Language Needs of School-Age Children

Robert A. Kominski and Hyon B. Shin, U.S. Census Bureau
Karen Marotz, SUNY Albany

Presented at the Annual Meeting of the Population Association of America
April 16–19, 2008

Introduction

The Issues

- Increasing levels of immigration to the U.S. have resulted in larger proportions of foreign-born persons (6.2% in 1980 and 12.5% in 2006).
- Many immigrants do not speak English or do not speak it very well.
- In 2006, of 53.4 million children 5 to 17 years old, 10.9 million spoke a language other than English at home and 2.8 million spoke English less than "very well".
- What are the possible implications for schools, teachers, and the children themselves?

Methodology

- Examine children 5 to 17 years old enrolled in nursery school to 12th grade by language and English-speaking ability.
- Examine young school children Pre-K to Grade 4.
- Examine pre-school children 0 to 4 years old by parental language use.
- Examine school teachers who might work with these children.

Data

- Data come from the 2006 American Community Survey (ACS).
- Sample covers the entire U.S. including group quarters population.
- 2.9 million households were selected for interview.
- Another 189,641 people living in group quarters were in the initial sample selection.

Language Question

- 3-part self-response question on language spoken and English-speaking ability
- Asked only of the population 5 years and older

12 a. Does this person speak a language other than English at home?
☐ Yes
☐ No → *SKIP to question 14*

b. What is this language?

For example: Korean, Italian, Spanish, Vietnamese

c. How well does this person speak English?
☐ Very well
☐ Well
☐ Not well
☐ Not at all

All Children 5–17 Years

Population 5 Years and Over by Language Use and English-Speaking Ability, 2006.

(In thousands)

	Number	Percent
Total population 5 years and over	**279,013**	**100.0**
English-only	224,154	80.3
Total non-English	54,858	19.7
Very well	30,646	11.0
Well	10,771	3.9
Not well	8,925	3.2
Not at all	4,516	1.6

Source: U.S. Census Bureau, The 2006 American Community Survey.

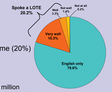
Where are the school children 5-17 years old who spoke a language other than English at home?

- Nationally, 20.3 percent of the population 5-17 enrolled in school spoke a LOTE.
- 10 states had 20.0 percent or more of its children speaking a LOTE at home – AZ, CA, FL, IL, NV, NJ, NM, NY, RI*, and TX.
- 6 states had 5.0 percent or less of its children speaking a LOTE at home – AL, KY, MS, VT*, and WV.

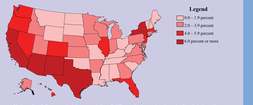
What are the language characteristics of school children 5-17 years?

- 51.3 million children 5-17 years enrolled in nursery school to 12th grade
- 41.0 million spoke only English
- 10.4 million spoke a Language Other Than English (LOTE) at home (20%)
- Speaking ability
  - 7.8M "very well"
  - 1.7M "well"
  - 742K "not well"
  - 94K "not at all"

  } Potentialy 2.5 million children need language assistance
- Language needs reflect the population speaking English less than "very well".



Where are the school children 5-17 years old with language needs?



- Nationally, 5.0 percent of the population 5-17 enrolled in school spoke English less than "very well."
- 5 states had 6.0 percent or more of its children speaking English less than "very well" – AZ, CA, NM*, NY*, and TX.
- 17 states had 2.0 percent or less of its children speaking English less than "very well" – AL, KY, LA, ME*, MS, MO, MT, NH, ND, OH, OK*, SC*, SD, TN, VT, WV, and WY*.

What are the main languages spoken by school children 5-17 years old?

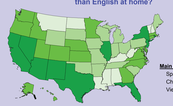
Language	Number	Language	Number
Spanish	7,468,000	Arabic	154,000
Chinese	351,000	German	128,000
Vietnamese	198,000	Russian	119,000
French	180,000	French Creole	115,000
Korean	157,000	Tagalog	106,000

- How many different languages were reported for children 5-17 years old?
  - 229 languages/language groups reported

Note: States marked with an * are states that were not significantly different from the comparison percentage. For example, 10 states had 20.0 percent or more of its children 5-17 years speaking a LOTE at home. Rhode Island, with 21.7 percent of its children population was not significantly different than 20.0 percent.

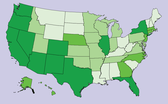
Young School Children

Where are the young school children enrolled in nursery/kindergarten to 4th grade who spoke a language other than English at home?



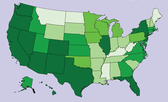
- Nationally, 20.4 percent of the young school children spoke a LOTE at home.
- 10 states had 20.0 percent or more of its children speaking a LOTE at home – AZ, CA, FL, IL, NV, NM, NY, NJ, RI*, and TX.
- 9 states had 5.0 percent or less of its children speaking a LOTE at home – AL*, KY*, LA, MS, MT, ND*, NH*, VT*, and WV.

Where are the young school children enrolled in nursery/kindergarten to 4th grade with language needs?



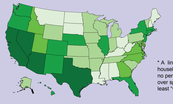
- Nationally, 6.5 percent of the young school children spoke English less than "very well."
- 11 states had 6.0 percent or more of its children speaking English less than "very well" – AZ, CA, CO, FL*, IL, NV, NM, NY, OR, TX, and WA*.
- 14 states had 2.0 percent or less of its children speaking English less than "very well" – AL, KY, LA, ME*, MS, MT*, ND, NH, OH, SC*, SD, VT*, WV, and WY*.

How many young school children enrolled in nursery/kindergarten to 4th grade lived in a household where the householder had language needs?



- Nationally, 12.6 percent of the young school children lived in households where the householder had language needs.
- 14 states had 12.0 percent or more of its children having language needs.
  - AZ, CA, CO*, FL, HI*, IL, NJ, NM, NV, NY, OR*, RI*, TX, and WA*.
- 7 states had 2.0 percent or less of its children having language needs.
  - KY*, ME*, MS*, MT, ND, SD*, and WV.

How many young school children enrolled in nursery/kindergarten to 4th grade lived in linguistically isolated* households?



* A linguistically isolated household is one in which no person age 14 years or over speaks English at least "very well".

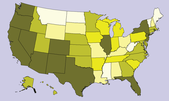
- Nationally, 7.8 percent of the young school children lived in a linguistically isolated household.
- 4 states had 12.0 percent or more of its children in linguistically isolated households – AZ, CA, NV, and TX.
- 11 states had 2.0 percent or less of its children in linguistically isolated households – AL*, KY, LA, ME, MS, MT, ND, NH*, OH, SD*, and WV.

Pre-School Children

How many pre-school children age 0-4 years lived in households where the householder spoke a language other than English at home?

- Nationally, 28.0 percent of children age 0-4 years (pre-school children) lived in a household where the householder spoke a LOTE.
- 18 states had 20.0 percent or more of its pre-school children in a LOTE household – AK*, AZ, CA, CO, CT, FL, HI, IL, MA, NV, NJ, NM, NY, OR, RI, TX, VA*, and WA.
- 2 states had 5.0 percent or less of its pre-school children in a LOTE household – MS* and WV.

How many pre-school children age 0-4 years lived in households where the householder had language needs?



- Nationally, 13.7 percent of children age 0-4 years (pre-school children) lived in a household where the householder spoke English less than "very well."
- 13 states had 12.0 percent or more of its pre-school children living in a household where the householder spoke English less than "very well."
- 6 states had 2.0 percent or less of its pre-school children living in a household where the householder spoke English less than "very well".

How many pre-school children age 0-4 years lived in linguistically isolated households?

- Nationally, 9.2 percent of children age 0-4 years (pre-school children) lived in a linguistically isolated household.
- 4 states had 12.0 percent or more of its pre-school children living in a linguistically isolated household – AZ, CA, NV, and TX.
- 10 states had 2.0 percent or less of its pre-school children living in a linguistically isolated household – KY*, LA, ME, MS, MT, ND*, OH*, VT, WV, and WY.

School Teachers

What about their teachers?

- School teachers act as a bridge between the home and society to help integrate children.
- For children with possible English limitations, these school teachers may be called upon to help even more.
- What do the pool of school teachers look like in terms of their language capabilities?

How many school teachers might be able to help these children?

- To the extent that school teachers are also conversant in a language other than English, they may be able to help students with English needs.
- In the United States the percentage of teachers who reported speaking a language other than English (LOTE) at home:

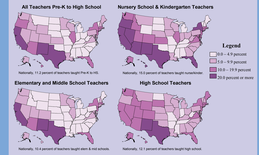
	Percentage of teachers who speak a LOTE	Percentage of children who speak a LOTE
Total NK-12th grade	11.2	20.2
Nursery and kindergarten	15.0	20.1
Elementary/middle school	10.4	20.1
High school	12.1	20.6

- At all levels, there are larger proportions of children who are LOTE than there are proportions of teachers who are LOTE.
  (NOTE: This does not take the specific language of children or teachers into account)

Top languages spoken by teacher category

All teachers	Nursery-kindergarten teachers	Elementary-middle school teachers	High school teachers
Spanish	Spanish	Spanish	Spanish
French	French	French	French
German	Other Asian	German	German
Chinese	Hungarian	Chinese	Italian
Italian	Chinese	Italian	Chinese

How many teachers who spoke a language other than English at home taught in nursery school through 12th grade?



Are there enough teachers in the right places?

- To examine the availability of teachers who may be able to help children with language needs, we create a ratio of the number of children and the number of teachers for two different population groups: pre-school children and elementary/middle school children
- LTVW = less than "very well"
- LOTE = language other than English
- Assuming that an average classroom has 25 children, we divide the number of children by 25.
- Pre-school children

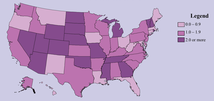
  (Number of children 0-4 years in with a householder speaking LTVW / 25)
  Number of nursery and kindergarten teachers who speak LOTE

  - This formula creates a ratio of a potential cluster of children age 0-4 years who lived in a household where the householder spoke English less than "very well" (LTVW) by the number of nursery and kindergarten teachers who spoke a language other than English.
  - Lower ratios mean a greater capacity of teachers to assist children who live in households where the householder spoke English less than "very well".
- Elementary and middle school children

  (Number of children enrolled in 1st-8th grade who spoke LOTE / 25)
  Number of 1st-8th grade teachers who speak LOTE

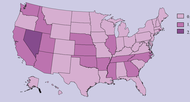
  - This formula creates a ratio of the number of children age 5-17 years who are enrolled in 1st-8th grade who spoke a LOTE by the number of 1st-8th grade teachers who spoke a LOTE.

What is the ratio of pre-school children age 0-4 years to their teachers?



- Nationally, the child/teacher ratio was 1.4.
- 13 states had a child/teacher ratio of 1.0 or less.
  - Ignoring specific languages, these states have higher possible capacity of teachers to assist children who had language needs at home.
- 17 states had a child/teacher ratio of 2.0 or more.
  - These states have a lower possible capacity to address these children.

What is the ratio of young school-age children enrolled in 1st-8th grade to their teachers?



- Nationally, the child/teacher ratio was 0.8.
- 35 states had a child/teacher ratio 1.0 or less.
  - Ignoring specific languages, these states have higher possible capacity of teachers to assist children who speak a LOTE at home.
- Only one state had a a child/teacher ratio greater than 2.0 – Nevada.

Summary

Summary

- Children's language needs are becoming more significant as time goes on.
- Children age 5-17 years with language needs live in states that have traditionally higher immigrant populations.
- Young school children also live in these states but taking into account the language needs of the householder, states that traditionally do not have higher immigrant populations, such as Idaho, Kansas, and Nebraska appear to have lower proportions of these children compared to all children 5-17 years in the U.S.
- The youngest children, age 0-4 years, who live in households with language needs are populating even more non-traditional immigrant states.
- Teachers who could potentially assist these children with language needs appear to be needed less as these children progress through the school system. Need appears larger at the nursery/kindergarten level.

This report is released to inform interested parties of ongoing research and to encourage discussion of work in progress. Any views expressed on methodological issues are those of the authors and not necessarily those of the U.S. Census Bureau.