

PEW RESEARCH CENTER ACTIVITY

Using Graphs as Evidence for a Democratic Deliberation

ACTIVITY SUMMARY

This activity asks students to analyze and interpret several Pew Research Center graphs on immigration, integrate information from the graphs with verbal information, and then engage in a deliberative discussion around immigration policy. The activity was designed with middle school students in mind but would also work well with high school students. It could be used in World Geography, World History, Civics, or U.S. History courses -- any subject that incorporates discussion of immigration and addresses contemporary public policy issues.

MATERIALS NEEDED

- [National Issues Forum Deliberation Guide](#)
- [Slides with graphs and directions for deliberation](#)

CONCEPT(S) ADDRESSED

- Immigration
- Core Democratic Values

OBJECTIVES

By the end of this activity, students will be able to:

- Read, interpret, and evaluate graphs on U.S. immigration policy.
- Integrate information from graphs with verbal information.
- Present information about an option for addressing immigration policy in the United States
- Engage in a deliberative discussion about U.S. immigration policy.

RELATED STANDARDS

Michigan Process & Skills Standards

- 6-8 P1.1 Use appropriate strategies to read and interpret basic social science tables, graphs, graphics, maps, and texts.
- 6-8 P1.3 Express social science ideas clearly in written, spoken, and graphic forms, including tables, line graphs, bar graphs, pie charts, maps, and images.
- 6-8 P1.4 Present an argument supported with evidence.
- 6-8 P2.2 Evaluate data presented in social science tables, graphs, graphics, maps, and texts.
- 6-8 P2.3 Know how to find, organize, and interpret information from a variety of sources.
- 6-8 P2.4 Use resources in multiple forms and from multiple perspectives to analyze issues.
- 6-8 P3.1 Clearly state an issue as a question of public policy, gather and interpret information about that issue, and generate and evaluate possible alternative resolutions.
- 6-8 P3.2 Discuss public policy issues, clarifying position, considering opposing views, and applying Democratic Values or Constitutional Principles to develop and refine claims.
- 6-8 P3.3 Construct arguments expressing and justifying decisions on public policy issues supported with evidence.
- 6-8 P3.4 Explain the challenges people have faced and actions they have taken to address issues at different times and places.

- 9-12 P1.1 Use appropriate strategies to read and analyze social science tables, graphs, graphics, maps, and texts.
- 9-12 P1.4 Express social science ideas clearly in written, spoken, and graphic forms.
- 9-12 P1.5 Construct and present an argument supported with evidence.
- 9-12 P2.2 Evaluate data presented in social science tables, graphs, graphics, maps, and texts for credibility, considering the origin, authority, structure, and context of the information.
- 9-12 P3.1 Clearly state an issue as a question of public policy, gather and interpret information about that issue, analyze various perspectives, and generate and evaluate possible alternative resolutions.
- 9-12 P3.2 Discuss public policy issues, by clarifying position, considering opposing views, and applying core values or Constitutional Principles to develop and refine claims.

Michigan Social Studies Content Standards

- 6 – P3.1.1 Integrate Michigan process and skills standards into a grade-appropriate project. Clearly state a global issue as a question of public policy, trace the origins of the issue, analyze various perspectives, and generate and evaluate alternative resolutions. Identify public policy issues related to global topics and issues studied. For example:
 - Use Michigan social studies process and skills methods to acquire content knowledge and appropriate data about the issue.
 - Identify the causes and consequences and analyze the impact, both positive and negative.
 - Share and discuss findings of research and issue analysis in group discussions and debates.
 - Compose a persuasive essay justifying a position with a reasoned argument.
- 7 – G4.3.3 Explain the patterns, causes, and consequences of major human migrations.
- 7 – P3.1.1 Clearly states an issue as a question of public policy in contemporary or historical context, or as a contemporary/historical comparison. Trace the origins of an issue, analyze and synthesize various perspectives, and generate and evaluate alternative resolutions. Deeply examine policy issues in group discussions and debates to make reasoned and informed decisions. Write persuasive/argumentative essays expressing and justifying decisions on public policy issues. Plan and conduct activities intended to advance views on matters of public policy, report the results, and evaluate effectiveness:
 - Identify public policy issues related to global topics and issues studied.
 - Clearly state the issue as a question of public policy orally or in written form.
 - Use inquiry methods to acquire content knowledge and appropriate data about the issue.
 - Identify the causes and consequences and analyze the impact, both positive and negative.
 - Share and discuss findings of research and issue analysis in group discussions and debates.
 - Compose a persuasive essay justifying the position with a reasoned argument.
- 7 – P4.2.2 Engage in activities intended to contribute to solving a national or international problem studied.
- HS Civ. C – 6.4.3 Identify and describe a local, state, national, or international public policy issue; research and evaluate multiple solutions; analyze the consequences of each solution and propose, defend, and take relevant action to address or resolve the issue.

- ❑ HS Civ C – 6.4.4 Equip students with the skills and knowledge to explore multiple pathways for knowledgeable, civic engagement through simulations and/or real-world opportunities for involvement.
- ❑ HS USH&G – 8.2.1 Demographic Changes – use population data to produce and analyze maps that show the major changes in population distribution and spatial patterns and density, including the Baby Boom, new immigration, suburbanization, reverse migration of African-Americans to the South, the Indian Relocation Act of 1956, and the flow of population to the Sunbelt.

ASSUMED BACKGROUND KNOWLEDGE/POTENTIAL CHALLENGES

This lesson assumes that students have already learned about why people migrate and the differences between voluntary and involuntary migration. It also assumes that they can define “immigration.”

Students who have little to no experience with reading graphs may require additional time and instruction, and some students may have trouble integrating the verbal and visual information from this lesson. It is highly recommended that teachers introduce the graphs *before* the verbal information.

INSTRUCTIONAL SEQUENCE

1. Show [slide presentation](#).
2. Ask students what they know about immigration policy in the United States, or controversies surrounding immigration policy. Discuss and address any misconceptions.
3. Go to Slide 3. Ask students how immigration affects them and their families and/or friends.
4. Frame the problem using Slide 4. Make sure they understand that most people agree that immigration needs to be reformed, they just disagree about how it should be reformed.
5. Tell students you’re going to look at some graphs from the Pew Research Center to learn more about immigration in the United States. Tell them that the Pew Research Center defines itself as “a nonpartisan fact tank that informs the public about the issues, attitudes and trends shaping the world. It conducts public opinion polling, demographic research, media content analysis and other empirical social science research. Pew Research Center does not take policy positions.”
6. Go to Slide 5. You can follow along with the speaker notes to guide students through analysis. The speaker notes read as follows:
 - a. Show question only. “Let’s learn about immigration. First, how many people in the United States are immigrants?” Click to reveal the graph.
 - b. “What is this graph about?” Click so the circle around the title appears and state the topic. “Do you think this will help us answer the question?”
 - c. “Remember where I said this graph came from? If I hadn’t told you, you would look for source information. Do you see where it is?” Click again to reveal the circle around the source and read aloud. “At the bottom of the graph is where you’ll usually find source information. In this case, this is good source information. It tells you who made the graph and where the data came from. That way you could go back and check the data if you wanted to.”
 - d. “What kind of graph is this?” Let students try to answer. “This is called a line graph. It uses a line to connect all the data points.” Click again to reveal an arrow pointing to the line. “This green line is an important visual element that helps you see trends

in the data. But we have to understand what the data are, so let's look for other important visual elements.”

e. “What are all the visual elements of this graph? What are all the parts that make up the graph in order to provide us with information?” Let students respond and point as they provide a correct answer. Then click through and review. The circles will appear in this order:

- i. X-axis with years. “This is called the x-axis. What data is on the x-axis?” Years. “Where do the years start and stop?” 1850 to 2017. “How much time is there between tick marks?” Ten years. “Notice there are only seven years between the last two tick marks as opposed to ten. Why is that?” Because when they made this graph, that was the last year for which they had data.
- ii. Y-axis with percentage. “This is called the y-axis. What are these numbers on the y-axis telling us?” Percent of population that is foreign born, which you can tell by looking at the label right under the main title. “What are the increments? That is, what is the difference between each tick mark?” Four percentage points, and that is consistent along the y-axis.
- iii. Pins on the line. “There are four pins along the line. These are not on all line graphs. This is something the graph creators were trying to call your attention to. What are the graph creators trying to point out?” Beginning and ending data, high point, and low point.
- iv. 1965 Immigration and Nationality Act vertical line. “Does anyone know or want to guess what this is?” This act, signed into law by Lyndon B. Johnson, removed restrictions on the number of immigrants coming from non-northwestern European countries. The restrictions had been in place since the 1920s to maintain a homogeneous population in the United States. “Why do you think the creators of this graph put this here?” They wanted to explain one of the reasons for the increase in immigrants from 1970 to 2017.
- v. Horizontal grid lines. “Why are these grid lines here?” Primarily to help you connect the green trend line to percentage.

7. Go to Slide 6 and help students connect all the visual elements to identify facts and inferences. You can use the slide notes, which are also written here:

- a. “Now, let's put all the elements together and read the graph. What does a particular point on the graph, like the one that reads 13.6% telling us?” Show animation. The point tells us that, in 2017, 13.6% of the U.S. population was foreign-born.
- b. “How could we tell what the population was in 2000?” Show animation. In 2000, around 11.5% of the U.S. population was foreign born.
- c. “And what happened between 2000 and 2017?” Show animation. As the upward sloping line indicates between those two points, the percentage of people increased. “So we can conclude that in the 21st century, or since 2000, the proportion of people living in the United States who are immigrants has increased. What fact can we draw from the graph?”
- d. “What can you infer from that information about how that might make people feel about immigration and policies about immigration?” An increase in immigration is going to be viewed differently by different people. Some people might be worried about there being too many immigrants. Some people might think that's a good thing because it's increasing diversity.
- e. If you feel comfortable that students are understanding, ask them to write 3 facts, and 3 inferences about the graph. Discuss as a group.

8. Go to Slide 7 with the pie chart. Follow the steps in speaker notes. The goal is to help students become more independent in reading graphs.
9. Go to Slide 8. See how well students do with this *stacked bar graph* on their own. Ask students to respond to the following questions on a piece of paper:
 - a. What kind of graph is this?
 - b. What do you think the graph is about? How do you know?
 - c. What is the source of this graph? Is the source information complete?
 - d. What visual elements make up this graph?
 - e. What facts can we draw from the graph?
 - f. What inferences can we draw from the graph?
10. Discuss students' responses, providing them with feedback and corrections as needed.
11. Provide an overall summary of what students have learned about the problems/concerns related to immigration. Then pose the question "So what should we do? Who should we welcome? What should our policy be?" Show slide 9 and tell students we're going to have a deliberative discussion about immigration policy.
12. Use Slide 10 to provide an overview of 3 proposed options and show the :
 - a. Option 1: Welcome Immigrants; Be a Beacon of Freedom
 - b. Option 2: Enforce the Law; Be Fair to Those Who Follow the Rules
 - c. This option says we need a fair system, in which the rules are clear and, above all, enforced.
 - d. Option 3: Slow Down and Rebuild Our Common Bonds
13. Tell students that they will be split into groups and each group will be an expert on an option. They should create a poster or slide with what should be done and benefits and tradeoffs.
14. Provide students with the Issues Guide and give them their assigned pages. Break the reading and preparation into 3 parts:
 - a. Have students read the graph that is relevant to their section and report back to you on information they gathered from it.
 - b. Once you are comfortable with their understanding of the graph, tell them to actively read the verbal text. Make sure they are clear about what they are trying to report on.
 - c. Have them create the poster or slides.
15. After students have had time to complete, begin the presentations and deliberation. Have students present on and discuss each option in turn. Their goal here is not to argue for their option; they just want everyone to understand what it would entail so that they can discuss their feelings about it.
16. After each option is presented, ask students to discuss what they think about it. Encourage them to draw from the data visualizations and written text. As a teacher and moderator, take notes on values (concern with justice, authority, safety, etc) that arise. This is important for reflection after deliberation.
17. Once students have presented options and discuss, hold a reflective discussion.
 - a. What were common concerns?
 - b. What common values do people hold?
 - c. What makes this problem so challenging?
18. If desired, ask students to write an essay arguing for their own individual option preference.