

U.S. Department of Education
NCES 2009-034

English Literacy of Foreign-Born Adults in the United States: 2003

Learning to read and write in the English language is a challenge faced by numerous foreign-born adults who arrive in the United States each year. Since 1970, the foreign-born population living in the United States has increased both in number and as a percentage share of the entire population (Census 2007; Schmidley 2001). This growth contributes to continued interest in how well foreign-born adults use written information to function in society and the factors associated with their literacy. Although prior studies have examined adult literacy in the United States by a variety of background characteristics (Kutner et al. 2007), no national-level research has focused specifically on the literacy abilities of the foreign-born adult population using the most recent data.

This Issue Brief draws on data from the 2003 National Assessment of Adult Literacy (NAAL) to explore the English literacy of foreign-born adults living in households in the United States.^{1,2} The brief presents the English literacy scores of foreign-born adults age 16 and older in 2003 by race/ethnicity, age of arrival in the United States, years spent in the United States, highest level of educational attainment, and language spoken before starting school.³ In addition, the distribution of the foreign-born adult population is reported for each of these categories.

The aim of NAAL is to document the English literacy levels of adults in the United States based on their performance across a wide array of tasks that reflect the types of materials and demands they encounter in their daily lives. NAAL measures English literacy on three separate scales: prose, document, and quantitative, with each scale ranging from 0 to 500.^{4,5} Assessment questions were open-ended and trained scorers evaluated responses with scoring rubrics. Scores can be categorized in one of four literacy levels: *Below Basic*, *Basic*, *Intermediate*, or *Proficient*.⁶

English Literacy Scores of Foreign-Born Adults

Among all adults living in households in 2003, some 14 percent were foreign born (table 1). Overall, foreign-born adults had lower average scores on all three literacy scales compared to the total household population as well as the U.S.-born population (218 vs. 275 and 282 points in prose literacy; 227 vs. 271 and 276 points in document literacy; and 242 vs. 283 and 288 points in quantitative literacy). The English literacy scores of foreign-born adults varied across a variety of background characteristics.

Race/ethnicity. In 2003, Hispanics accounted for approximately half of all foreign-born adults living in households (52 percent) (table 2). Whites and Asians each

represented about one-fifth of the foreign-born population (21 and 18 percent, respectively). Blacks accounted for 9 percent of foreign-born adults. Across all three literacy scales (prose, document, and quantitative), Hispanics had the lowest average English literacy scores compared to their foreign-born peers. Blacks scored above Hispanics but below Whites and Asians. For example, in prose literacy, Hispanic foreign-born adults had an average score of 179 points compared to 228 points for Blacks, 261 points for Asians, and 265 points for Whites.

Age of arrival in the United States. A majority (60 percent) of the foreign-born adult population living in the United States in 2003 arrived here at the age of 19 or older. These adults had lower average prose, document, and quantitative literacy scores than foreign-born adults who arrived in the United States at the age of 11 or younger. For example, the average document literacy score for adults who arrived in the United States at the age of 19 or older was 214 points compared to 271 points for those who arrived at the age of 11 or younger.

Years spent in the United States. In 2003, foreign-born adults who had spent 1 to 5 years in the United States represented a larger percentage than those who had spent 6 to 10 years, 11 to 15 years, 16 to 20 years, 21 to 30 years, and 31 years or more in the United States. Adults who had been in the United States the least amount of time (1 to 5 years) had lower average scores on each literacy scale than foreign-born adults who had spent the most amount of time (21 to 30 years and 31 years or more) in the country (200 vs. 232 and 236 points for prose literacy; 214 vs. 245 and 239 points for document literacy; and 227 vs. 253 and 258 points for quantitative literacy).

Table 1. Percentage distribution and average prose, document, and quantitative literacy scores of adults living in households, by country of birth: 2003

Country of birth	Percent	Average literacy score		
		Prose	Document	Quantitative
Total	100.0	275	271	283
U.S. born	85.8	282	276	288
Foreign born	14.2	218	227	242

NOTE: Adults are defined as people 16 years of age or older. Foreign-born adults are persons born outside of the 50 states or the District of Columbia. The household population includes those living in private households and college dormitories. It does not include the prison population or individuals residing in other institutions—military housing, nursing homes, group homes, or psychiatric facilities. The prose, document, and quantitative literacy scales range from 0 to 500. Details may not sum to totals due to rounding. Standard errors can be found at <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2009034>.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, 2003 National Assessment of Adult Literacy.

Table 2. Percentage distribution and average prose, document, and quantitative literacy scores of foreign-born adults living in households, by selected characteristics: 2003

Characteristics	Percent	Average literacy score		
		Prose	Document	Quantitative
Total	100.0	218	227	242
Race/ethnicity ¹				
White	20.7	265	267	288
Black	8.6	228	239	237
Hispanic	51.8	179	190	205
Asian	18.2	261	264	281
Age of arrival in the United States				
11 or younger	18.8	270	271	276
12 to 18	21.4	207	217	221
19 to 24	23.5	201	214	233
25 or older	36.3	206	214	240
Years spent in the United States				
1 to 5	24.1	200	214	227
6 to 10	17.1	211	216	240
11 to 15	14.1	214	225	239
16 to 20	11.9	225	232	242
21 to 30	15.5	232	245	253
31 or more	17.3	236	239	258
Highest educational attainment				
Still in high school	3.8	209	212	203
Less than high school	18.9	123	132	146
Some high school	13.1	176	192	200
GED/high school equivalency	3.3	210	223	230
High school graduate	16.7	210	224	233
Vocational/trade/business school	6.0	218	233	249
Some college	6.9	258	259	274
Associate's/2-year degree	8.7	261	265	278
College graduate	11.6	271	272	292
Graduate studies/degree	11.2	300	291	319
Language spoken before school ²				
English only	13.8	269	266	277
English and Spanish	3.9	235	232	239
English and other	5.5	274	265	294
Spanish only or with other	47.2	173	186	202
Other only	29.7	246	255	268

¹ All adults of Hispanic origin are classified as Hispanic, regardless of race. Asian includes Pacific Islander. Respondents who identified Alaska Native, American Indian, or multiple races as their race are included in the total row, but not included in the subtotals. Reporting standards for these races were not met. The sample size was insufficient to permit a reliable estimate.

² The category "language spoken before starting school" indicates the language or languages the foreign-born adult first learned to speak before starting school in any country. The English and Spanish category includes adults who spoke only English and Spanish, as well as adults who spoke English, Spanish, and another non-English language. The Spanish only or with other category includes adults who spoke only Spanish, as well as adults who spoke Spanish and another non-English language. The Other language category includes only adults who did not speak English or Spanish.

NOTE: Adults are defined as people 16 years of age or older. The table includes foreign-born adults (persons born outside of the 50 states or the District of Columbia). The household population includes those living in private households and college dormitories. It does not include the prison population or individuals residing in other institutions—military housing, nursing homes, group homes, or psychiatric facilities. The prose, document, and quantitative literacy scales range from 0 to 500. Details may not sum to totals due to rounding. Standard errors can be found at <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2009034>.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, 2003 National Assessment of Adult Literacy.

Highest educational attainment. In 2003, the two most common highest educational attainment categories for foreign-born adults were high school graduates and those who had completed less than high school (17 and 19 percent, respectively). Adults with a GED or high school equivalency as their highest educational attainment represented the least common category (3 percent).⁷ In general, foreign-born adults with higher levels of education had higher average prose, document, and quantitative literacy scores than their peers with less education. For example, adults who completed graduate studies or a graduate degree scored higher in prose literacy (300 points) than adults whose highest level of educational attainment was college (271 points) and those with an associate's or 2-year degree and adults with some college (261 and 258 points, respectively). Average prose literacy scores were lowest for foreign-born adults who had

not finished high school (176 points for those who completed some high school and 123 points for those completing less than high school).⁸ Similar patterns were observed in the document and quantitative literacy scales.

Language spoken before starting school. In 2003, foreign-born adults who spoke only Spanish or Spanish and another non-English language before starting school accounted for approximately half (47 percent) of the overall distribution of foreign-born adults. Foreign-born adults who spoke a language other than English or Spanish represented the second largest language category (30 percent) followed by those who spoke only English (14 percent). Adults who spoke only Spanish or Spanish and another non-English language had the lowest average scores in all three literacy scales compared to adults in all other language categories (173 vs.

235–274 points in prose literacy; 186 vs. 232–266 points in document literacy; 202 vs. 239–294 points in quantitative literacy). Adults who spoke English only or spoke English and another non-Spanish language were among the highest scoring foreign-born adults on all three literacy scales (269 and 274 points, respectively, in prose literacy; 266 and 265 points, respectively, in document literacy; 277 and 294 points, respectively, in quantitative literacy).⁹

Summary

Foreign-born adults represented 14 percent of all adults living in households in 2003. Their English literacy scores on the prose, document, and quantitative scales varied by a number of background characteristics. Hispanics, who represented approximately half of foreign-born adults, had lower average prose, document, and quantitative literacy scores than their foreign-born Black, White, and Asian peers. A majority of foreign-born adults arrived in the United States at the age of 19 or older (60 percent). These individuals scored lower, on average, than those who arrived in the United States at the age of 11 or younger. In addition, foreign-born adults who had been in the United States the least amount of time (1 to 5 years) had lower average scores on each literacy scale than foreign-born adults who had spent the most amount of time (21 to 30 years and 31 years or more) in the country. In general, foreign-born adults with higher levels of education had higher prose, document, and quantitative literacy scores than their peers with less education. Finally, approximately half of foreign-born adults spoke only Spanish or Spanish and another non-English language before starting school. These adults had the lowest average prose, document, and quantitative literacy scores compared to their peers in all other language categories.

References

- Kutner, M., Greenberg, E., Jin, Y., Boyle, B., Hsu, Y., and Dunleavy, E. (2007). *Literacy in Everyday Life: Results From the 2003 National Assessment of Adult Literacy* (NCES 2007-480). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.
- Schmidley, A.D. (2001). *Profile of the Foreign-Born Population in the United States: 2000* (Series P23-206). U.S. Census Bureau. Washington, DC: U.S. Government Printing Office.
- U.S. Census Bureau, American Community Survey. (2007). Retrieved October 1, 2008, from http://factfinder.census.gov/servlet/ADPTable?_bm=y&-geo_id=01000US&-qr_name=ACS_2007_1YR_G00_DP2&-ds_name=ACS_2007_1YR_G00_-lang=en&-caller=geoselect&-redoLog=false&-format.

Endnotes

- ¹ “Foreign born” is defined in this Issue Brief as anyone born outside of the 50 states or the District of Columbia. Adults born in U.S. territories are included in the foreign-born population.
- ² NAAL defines adults as people 16 years of age and older. The household population includes those living in private households and college dormitories. It does not include the prison population or individuals residing in other institutions—military housing, nursing homes, group homes, or psychiatric facilities.
- ³ The category “language spoken before starting school” indicates the language or languages the foreign-born adult learned to speak before starting school in any country.
- ⁴ Prose literacy is the ability to search, comprehend, and use information from continuous texts (e.g., news stories, brochures, and instructional materials). Document literacy is the ability to search, comprehend, and use information from noncontinuous texts (e.g., job applications, payroll forms, and transportation schedules). Quantitative literacy is the ability to identify and perform computations using numbers embedded in printed materials.
- ⁵ The main NAAL assessment consisted of 12 blocks of tasks with approximately 11 questions in each block. Each respondent was given an assessment booklet that included only 3 blocks of questions. Because each respondent did not answer all of the NAAL items, item response theory (IRT) methods were used to estimate average scores on the prose, document, and quantitative literacy scales; a simple average percent correct would not allow reporting results that are comparable for all respondents. Further details on the design and scoring of the assessment can be found in *Literacy in Everyday Life: Results From the 2003 National Assessment of Adult Literacy* (Kutner et al. 2007).
- ⁶ *Below Basic* scores range from 0–209 (prose), 0–204 (document), and 0–234 (quantitative); *Basic* scores range from 210–264 (prose), 205–249 (document), and 235–289 (quantitative); *Intermediate* scores range from 265–339 (prose), 250–334 (document), and 290–349 (quantitative); and *Proficient* scores range from 340–500 (prose), 335–500 (document), and 350–500 (quantitative). For more detail on performance levels, visit http://nces.ed.gov/naal/perf_levels.asp.
- ⁷ One exception to this statement is that the percentage of adults who were still in high school was not measurably different from the percentage who received a GED or high school equivalent.
- ⁸ This comparison includes foreign-born adults whose highest educational attainment was less than high school or some high school, and excludes foreign-born adults who were still enrolled in high school.
- ⁹ Adults who spoke a language other than English or Spanish had average document literacy scores (255 points) that were not measurably different than adults who spoke English only (266 points) or English and another non-Spanish language (265 points). In quantitative literacy, adults who spoke a language other than English or Spanish had scores that were not measurably different from adults who spoke English only (268 vs. 277 points).

The Issue Brief series presents information on education topics of current interest. All estimates shown are based on samples and are subject to sampling variability. All differences discussed are statistically significant at the .05 level as measured by two-tailed Student's *t* tests; this means a difference is discussed only if the probability that it is due to chance (i.e., sampling variability) is less than 1 in 20. No adjustments were made for multiple comparisons. In the design, conduct, and data processing of National Center for Education Statistics (NCES) surveys, efforts are made to minimize the effects of nonsampling errors, such as item nonresponse, measurement error, data processing error, or other systematic error. For more information on the National Assessment of Adult Literacy, visit <http://nces.ed.gov/naal>.

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Table A1. Standard errors for Table 1: Percentage distribution and average prose, document, and quantitative literacy scores of adults living in households, by country of birth: 2003

Country of birth	Percent	Average literacy score		
		Prose	Document	Quantitative
Total	†	1.3	1.2	1.2
U.S. born	0.90	1.3	1.2	1.2
Foreign born	0.90	3.8	3.2	3.8

† Not applicable.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, 2003 National Assessment of Adult Literacy.

Table A2. Standard errors for Table 2: Percentage distribution and average prose, document, and quantitative literacy scores of foreign-born adults living in households, by selected characteristics: 2003

Characteristics	Percent	Average literacy score		
		Prose	Document	Quantitative
Total	†	3.8	3.2	3.8
Race/ethnicity				
White	1.52	4.8	5.0	4.3
Black	1.12	4.4	4.7	4.7
Hispanic	2.53	4.4	5.0	5.5
Asian	1.79	4.9	5.7	6.3
Age of arrival in the United States				
11 or younger	0.92	3.5	3.2	3.5
12 to 18	1.13	5.6	6.5	6.0
19 to 24	1.04	3.9	4.2	5.2
25 or older	1.46	6.1	5.5	6.2
Years spent in the United States				
1 to 5	1.12	6.6	7.1	6.7
6 to 10	1.12	6.9	7.2	7.2
11 to 15	0.82	4.5	5.8	5.2
16 to 20	0.63	5.5	6.3	6.7
21 to 30	1.14	6.4	5.6	5.9
31 or more	1.18	7.0	5.4	7.0
Highest educational attainment				
Still in high school	0.63	12.7	18.4	14.0
Less than high school	1.29	5.6	6.0	6.7
Some high school	0.73	4.2	4.3	4.3
GED/high school equivalency	0.52	8.8	9.5	8.5
High school graduate	1.29	5.4	5.1	6.4
Vocational/trade/business school	0.61	7.4	6.3	7.0
Some college	0.68	4.0	7.0	4.9
Associate's/2-year degree	0.85	5.1	4.9	5.4
College graduate	0.94	4.2	5.9	4.5
Graduate studies/degree	1.03	6.3	3.8	4.5
Language spoken before school ²				
English only	1.12	3.9	5.7	4.7
English and Spanish	0.47	7.8	7.2	8.1
English and other	0.78	7.2	10.7	8.0
Spanish only or with other	2.32	4.6	5.4	5.6
Other only	1.86	4.7	4.8	3.9

† Not applicable.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, 2003 National Assessment of Adult Literacy.