The Contribution of Foreign Schools to Educational Attainment in the United States

Jessica Davis
Kurt Bauman

US Census Bureau
Housing and Household Economic Statistics Division

Presented at the Annual Meeting of the Population Association of America
Los Angeles, California
March 30th to April 1st , 2006

INTRODUCTION

Immigration is an important factor shaping the education distribution of the United States. Several writers have noted that immigration has led to a "barbell" shaped educational distribution in some places, with low-skilled immigrants flowing into the United States along with others possessing advanced degrees (Martin 1995, Frey 2004). Places with concentrations of high school dropouts, for example, tend also to have high immigrant populations (Bauman and Graf 2003). An unexamined assumption is that the characteristics of the immigrants themselves have created these conditions. The contribution of local schools, colleges and universities to the shape of the immigrant educational distribution has been largely ignored.

Among researchers not concerned with immigration, there is almost the opposite assumption. Rates of school dropout are usually assumed to be the responsibility of local schools even when large immigrant populations are present. Concern about high school completion, college completion, and the literacy level of adults has focused almost exclusively on the role of U.S. schools, while largely ignoring the role of immigration.

Clearly, both these stories cannot be completely true. Immigrant education levels are produced by conditions (including school systems) in foreign countries, but also by U.S. schools. What is unknown, to this point, is just where the balance lies.

If we measure where degrees are coming from, we can also better understand the economic situation of immigrants. Immigrants who obtained their education in their country of origin are sometimes at a disadvantage because education acquired abroad is less valued than human capital obtained domestically (Zeng and Xie 2004, Friedberg 2000). The quality of education in some sending countries is lower than in the United States. With certain majors, such as law, the training and knowledge learned at schools in sending countries may not be easily transferable to the U.S. job market. In addition, education attained abroad may be undervalued by American employers unfamiliar with foreign schooling systems (Zeng & Xie, 2004, p. 1081).

OBJECTIVE

Currently, there are no comprehensive estimates of the extent to which credentials earned in other countries affect the educational distribution of the U.S. population. We will produce estimates of the number of such credentials, and how they are distributed among various segments of the population aged 25 and over. We are especially interested in the geographic distribution of high-education and low-education immigrant populations, and the degree to which foreign and U.S. schools contributed to this distribution.

DATA

We will rely primarily on data from the American Community Survey (ACS). Although this survey contains information on place of birth outside the United States and level of

education attained, it does not have information on whether this education was received in the United States or elsewhere. In order to estimate the percentage receiving their degrees outside the United States, we will follow a procedure similar to that of Zeng and Xie (2004), who used a smaller scale survey that included information on country where highest degree was received to estimate the relationship between this and age of entry into the United States.

The ACS is a nationwide survey that will give communities the information they need to track annually how they are changing on a range of social, economic, housing and demographic issues. Starting in 2010, the ACS will replace the long-form Census questionnaire that was sent to about 1 in 6 households in 2000. The ACS publishes data for all States, most areas with populations of 250,000 or more, and selected areas of 65,000 or more. The 2004 survey data collection took place in 31 test sites and 1203 additional counties.

Our approach will be to examine the factors related to receipt of degrees in the United States or elsewhere in the 2001 National Household Education Survey (NHES). Unlike Zeng and Xie, we will not be coding individual respondents in our larger survey, but estimating percentages of people in population groups. This will allow us to use a larger number of variables to estimate the propensity to have earned a degree in a foreign country. This will allow more accurate and up-to-date estimates of the distributions of degrees received by various population subgroups and across geographic areas.

METHODS

We used reports of place where highest degree was received from the National Household Education Survey (NHES) to estimate a relationship between age of entry and probability of having been educated outside the U.S. We applied these probabilities to American Community Survey data, which provide age of entry but not location where degree was received.

Although some differences existed by race/ethnicity and sex for some levels of education, we were able to produce more reliable results, with no substantive differences in estimated probabilities, by just using age of entry in our final model.

A limitation of the NHES is that people who completed less than a high school diploma were not asked if they attended school in the United States, only if they attended a foreign school. Our estimate of the proportion with a foreign education thus includes an unknown portion who attended school in both places

Due to the use of two different surveys, exact standard errors could not be calculated for our estimates of the prevalence of foreign education. For the NHES data we were able to calculate 90 percent confidence intervals for the probability estimates generated from regression models. The range of estimates for the proportion with foreign education at five education levels is shown in the following figure (labeled low, medium and high estimates).

Additional variance is introduced through the use of ACS data, but we have not estimated this additional variance for the presentation of these estimates.

RESULTS

Our estimates reveal that place of education does influence the educational attainment of the United States. Of high school drop-outs in the United States, we estimate that 23 percent attended a foreign school. Among adults in the United States with a high school diploma, an estimated eight percent attended a foreign school. Among foreign born individuals, we estimate that 61 percent of them received their high school degree from a foreign school. Essentially it is foreign education that shapes the barbell distribution of immigrant educational attainment.

Foreign education affects the distribution of education in the U.S., especially with respect to the number with less than a high school education.

The impact of foreign education is especially notable in well-known "gateway" metropolitan areas such as Los Angeles and Miami. (Data for only five of the ten largest metropolitan areas are available in the 2004 ACS. Data for all metropolitan areas will be available for 2005 data.)

The foreign born make up 29 percent of those with less than a high school education, and 17 percent of those with an advanced degree, while they are only 10 percent of those with some college or an associate degree.

If we exclude those who attended foreign schools (among those who completed less than high school) or received foreign degrees (among those with a high school diploma or higher education), we find that the foreign born make up 4 to 8 percent of the total at all educational categories.

Among states, California had the highest percentage of people with less than a high school education who were foreign educated, 9.9 percent, which represented half the population with this education level in the state. Nevada had the second highest percentage of people with less than high school who were foreign educated, with 7.4 percent.
On the other end of the educational attainment extreme, Washington, DC had the highest percentage of advanced degree holders who were foreign educated, with 2.4 percent. Followed by New Jersey with 1.6 percent.

In conclusion, knowing the location of a person's educational experience, whether inside or outside the United States, helps us better understand the economic situation of immigrants. Zeng and Xie's (2004) research concluded that foreign educated Asian immigrants generally earned less than U.S. born whites, U.S. born Asians, and U.S. educated Asian immigrants. If a foreign education reduces earning potential, then states

such as California, Nevada, Texas, New York, and Arizona are going to have a large percentage of their foreign born and foreign educated population earning less than their U.S. educated counterparts. People with less than high school who attended a foreign schools are likely to be at a further disadvantage than their counterparts, foreign born or native born, who were educated in the U.S. because their exposure to the English language and American culture are limited, which in turn reduces their occupational choices and earning potential.

REFERENCES

Bauman, Kurt J. and Nikki L. Graf. (2003) *Educational Attainment: 2000.* Census 2000 Brief C2KBR-24. U.S. Census Bureau.

Frey, William H. (2004) "Brain Drains, Brain Gains." *American Demographics*.

Friedberg, Rachel M. (2000) "You Can't Take it With You? Immigrant Assimilation and the Portability of Human Capital." *Journal of Labor Economics*, 18(2), 221-251.

Martin, Phillip L. (1995) "The Economics of Immigration." Q*uill Magazine.*

Zeng, Zhen and Yu Xie. (2004) "Asian-American's Earnings Disadvantage Reexamined: The Role of Place of Education." *American Journal of Sociology*, 5, 1075-1108.