Lesson 11.5 "Growing Cities"

Unit 11: Big Factories and New Industries

Lesson Objectives	Lesson Competencies
• Students will construct the definition of the word "urbanization" using data from a graph.	• When appropriate, I can use context to determine intended meanings of words and phrases. (ELA 1)
• Students will create compound sentences that show the positives and negatives of urbanization.	• I can read and comprehend a variety of grade-appropriate texts with increasing automaticity and fluency* (i.e., fluency increases with successive readings). (ELA 1)
• Students will explain in writing whether they think urbanization was more positive or more negative.	• I can state an opinion that answers a question about a topic or text. (ELA 6)

Essential Questions	How has New Hampshire come to be the way it is?
Focus Questions	How did people change the way they lived because of industrialization in New Hampshire? How did New Hampshire modernize because of the Industrial Revolution?
Estimated Time	Two 40-minute class sessions
Materials & Equipment	"Population in New Hampshire Towns" graph for projection "Communities in New Hampshire with More Than 10,000 Residents 1920" map for projection "Mason Explains: Farm to City" video "Urbanization" signs, posted at opposite ends of the classroom "Urbanization: Is it more positive or more negative?" chart for projection Class set of "Urbanization: You Judge!" worksheet

Educator Introduction & Rationale

Because New Hampshire's waterways provided the energy to power the industries of the early Industrial Revolution, New Hampshire experienced the rise and development of urban areas early and rapidly. In 1840, 10% of New Hampshire's population lived in urban areas; by 1900, nearly 50% of the people in New Hampshire lived in urban areas. This change transformed the physical, cultural, and social lives of the state's people. Urbanization brought both positives and negatives. Though there were job and business opportunities in the cities, disease and crime were more present than in rural areas. While the cities offered educational and cultural activities, many people lived in cramped apartments. Young people who moved to the cities experienced lives their parents couldn't imagine, with more choices, different opportunities, a variety of entertainment, greater diversity of people and cultures, and, in a sense, more dangers, than what rural life offered. Refer to the Educator Overview for more information.

This is the fifth lesson in Unit 11, Big Factories and New Industries. It can stand alone from the unit, although lesson 11.2, "Bells and Conveyor Belts," complements this lesson because it examines the change from the individual, craftsman cottage industry to the factory system, which led to the development of cities.

In this lesson, students examine urbanization using a variety of disciplines. After analyzing a graph of population change in some of New Hampshire's towns to help define urbanization, students examine a map of towns in New Hampshire that had populations at or over 10,000 people by 1920 to discover what these towns had in common. Students then use a chart listing positives and negatives of urbanization to create compound sentences about urbanization's effects, followed by reflections on their opinions about urbanization. This lesson provides an introductory but robust look at how people changed the way they lived because of urbanization in New Hampshire. Understanding the basics of urbanization and its effects is essential because students will circle back around it throughout modern U.S. and world history to deepen their understanding of the world.

Please note, unit vocabulary and definitions are at the end of this document. You may wish to preview these with your students. Please adapt all material in this lesson, as necessary, to meet the needs of the students in your classroom.

A reinforcement activity is provided to give students more practice with math skills using population changes over time. Extension activities are provided for students ready to compare maps of today's populous cities with the 1920s map or who want to apply the content reading to a historic map of Manchester.

Learning Activity

Activation

Urbanization. Project graph titled "Population in New Hampshire Towns" and tell students they will use this graph to understand the word **urbanization**. Guide students through observing the graph first before trying to make meaning of it.

Once students understand the data that is being represented in the graph, ask students to write sentences that draw conclusions from it.

Possible responses:
- The lines show population in New Hampshire towns changing.
- Some populations increase a lot, and others stay the same or decrease a little.
- There is a bigger difference in the population of the big and small towns in 1920 than in 1840.

Review with students the definition of the words **urban** and **rural**.
- **Rural**: An area of land that is primarily used for farming, where there are no large towns or cities
- **Urban**: A large town or city, where there are lots of buildings and people

Which of the towns on the graph are urban by 1920? Which are rural? How do they know? How does this graph demonstrate **urbanization**?

Possible outcomes:
- By 1920, Berlin, Dover, and Keene are urban because their population rose and they became big towns.
- By 1920, Brentwood, Canaan, and Gilmanton are still rural because their small populations stayed the same or shrank.
- This graph demonstrates urbanization because it shows how some towns grew rapidly in their populations, and therefore in their buildings and businesses as well.
- **Urbanization** means to the growth of cities as a response to more and more people moving from the countryside into cities.
- **Note:** Small towns during this time might have lost population because their citizens moved to cities to work or because people stopped farming in New Hampshire during this time. As railroads became more widespread, small New Hampshire farms couldn't compete with the prices of food coming from the Midwest. Many farmers themselves went west or turned to dairy farming.

Guided Practice

Urban towns. Keene, Berlin, and Dover weren't the only towns that grew during this time and became more urbanized. By 1920, there were 10 towns in New Hampshire that had populations over or around 10,000 because people had moved to them for job opportunities. These were the most urban areas in the state. Which ones were they, and where were they? Have students make some guesses based on their background knowledge.

Project the map "Communities in New Hampshire with More Than 10,000 Residents 1920" and examine with students. Why were these the towns that grew during industrialization? What did they have in common?

Possible outcomes: In particular, these towns were all on rivers. Early industrialization relied on water power; first, moving water powered water wheels which ran factory machines. By 1860, steam power was invented, and this more flexible and powerful energy system drove factories. Please note, this map is also used in lesson 11.1 "Water Power" so you might skip this part if your class completed that lesson.

Teaching Tip: The video "Mason Explains: Farm to City" examines how life was different living in on a farm versus living in a city in the 19th century. Find it in the Media Library on the Educator side of the website.

Guided Practice & Discussion

More negative or more positive? Urbanization has happened and is happening all over the world, and brings both positives and negatives with it. Ask students if they know of any examples of urbanization. During discussion, hang the two signs "Urbanization is more positive" and "Urbanization is more negative" up on two sides of the classroom. When ready, ask students to vote with their feet on their first impression. Do they believe that urbanization is more positive or more negative? Allow students to array themselves along a spectrum to permit options like mostly negative or somewhat positive.

Have students turn to the person next to them and each say one reason why they are standing where they are.

Teaching Tip: This is a good spot to pause if you will divide the lesson between two teaching periods.

Independent Practice

Compound sentences about urbanization. Project the chart "Urbanization: Is it more positive or more negative?" Review as best for your class to ensure students have a basic understanding of the bulleted ideas. Recall with students that a compound sentence is two independent clauses joined into one sentence, sometimes by using a coordinating conjunction, or FANBOYS.

Tell students they will create compound sentences using FANBOYS to show urbanization as more positive or more negative. They should walk around the classroom and say different sentences to each person they meet and experiment to see what ideas about urbanization they can express.

Once students have had sufficient time to create several compound sentences each, have them return to vote with their feet again along the urbanization positive/negative spectrum. Invite students to share their final compound sentences that express their opinions.

Reflection

Support your opinion. Now that students understand how urbanization affected people's lives in the past and today, do they think it is more positive or more negative? How could it be positive for some people and negative for others? Be sure to keep the chart of urbanization's positives and negatives projected for students to use as a guide.

Discuss as a class or complete the reflection sheet individually, then discuss. Include discussion as part of the reflection so that all understand that urbanization's positive effects are felt more by people in a higher economic standing, even today. Although urbanization's positive effects are available to all, its negative effects are suffered disproportionally by the poor.

Reinforcement

1. **Population changes.** Using the "Population Changes" worksheets, students use subtraction and their knowledge of number ordering to figure out how different towns' population changed over time.

Extension

1. **Mapping skills.** Using the map, "Manchester Millyard," students read about the development of Manchester and circle and label aspects on the map mentioned in the student content. Find information about Manchester's history in the student content for Unit 11 on the "New Hampshire's Main Industries" tab. Manchester developed because of the textile industry.

2. **Today's most populous towns**. Compare the map New Hampshire's most populous cities today to the map from 1920. Students should use the "Communities in New Hampshire with More Than 10,000 Residents 1920" map and "Communities in New Hampshire with More Than 10,000 Residents 2010" map. What do they notice about the most populous towns today? How is the map different and the same as the map from 1920?

Supporting Materials

New Hampshire Historical Society Resources

1. Population of New Hampshire Towns Graph
2. Communities in New Hampshire with More Than 10,000 Residents 1920 Map
3. Communities in New Hampshire with More Than 10,000 Residents 2010 Map

Other Resources

- All population data taken from the Historical Census Data website by the Office of Strategic Initiatives: www.nh.gov/osi/data-center/historical-census.htm
- Manchester Millyard, 1885 courtesy of the Library of Congress

Standards

"Moose on the Loose" Content:

- ✓ Students will understand that improved technology such as the steam engine and telegraph made transportation and communication faster and easier. They will understand that this led to rapid industrialization in the state and the world and the growth of various industries and manufacturing. (3-5.T5.1)
- ✓ Students will understand that industrialization in the 19th century changed patterns of settlement as well as the way people lived in New Hampshire. (3-5.T5.3)

"Moose on the Loose" Skills:

- ✓ Gathering, Interpreting, and Using Evidence (3-5.S1.1, 3-5.S1.2)
- ✓ Communicating and Critiquing Conclusions (3-5.S2.1)
- ✓ Effective Historical Thinking (3-5.S3.2)
- ✓ Comprehensive Geographic Reasoning (3-5.S4.2)

New Hampshire Social Studies Frameworks:

- ✓ Geography: The World in Spatial Terms (SS:GE:4:1.5)
- ✓ Geography: Places and Regions (SS:GE:4:2.2, SS:GE:4:2.4)
- ✓ Geography: Human Systems (SS:GE:4:4.1, SS:GE:4:4.2, SS:GE:4:4.4)
- ✓ Geography: Environment and Society (SS:GE:4:5.2, SS:GE:4:5.3)
- ✓ US / NH History: Economic Systems & Technology (SS:HI:4:4.1, SS:HI:4:4.2, SS:HI:4:4.3)

National Council for Social Studies Themes:

- ✓ Theme 3: People, Places, and Environments
- ✓ Theme 7: Production, Distribution, and Governance
- ✓ Theme 8: Science, Technology, and Society

C3 Frameworks:

- ✓ Construction Compelling Questions (D1.2.3-5)
- ✓ Economic Decision Making (D2.Eco.2.3-5)
- ✓ Exchange and Markets (D2.Eco.8.3-5)
- ✓ Geographic Representations: Spatial Views of the World (D2.Geo.2.3-5)
- ✓ Human-Environment Interaction: Place, Regions, and Culture (D2.Geo.6.3-5)
- ✓ Human Population: Spatial Patterns and Movements (D2.Geo.8.3-5)
- ✓ Perspectives (D2.His.4.3-5)
- ✓ Causation and Argumentation (D2.His.16.3-5)
- ✓ Developing Claims and Using Evidence (D3.4.3-5)

Common Core ELA:

- ✓ Craft and Structure in Informational Text (RI.4.4)
- ✓ Phonics and Word Recognition in Foundational Skills (RF.4.3)
- ✓ Text Types and Purposes in Writing (W.4.1, W.4.1b)
- ✓ Production and Distribution of Writing (W.4.4)
  Comprehension and Collaboration in Speaking and Listening (SL.4.1b)

Common Core Math:

- ✓ Represent and interpret data in measurement and data (3.MD.3)

Lesson Vocabulary

factory	(noun) A building designed to house machines and other technology
Industrial Revolution	(noun) A period of major change in the economy focusing on the change from making things at home to making things in factories
industry	(noun) 1 Making products by using machinery and factories 2 A group of businesses that provide a particular product or service
rural	(adjective) An area of land that is primarily used for farming, where there are no large towns or cities
steam power	(noun) The use of water vapor to power machines and other technology
tenement house	(noun) Crowded living apartments, usually unsafe with poor sanitation
urban	(adjective) A large town or city, where there are lots of buildings and people
urbanization	(noun) The growth of cities as a response to more and more people moving from the countryside into cities
water power	(noun) Using moving water to power machines