	†	0.32	0.49	0.42	0.28	0.40	0.18
Spoke only English	89.6	0.36	0.54	0.45	0.31	0.43	0.19
Spoke other language	135.2	1.06	1.84	1.65	1.08	1.63	0.89
1995							
Total	†	0.30	0.44	0.38	0.26	0.38	0.17
Spoke only English	87.4	0.34	0.49	0.41	0.29	0.41	0.18
Spoke other language	99.1	0.70	1.20	1.08	0.72	1.11	0.56
1999							
Total	†	0.33	0.46	0.39	0.28	0.37	0.16
Spoke only English	97.2	0.37	0.51	0.43	0.30	0.40	0.16
Spoke other language	110.3	0.73	1.16	1.01	0.77	1.01	0.61

†Not applicable.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), November 1979, November 1989, October 1992, October 1995, and October 1999.

Table A19. Standard errors for table 19: Number of 18- to 24-year-olds who spoke a language other than English at home, number and percentage who were employed, and of those employed, percentage distribution according to occupational category, by language characteristics: 1999

Language characteristics	Total number (in thousands)	Employed		Occupation category of those employed					
		Number (in thousands)	Percent	Managerial, professional	Technical, sales, administrative	Service	Precision production, craft, repair	Operators, fabricators, laborers	Farming, forestry, fishing
Total	110.3	52.9	1.08	0.83	1.32	1.15	0.88	1.15	0.69
English-speaking ability									
Spoke English "very well"	90.1	46.8	1.55	1.39	2.02	1.59	1.06	1.46	0.67
Spoke English with difficulty	73.4	37.5	1.97	0.92	1.78	2.21	2.01	2.39	1.65
Spoke English "well"	47.9	24.2	3.13	1.99	3.61	3.70	3.22	3.82	1.25
Spoke English "not well"	47.8	22.9	2.97	0.64	2.15	3.31	3.02	3.60	2.79
Spoke English "not at all"	32.9	16.5	4.59	2.57	2.96	4.91	4.85	5.83	4.97
Language spoken at home									
Spanish	96.2	50.2	1.43	0.92	1.68	1.53	1.26	1.58	1.00
Asian	40.4	20.4	3.74	4.04	5.07	4.32	2.55	3.58	1.06
All other European	32.9	16.4	4.56	4.60	6.07	4.42	2.92	4.19	1.83
All other non-European	38.6	19.3	3.87	4.01	5.08	3.92	2.71	3.66	0.96
Spoke English "very well"									
Language spoken at home									
Spanish	75.2	38.0	1.89	1.47	2.43	1.97	1.41	1.87	0.88
Asian	35.4	17.8	4.26	4.78	5.73	4.80	1.65	3.68	1.32
All other European	27.2	13.1	5.36	5.54	6.98	4.35	2.34	4.37	2.39
All other non-European	31.9	15.9	4.71	5.20	6.28	4.46	2.88	3.47	1.41
Spoke English with difficulty									
Language spoken at home									
Spanish	65.7	32.9	2.19	0.78	1.81	2.43	2.23	2.66	1.97
Asian	19.7	9.8	7.64	‡	10.11	9.90	10.08	9.97	0.00
All other European	18.6	9.2	8.10	‡	‡	‡	‡	‡	‡
All other non-European	22.2	11.0	6.79	‡	7.95	7.63	‡	8.13	‡

‡Did not meet reporting standards.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table A20. Standard errors for figure 3: Number of 5- to 24-year-olds who spoke only English and who spoke a language other than English at home, by age group: Selected years 1979–99

Year	Spoke only English at home (in thousands)			Spoke a language other than English at home (in thousands)		
	Total	5- to 17-year-olds	18- to 24-year-olds	Total	5- to 17-year-olds	18- to 24-year-olds
1979	109.7	86.8	67.1	150.7	119.3	92.2
1989	149.5	127.0	115.6	248.1	196.6	152.9
1992	150.7	115.0	117.7	227.3	182.4	136.8
1995	145.4	75.9	108.4	165.0	130.7	100.3
1999	163.9	74.4	110.7	186.0	147.6	111.2

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), November 1979, November 1989, October 1992, October 1995, and October 1999.

Table A21. Standard errors for figure 4: Percentage of 5- to 24-year-olds who spoke a language other than English at home, by age group: Selected years: 1979–99

Year	Total	5- to 17-year-olds	18- to 24-year-olds
1979	0.20	0.26	0.33
1989	0.35	0.43	0.60
1992	0.32	0.39	0.56
1995	0.22	0.26	0.40
1999	0.24	0.28	0.42

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), November 1979, November 1989, October 1992, October 1995, and October 1999.

Table A22. Standard errors for figure 5: Of 5- to 24-year-olds who spoke a language other than English at home, percentage distribution according to place of birth, by age group: 1999

Place of birth	Spoke a language other than English					
	Total	5- to 9-year-olds	10- to 13-year-olds	14- to 17-year-olds	18- to 20-year-olds	21- to 24-year-olds
Native-born	0.91	1.13	1.51	1.62	1.92	1.58
Foreign-born	0.91	1.13	1.51	1.62	1.92	1.58

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table A23. Standard errors for figure 6: Percentage distribution of 5- to 24-year-olds who spoke a language other than English at home according to English-speaking ability, by youth's year of entry into the United States: 1999

Youth's year of entry	Spoke English "very well" (percent)	Spoke English with difficulty (percent)
1996–98	1.90	1.90
1990–95	1.93	1.93
1986–89	2.79	2.79
1980–85	3.51	3.51
1970–79	4.38	4.38
Native-born	0.78	0.78

NOTE: Data for foreign-born include only those youth and young adults for which complete parent data exist.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table A24. Standard errors for figure 7: Among 18- to 24-year-olds who were not enrolled in school, percentage who did not complete high school, by language spoken at home and enrollment status in U.S. schools: 1999

Language spoken at home	18- to 24-year-olds who did not complete high school					
	Total			Ever enrolled in U.S. school		
	Total (in thousands)	Number (in thousands)	Percent	Total (in thousands)	Number (in thousands)	Percent
Total	15.1	41.1	2.16	15.1	75.9	0.32
Spoke only English at home	15.1	8.8	7.40	105.7	66.2	0.33
Spoke other language at home	57.1	45.7	2.53	95.8	45.8	1.19
Spanish	53.5	44.6	2.60	80.0	42.5	1.61
Asian	11.0	4.9	11.05	37.3	9.2	1.93
All other European	11.8	4.6	9.25	29.9	8.9	2.87
All other non-European	12.8	7.6	11.35	35.3	12.0	2.71

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.





## **Appendix B: Glossary**

---

The glossary describes the variables used in this report. The variables were taken directly from the U.S. Bureau of the Census Current Population Surveys (CPS) 1979 through 1999. In cases where similar questions were asked in the CPS, variable labels and age categories are listed in parentheses. The following is a list of variables that appear in this report organized by name under type of characteristic.

### **DEMOGRAPHIC CHARACTERISTICS**

Age

Race/ethnicity

Residence by region of the United States

### **EDUCATIONAL CHARACTERISTICS**

Attending or enrolled in school

Ever enrolled in United States school

Ever repeated a grade

Highest level of school completed

High school completion

Last or most recent year attending school

Postsecondary enrollment

Postsecondary attendance status

### **FAMILY INCOME CHARACTERISTICS**

Family income

### **LANGUAGE CHARACTERISTICS**

Spoke a language other than English

Language spoken at home

English-speaking ability

Ever taken an ESL course

Completed an ESL course

### **NATIVITY CHARACTERISTICS**

Citizenship status of child

Country of origin of child

Father's country of origin

Mother's country of origin

Year of entry

### **LABOR FORCE CHARACTERISTICS**

Employment status

Occupation

## DEMOGRAPHIC CHARACTERISTICS

### ***Age (peage) 1979–1999***

Respondents were asked to indicate their child’s age.

### ***Race/ethnicity (perace) (1979–1999)***

Respondents were asked to identify their child’s race/ethnicity as one of the following:

White, non-Hispanic

Black, non-Hispanic

Hispanic

American Indian/Alaska Native

Asian/Pacific Islander

### ***Residence by region of the United States (gereg) 1999***

Respondents were classified as living in Northeast, Midwest, South, or West according to their city of residence. The following describes the states that make up each region.

The Northeast consists of Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, and Pennsylvania.

The Midwest consists of Ohio, Indiana, Illinois, Michigan, Wisconsin, Iowa, Minnesota, Missouri, North Dakota, South Dakota, Nebraska, and Kansas.

The South consists of Delaware, Maryland, the District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas.

The West consists of Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Alaska, and Hawaii.

## EDUCATIONAL CHARACTERISTICS

### ***Attending or enrolled in school (preschool (6–14), pegrade (15+)) 1999***

Respondents were asked to indicate whether or not they or their child was attending or enrolled in regular school.

### ***Ever enrolled in United States school (pes50a (15+)) 1999***

Respondents who indicated their child was foreign-born and was not attending or enrolled in a regular school were asked to indicate whether their child had ever attended a school in the United States.

***Ever repeated a grade (pes58a (6–14), pes42A (15–24)) 1999***

Respondents were asked to indicate if their child had ever repeated a grade.

***Highest level of school completed (peeduca (15+)) 1999***

Respondents whose child or who themselves were 15 years old or older were asked to indicate the highest level of school completed or the highest degree received.

- Less than 1st grade
- 1st, 2nd, 3rd, or 4th grade
- 5th or 6th grade
- 7th or 8th grade
- 9th grade
- 10th grade
- 11th grade
- 12th grade, no diploma
- High school graduate, diploma or equivalent (GED)
- Some college, no degree
- Associate's degree, occupational/vocational
- Associate's degree, academic program
- Bachelor's degree (BA, AB, BS)
- Master's degree (MA, MS, MEng, MEd, MSW)
- Professional degree (MD, DDS, DVM)
- Doctorate degree (PhD, EdD)

***High school completion (peeduca (15+)) 1999***

This variable recodes highest level of school completed (*peeduca*) into two categories: completed high school and did not complete high school. Respondents who were 15 years old or older whose highest grade completed was 12th grade but had not received a diploma were recorded as not completing high school, while those who indicated their highest level of school completed was high school (with a diploma or equivalent) or higher were recoded as having completed high school.

***Last or most recent year attending school (pes56 (3–14) pelastyr (15+)) 1999***

Respondents were asked to indicate whether they or their child was attending or enrolled in a regular school, college, or university if applicable in October 1998.

### ***Postsecondary enrollment (pegrade) 1999***

This variable recodes grade or year attending school (*pegrade*) into two categories: enrolled in postsecondary education or not enrolled in postsecondary education. Respondents whose child or who themselves were 15 years old or older were asked to indicate the grade in which they were enrolled. Those who indicated they were enrolled in their first year of postsecondary school were classified as being enrolled in postsecondary education. Respondents who indicated attending high school or below were classified as not being enrolled in postsecondary education.

### ***Postsecondary attendance status (pefull) 1999***

Respondents whose child was or who themselves were 15 years old or older and who indicated they or their child were attending a postsecondary institution were asked to indicate if they or their child were attending college full time or part time.

Full time

Part time

## **FAMILY INCOME CHARACTERISTICS**

### ***Family income (income) 1999***

The family income variable was recoded to create three income levels representing the lowest income quartile, the middle two quartiles, and the top quartile:

Low income = \$19,999 or less

Middle income = \$20,000–74,999

High income = \$75,000 or more

## **LANGUAGE CHARACTERISTICS**

### ***Speaks a language other than English (spkothr) (pes59 (5–14), pes43 (15–24)) 1979–1999***

Respondents were asked to indicate if they or their child spoke a language other than English at home.

### ***Language spoken at home (language) (pes60 (5–14), pes44 (15–24)) 1979–1999***

Respondents who indicated they or their child spoke a language other than English at home were asked to indicate which language they spoke.

Spanish

Asian (i.e., Chinese, Japanese, Vietnamese)

Other European (i.e., French, German, Polish)

Other (i.e., African, Arabic, Native American, Persian)

***English ability (spkeng) (pes60 (5–14), pes45a (15–24)) 1979–1999***

Respondents who indicated they or their child spoke a language other than English at home were asked to indicate how well they spoke English. This variable was recoded into two categories:

Spoke English very well = spoke English very well

Spoke English with difficulty = spoke English well, not well, or not at all

**NATIVITY CHARACTERISTICS*****Citizenship status of child (prcitshp) 1999***

Respondents were asked to indicate their child's citizenship status. Citizenship status was derived from a variable on the control card inquiring about the citizenship status of each household member:

Native, born in United States

Native, born in Puerto Rico or U.S. outlying area

Native, born abroad of U.S. parents

Foreign-born, U.S. citizen by naturalization

Foreign-born, not a U.S. citizen

Those coded above as Native, born in United States were considered born in the 50 states or the District of Columbia. Persons born in Puerto Rico or U.S. outlying areas and those born abroad of U.S. parents were also considered native-born. All others were considered foreign-born.

***Country of origin of child (penatvty) 1999***

Respondents were asked to indicate their country of birth.

***Father's country of origin (pefntvty) 1999***

Respondents were asked to indicate their father's country of birth.

***Mother's country of origin (pemntvty) 1999***

Respondents were asked to indicate their mother's country of birth.

***Year of entry (prinuyer) 1999***

Respondents who reported they or their children were foreign-born were asked to indicate their year of entry into the United States.

Before 1950

1950–59

1960–64

1965–69

1970–74

1975–79

1980–81

1982–83

1984–85

1986–87

1988–89

1990–91

1992–93

1994–97

## **LABOR FORCE CHARACTERISTICS**

### ***Employment status (pemplr) 1999***

Respondents were asked to indicate their employment status during the previous week. Responses were recoded into the following three categories:

Not in universe = less than 18 years old

Employed = Employed

Unemployed = Employed absent, on layoff and looking for work

Not in labor force = Retired, disabled, not looking for work, other

Employed persons comprise (1) all civilians who during the survey week did any work at all as paid employees or in their own business or profession or on their own farm, or who work 15 hours or more a week as unpaid workers on a farm or a business operated by a member of the family; and (2) all those who have jobs but who are not working because of illness, bad weather, vacation, or a labor management dispute or because they are taking time off for personal reasons, whether or not they are seeking other jobs.

---

***Occupation (peio1icd) 1999***

Respondents who indicated they were employed were asked to indicate their occupation. Occupational classifications based on their responses were grouped as follows for the purposes of this report:

Managerial/professional

Technical/sales/administrative

Service

Precision production

Operators/fabricators

Farming/forestry/fishing





## **Appendix C: Survey Methodology and Data Reliability**

---

The data from this report come from five waves of the Current Population Survey (CPS) conducted in 1979, 1989, 1992, 1995, and 1999. This appendix provides more detail on the technical features of these CPS surveys and on the analysis conducted for this report. Specifically, it describes information on survey design, survey response rates, variable definition, data reliability, and statistical testing procedures.<sup>27</sup>

### **Overview of the CPS Survey**

The CPS is a nationally representative sample survey of all households, conducted in approximately 50,000 dwelling units in 729 primary sampling units. Dwelling units are in-sample for 4 successive monthly interviews, out-of-sample for the next 8 months, and then returned to the sample for the following 4 months. The sample frame is a complete list of dwelling-unit addresses at the time of the Census updated by demolitions and new construction and field listings. The population surveyed excludes members of the Armed Forces, inmates of correctional institutions, and patients in long-term medical or custodial facilities; it is referred to as the civilian, noninstitutionalized population. Typically, about 4 percent of dwelling units are not interviewed because occupants are not at home after repeated callbacks or for some other reason.

An adult member of each household serves as the respondent for that household, supplying data for each member of the household. In October, supplementary questions regarding school enrollment are asked about eligible household members 3 years old or older. Most interviews are conducted by phone using computer-assisted telephone interviewing.

The CPS monthly survey was conducted in English. However, at the interviewer's discretion, some interviews were conducted in Spanish. Therefore, bias exists in an unquantifiable manner for respondents who do not speak English or Spanish.

### **Response Rates**

*CPS 1999:* The 1999 October CPS unweighted response rate was 93.6 percent, and the response rate for the school supplement was 95.8 percent.

*CPS 1995:* The 1995 October CPS unweighted response rate was 93.5 percent, and the response rate for the school supplement was 95.5 percent.

Response rates for 1992, 1989, and 1979 are unavailable from CPS.

---

<sup>27</sup>For more information about CPS methodology, refer to U.S. Department of Labor, Bureau of Labor Statistics and U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau (2002), *Design and Methodology* (Technical Paper 63RV), Current Population Survey. Washington, DC: Author. Also available at <http://www.bls.census.gov/cps/tp/tp63.htm>.

## Data Reliability

Most of the estimates in this report are derived from sample survey data and are subject to two broad categories of error—sampling and nonsampling error. Sampling errors occur because the data are collected from a sample of a population rather than from the entire population. Estimates based on a sample will differ somewhat from the values that would have been obtained from a universe survey using the same instruments, instructions, and procedures. Nonsampling errors come from a variety of sources and affect all types of surveys, universe as well as sample surveys. Examples of sources of nonsampling error include design, reporting, and processing errors and errors due to nonresponse. The effects of nonsampling errors are more difficult to evaluate than those that result from sampling variability. As much as possible, procedures are built into surveys in order to minimize nonsampling errors.

In this report, all nonresponse on education items and language items was imputed. For the education items and the language usage items missing data were imputed using a hot-deck approach.

- (1) Those with and without data were assigned to cells and ordered randomly within each cell.
- (2) Data from the first observation with data was assigned to the first observation without data; data from the second observation with data was assigned to the second observation without data and so on.
- (3) In many instances cells had to be collapsed to attain an acceptable number of cases for the imputation.
- (4) Acceptable was defined as a ratio of one missing case to five valid cases, a minimum of ten valid cases per cell.

For the SPKOTHR, LANGUAGE, SPKENG series, a slightly more complex approach was taken. Because this series was asked sequentially, and each variable builds on information covered in the previous one, the variables logically follow in the order listed. As each was imputed, any missing values for the others coming later in the series were picked up from the same observation and used to impute the variable itself.

Other variables, such as country of birth, were not imputed for nonresponse. Tables do not include information for persons who did not respond to particular items, therefore, estimates may vary between tables due to nonresponse on other items.

## Accuracy of Estimates

In reporting sample survey data, estimates based on unweighted sample sizes less than 30 are not displayed. The standard error is a measure of the variability due to sampling when estimating a parameter. It indicates how much variance there is in the population of possible estimates of a parameter for a given sample size. Standard errors can be used as a measure of the precision expected from a particular sample. The probability that a complete census would differ from the sample by less than the standard error is about 68 out of 100. The chances that the difference would be less than 1.65 times the standard error are about 90 out of 100, and the chances that the difference would be less than 1.96 times the standard error, about 95 out of 100.

Standard errors for percentages and number of persons based on CPS data were calculated using the following formulas:

**Percentage:**

$$se = \sqrt{(b/N)(p)(100-p)}$$

where  $p$  = the percentage ( $0 < p < 100$ ),  
 $N$  = the population on which the percentage is based, and  
 $b$  = the parameter associated with the characteristic;  
 $b$  is equal to 2,369 for the total or white population, 2,680 for the black population, and 3,051 for the Hispanic population aged 14–24 in 1999.

**Number of persons:**

$$se = \sqrt{(bx)(1-x/T)}$$

where  $x$  = the number of persons (i.e., dropouts),  
 $T$  = population in the category (i.e., blacks aged 16–24), and  
 $b$  = as above.

Standard errors for the estimates in the tables appear in appendix A.

In 1997, the Bureau of the Census released new  $b$  parameters for October 1997 CPS estimates. With the release of the new parameters, the U.S. Bureau of the Census also made adjustments to parameters for earlier years based on March 1994 CPS data.

**Methodology and Statistical Procedures**

The comparisons in the text have all been tested for statistical significance to ensure that the differences are larger than those that might be expected due to sampling variation. Observed differences were judged to be statistically significant when an appropriate hypothesis test rejected the null hypothesis at  $\alpha = 0.05$ . Two types of comparisons have been made in the text.

*Differences in two estimated percentages.* The Student's  $t$  statistic can be used to test the likelihood that the differences between two percentages are larger than would be expected by sampling error.

$$t = \frac{P_1 - P_2}{\sqrt{se_1^2 + se_2^2}}$$

where  $P_1$  and  $P_2$  are the estimates to be compared and  $se_1$  and  $se_2$  are their corresponding standard errors.

*Trends.* Regression analysis was used to test for trends for English language usage, high school completion, and employment over time. Regression analysis assesses the degree to which one variable, such as English speaking rate (the dependent variable), is related to a set of other variables, such as time and changes in the rates of the dependent variables over time (the independent variables). The estimation procedure most commonly used in regression analysis is ordinary least squares (OLS).

The analyses in this report were conducted on English-speaking, non-English-speaking, foreign-born, native-born, and English-speaking ability rates. Rates for the above categories were used as dependent measures in the analysis, with a variable representing time used as the independent variable. However, in these data, some of the observations were less reliable than others (i.e., the standard errors for some years were larger than those for other years). In such cases, OLS estimation procedures do not apply,

and it is necessary to modify the regression procedures to obtain unbiased regression parameters. The modification that is usually recommended transforms the observations to variables that satisfy the usual assumptions of OLS regression and then applies the usual OLS analysis to these variables. This procedure was done using the data manipulation and regression capability of Microsoft EXCEL<sup>®</sup>. Each variable in the analysis was transformed by dividing each by the standard error of the dependent variables. The new dependent variable was then regressed on the new independent variable used. All statements about trends in this report are statistically significant at the 0.05 level.

