Comparing Historical Maps

Students compare maps of Boston in 1775 and today and identify how humans have altered the landscape. They describe how changes in population affect the physical characteristics of a place.

GRADES
5, 6

SUBJECTS
Geography, Social Studies, U.S. History

CONTENTS
3 Photographs, 2 PDFs

OVERVIEW

Students compare maps of Boston in 1775 and today and identify how humans have altered the landscape. They describe how changes in population affect the physical characteristics of a place.

For the complete activity with media resources, visit:
http://www.nationalgeographic.org/activity/comparing-historical-maps/

DIRECTIONS

1. Focus on changes in students’ community over time.

Have a whole-class discussion about how land use has changed in students’ community over time. Ask:

- What has changed in our community in the last five years? (Encourage thinking about new roads, shopping or business areas, housing developments, and areas for recreation.)
• Are most of these changes human-made? (Yes.)
• Are there physical changes that have affected the area? (Explain that human changes are often more visible, although physical changes affect a place over time too.)
• What are some examples of physical changes affecting a place? (Possible responses: rivers can flood; shorelines can change; and volcanoes and earthquakes can affect a place.)

2. Introduce the 1775 map of Boston.

Project the map titled Boston, 1775. Ask: Does this show what Boston looks like today? How do you know? (No; the date on the map is 1775.) Explain that we call a map like this a historical map, because it shows what the land was like at a particular time in history, or it reflects what people knew at the time. Have students describe the land and water they see on the map. Ask:

• What landforms do you see? (The city was a peninsula; the Charles River flowed into Back Bay.)
• Why do you think Boston was settled on a peninsula? (Possible responses: the settlers wanted a place that was close to water for ships but also easy to defend from attacks; access to Boston via the narrow connection to the mainland was easy to protect.)

Ask students to imagine how this area may have changed over time. Ask: What physical changes could have happened? What human-made changes could have happened? Invite students to come to the projected map and describe their ideas.

3. Examine the map of present-day Boston.

Project the map titled Boston Now, and point out the lines that show the original shoreline. Give students a few minutes to examine the map and list on paper ways Boston has changed since 1775. Then discuss their ideas as a class. Have students come to the map and describe the differences. Compare their ideas for how the area might have changed. Students likely do not realize water could be filled to become land. Ask:

• Why do you think Bostonians filled in the water around the original city? (Possible response: as the population grew, there was a need for more land.)
• How does the map show how people’s lives have changed over time? (It shows increased transportation, including commuter train lines, and also more roads and bridges for
car/truck travel instead of ship/boat travel.)

- **What buildings and areas are still found in Boston?** (Old North Church; Paul Revere’s House; Boston Common and Beacon Hill [changed somewhat]; King’s Chapel; Back Bay is not a bay, but the area is still called Back Bay.)

Students might also notice that the old streets were winding and crooked, and the newer streets are arranged in a grid. These are street patterns you can find in many cities.

**4. Show the graph of population change.**

Project the bar graph of Boston Population, 1765-2010. Explain that maps are useful for showing how the cultural landscape of a city changes over time, but graphs provide different kinds of useful information. Ask: **What information can you get from this graph that you can’t get from the maps?** (You can find the population of Boston in different years.) Note for students that the population in 1765 was only 15,520, and in 2010 there were more than 600,000 residents. Ask: **When was the population the highest?** (It was highest during the 1940s-1960s, in the middle of the century.)

**5. Have students complete a Venn diagram for Boston past and present.**

Give each student a copy of the worksheet Boston: Past and Present and a Venn diagram. Have students use information from the two maps and population graph to complete a Venn diagram that compares and contrasts Boston in 1775 and today.

**Informal Assessment**

Check students’ Venn diagrams for understanding.

**Extending the Learning**

- Use this MapMaker Interactive map to have students compare and contrast different maps of the Boston area today. Change the base map in the tab titled "Base Maps" toward the top right of the application. As you view Boston in each of the base maps, have a whole-class discussion about how different maps of the same time and place can show different information.
• Contact a local or state historical society or the city clerk’s office to find census records and historical maps of your area. Have students analyze the changes since the town’s early days and create a bulletin board display to showcase their learning.

• Have students use library and Internet resources to research how new land was created in Back Bay and other areas of Boston.

OBJECTIVES

Subjects & Disciplines

- Geography
- Social Studies
- U.S. History

Learning Objectives

Students will:

- compare and contrast maps of Boston from different periods in time
- identify how humans have altered the physical landscape
- describe how changes in population affect the physical characteristics of a place

Teaching Approach

- Learning-for-use

Teaching Methods

- Discussions
- Information organization
- Visual instruction

Skills Summary

This activity targets the following skills:
• 21st Century Student Outcomes
  • Information, Media, and Technology Skills
    • Information Literacy
  • Critical Thinking Skills
    • Analyzing
    • Understanding
  • Geographic Skills
    • Analyzing Geographic Information

National Standards, Principles, and Practices

NATIONAL COUNCIL FOR SOCIAL STUDIES CURRICULUM STANDARDS

• Theme 2:
  Time, Continuity, and Change
• Theme 3:
  People, Places, and Environments

NATIONAL GEOGRAPHY STANDARDS

• Standard 14:
  How human actions modify the physical environment
• Standard 3:
  How to analyze the spatial organization of people, places, and environments on Earth’s surface
• Standard 4:
  The physical and human characteristics of places
• Standard 9:
  The characteristics, distribution, and migration of human populations on Earth’s surface

COMMON CORE STATE STANDARDS FOR ENGLISH LANGUAGE ARTS & LITERACY

• Reading Standards for Informational Text K-5:
  Integration of Knowledge and Ideas, RI.5.9
THE COLLEGE, CAREER & CIVIC LIFE (C3) FRAMEWORK FOR
SOCIAL STUDIES STATE STANDARDS

• **Geographic Representations: Spatial Views of the World: D2.Geo.2.6-8:**
Use maps, satellite images, photographs, and other representations to explain relationships between the locations of places and regions, and changes in their environmental characteristics.

• **Human Population: Spatial Patterns and Movements: D2.Geo.7.3-5:**
Explain how cultural and environmental characteristics affect the distribution and movement of people, goods, and ideas.

PREPARATION

What You’ll Need

MATERIALS YOU PROVIDE

• Paper
• Pencils, pens

REQUIRED TECHNOLOGY

• Internet Access: Required
• Tech Setup: 1 computer per classroom, 1 computer per pair, Projector

PHYSICAL SPACE

• Classroom

GROUPING

• Large-group instruction

BACKGROUND & VOCABULARY
Background Information

The ability to compare historical and modern maps enables students to understand how a place changes over time. In Boston, human actions have modified the physical environment extensively over a 250-year period. Students will be asked as adults to make decisions about zoning and future development of their cities. The ability to accurately analyze maps will help them to make effective decisions.

Prior Knowledge

Recommended Prior Activities

- None

Vocabulary

<table>
<thead>
<tr>
<th>Term</th>
<th>Part of Speech</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>bar graph</td>
<td>noun</td>
<td>graph using parallel bars of varying lengths to compare and contrast data.</td>
</tr>
<tr>
<td>city</td>
<td>noun</td>
<td>large settlement with a high population density.</td>
</tr>
<tr>
<td>historical map</td>
<td>noun</td>
<td>representation of spatial information displaying sites of historical interest.</td>
</tr>
<tr>
<td>landform</td>
<td>noun</td>
<td>specific natural feature on the Earth's surface.</td>
</tr>
<tr>
<td>landscape</td>
<td>noun</td>
<td>the geographic features of a region.</td>
</tr>
<tr>
<td>location</td>
<td>noun</td>
<td>position of a particular point on the surface of the Earth.</td>
</tr>
<tr>
<td>map skills</td>
<td>noun</td>
<td>skills for reading and interpreting maps, from learning basic map conventions to analyzing and comprehending maps to address higher-order goals.</td>
</tr>
<tr>
<td>peninsula</td>
<td>noun</td>
<td>piece of land jutting into a body of water.</td>
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<tr>
<td>physical</td>
<td>noun</td>
<td>physical feature of an organism or object.</td>
</tr>
<tr>
<td>characteristic</td>
<td>noun</td>
<td>total number of people or organisms in a particular area.</td>
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For Further Exploration

Books