



THE NEW AMERICANS



The Demographics of Immigration: Using United States Census Data

Subjects: (U.S. History, World History), Mathematics

Summary: Census data provides interesting demographic insight into immigrants living in the United States, and allows for comparative studies of past and present immigration trends and patterns.

Standards: This lesson addresses the following national content standards established at <http://www.mcrel.org/standards-benchmarks/>

Objectives

Students will:

- Analyze U.S. Census data regarding immigrant demographics
- Compare and contrast data to determine demographic changes over time
- Calculate percentages and apply other mathematical skills to arrive at conclusions regarding historic and current immigrant trends and patterns

Materials

- Computers with Internet access
- Print copies of the following U.S. Census tables (if students do not have computer access)

Table 1. Nativity of the Population and Place of Birth of the Native Population: 1850-1990

<http://www.census.gov/population/www/documentation/twps0029/tab01.html>

Table 2. Region of Birth of the Foreign-Born Population: 1850-1930 and 1960-1990

<http://www.census.gov/population/www/documentation/twps0029/tab02.html>

Table 3. Region and Country of Area of Birth of the Foreign-Born Population: 1960-1990

<http://www.census.gov/population/www/documentation/twps0029/tab03.html>



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Table 4. Region and Country or Area of Birth of the Foreign-Born Population, With Geographic Detail Shown in Decennial Census Publications of 1940 or Earlier: 1850 to 1930 and 1960-1990

<http://www.census.gov/population/www/documentation/twps0029/tab04.html>

- Graph and plain white paper
- Pencils with erasers

Procedure

Preparation: Look at the “Historical Census Statistics on the Foreign-born Population of the United States: 1850-1990” <http://www.census.gov/population/www/documentation/twps0029/twps0029>. Refer to the introductory section for background information. Choose the tables appropriate for class study of immigration, if the following are not sufficient. Note: If students do not have computer access, hard copies of selected tables should be provided.

1. Have students access the U.S. Census Web page and go to the “Historical Census Statistics on the Foreign-born Population of the United States: 1850-1990” <http://www.census.gov/population/www/documentation/twps0029/twps0029.html>. This is a working paper prepared by the U.S. Census Bureau that contains 22 tables related to immigration to the United States between 1850 and 1990.

Tell students to choose those tables best suited to their immigration studies. Among some of the most useful for determining basic trends in U.S. immigration:

Table 1. Nativity of the Population and Place of Birth of the Native Population: 1850-1990

<http://www.census.gov/population/www/documentation/twps0029/tab01.html>

Table 2. Region of Birth of the Foreign-Born Population: 1850-1930 and 1960-1990

<http://www.census.gov/population/www/documentation/twps0029/tab02.html>

Table 3. Region and Country of Area of Birth of the Foreign-Born Population: 1960-1990

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Table 4. Region and Country or Area of Birth of the Foreign-Born Population, With Geographic Detail Shown in Decennial Census Publications of 1940 or Earlier: 1850 to 1930 and 1960-1990

<http://www.census.gov/population/www/documentation/twps0029/tab04.html>

Most sections of Tables 1-4 show information in total numbers. Students can apply their math skills by creating charts or graphs in Microsoft Excel (or other spreadsheet software) to explain various trends. They can also practice converting these absolute population numbers into percentages and create pie charts or graphs with these percentages. (Table 2 contains many of these percentages already calculated.)

Table 1 Activities

Table 1 shows the number of foreign-born and native-born from 1850 through 1990. The great immigration periods between 1890-1930 and 1970-1990 can be observed through this table.

Students can analyze this data by determining the percentages of native vs. foreign-born for each census. Although the censuses of 1980 and 1990 show the greatest foreign-born population, analysis will reveal an even greater percentage in the earlier immigration period between 1890-1930. These percentages can be used to construct pie charts for the years 1850-1990 that show the comparison between numbers of native and foreign-born in the United States.

Table 2 Activities

Table 2 presents the regional numbers and percentages of immigrants between 1850-1990. (Note: If you plan to have students calculate percentages for other charts, encourage them to do their own calculations, rather than using the numbers already calculated.) The data in this graph show the spike of European immigration between 1890-1930, and the spike in Asian and Latin American immigration between 1980-1990.

Students can use these data to construct bar graphs or pie charts showing the change in regional immigration between 1850-1990.



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**Table 3 Activities**

Table 3 highlights the large increase in numbers of immigrants from Asia and Latin America between 1960-1990. It also demonstrates the relative decline in emigrants from European countries and the relatively few immigrants from African nations.

Students can analyze the change in regional emigration by constructing pie charts for each region: Europe, Asia, Africa, Oceania, and Latin America. Since data exists for the years 1960, 1970, 1980 and 1990, students can construct five of these pie charts in order to see the change in regional emigration. Students can also break down the trends more precisely by choosing various countries from each of the five regions. For more application of mathematical skills, students can determine the percentage increase and/or decrease for various regions.

Students can construct bar graphs using these data. Students can analyze trends by region or by country. Where there are great increase or decreases in a ten-year period, students can construct hypotheses or questions to address why these dramatic changes occurred. For example, in the Dominican Republic, the number of people born in this country who immigrated to the United States increased between 1960 and 1970 from 11,883 to 61,228—nearly a 600% increase. Why the sudden increase in these numbers? Other countries saw growth in immigration during this time, but not nearly such exponential growth.

Table 4 Activities

This chart shows data similar to that found in Table 3 for the years 1960-1990 (though with a bit less detail). It also includes data between 1850-1930 as well.

Students can do the same activities they did for the data from Table 3. The data shows that most immigration occurred from Ireland and Germany in the last decades of the 19th century and that immigration patterns shifted at the turn of the century to include more people from Italy, Russia, and Poland. Here students clearly see the division in years between the two waves of immigration.

Students can construct bar graphs or pie charts to show the various waves of immigration in these years. Since this table contains no percentages, students will need to convert the data into percent before constructing these charts or graphs.



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WELCOME
TO THE UNITED STATES**Assessment**

Create a rubric that assesses student understanding and application of Census data.

Extensions

Students can:

- Gather data on immigration in their town or state and create graphs that compare the national averages with local numbers.
- Conduct school and/or community polls regarding immigration and graph the results, which can be compared with Gallup Poll results <http://www.gallup.com>

Correlation to National Standards

Mid-continent Research for Education and Learning (McREL)

United States History

- Understands massive immigration after 1870 and how new social patterns, conflicts, and ideas of national unity developed amid growing cultural diversity.
- Understands demographic shifts and the influences on recent immigration patterns.

Mathematics

- Adds, subtracts, multiplies, divides, and simplifies rational expressions.
- Understands that mathematicians often represent real things using abstract ideas like numbers or lines; they then work with these abstractions to learn about the things they represent.
- Understands the concepts of ratio, proportion and percent and the relationships among them.
- Reads and interprets data in charts, tables, plots (e.g., stem-and-leaf, box-and-whiskers, scatter), and graphs e.g., bar, circle, line).
- Organizes and displays data using tables, graphs (e.g., line, circle, bar), frequency distributions, and plots (e.g., stem-and-leaf, box-and-whiskers, scatter).
- Understands that the same set of data can be represented using a variety of tables, graphs, and symbols and that different modes of representation often convey different messages (e.g., variation in scale can alter a visual message).