



Lesson 11.6 “Modernization”

Unit 11: Big Factories and New Industries

Lesson Objectives

- Students will analyze primary sources to find elements of modernization.
- Students will complete station activities to investigate the impacts of modernization on people in New Hampshire.
- Students will create an illustration demonstrating how New Hampshire modernized because of the Industrial Revolution.

Lesson Competencies

- I can analyze primary and secondary sources and draw appropriate conclusions. (Moose SS)
- I can analyze and explain changes in society and how they impact people in the past and present. (Moose SS)
- I can integrate information, distinguish relevant-irrelevant information (e.g., fact/opinion), and (visually, orally, in writing) present what was learned. (ELA 8)
- I can use sources (pictures, primary and secondary sources, discussion) to expand my understanding of the topic/text and locate information to support my point of view. (ELA 6)
- I can add visuals to help elaborate on my reasons. (ELA 6)

Essential Question

How has New Hampshire come to be the way it is?

Focus Questions

How did New Hampshire modernize because of the Industrial Revolution?

How did people change the way they lived because of industrialization in New Hampshire?

Estimated Time

Three 40-minute class sessions

Materials & Equipment

Sources 1–4 for projection or printing

Class set of “Modernization in New Hampshire: Identify It!” worksheets

Class set of “Modernization in New Hampshire: Experience It!” station worksheets

Appropriate copies of Stations B, C, D, and E sources

Class set of “Drawing Modernization” worksheet



Educator Introduction & Rationale

The Industrial Revolution impacted almost every aspect of people's lives in the 19th century, especially those who moved closer to the factories for work. The population growth due to the factories transformed towns into cities with restaurants, shops, theaters, apartment buildings, churches, clubs, and even amusement parks. The cities became linked by transportation and communication networks, such as railroads and telephones. This modernization of the way people lived and worked in New Hampshire made the Granite State a very different place in 1900 from what it had been 100 years earlier and laid the foundation for our world today.

This is the sixth lesson in Unit 11: Big Factories and New Industries. Earlier lessons in the unit are not necessary in order to complete this lesson, but the learning objectives in lessons 11.2 "Bells and Conveyor Belts" and 11.5 "Growing Cities" would be helpful for students to understand changes in people's work and living conditions as society modernized.

In this lesson, students explore how the technological, social, and economic changes brought upon the state of New Hampshire by the Industrial Revolution resulted in the modernization of society through five stations:

- Station A: Electricity
- Station B: The Telephone
- Station C: Railroads and Time Zones
- Station D: Leisure Time
- Station E: Standardized Currency

Students first define and practice identifying signs of modernization with images of New Hampshire in the early 1900s. They then explore some of the many ways in which modernization is represented in society through the five stations using a variety of learning strategies. After the class has completed the stations, groups of students create a drawing of modernization in New Hampshire.

Teaching tip: Lesson 13.2 "Railroads Over and Across New Hampshire" in Unit 13: Tourism in New Hampshire, 1826–1920 addresses where railroads were built in the state during the 19th century. This lesson's station focuses on the effects of the railroad and creation of time zones.

Two reinforcement activities provide practice with timelines and thinking creatively about advertising. An extension activity invites students to write a letter from the city back to grandparents on the farm. Please adapt all the material in this lesson as necessary to meet the needs of the students in your classroom. Please note, lesson vocabulary and definitions are at the end of this document. You may wish to preview these with your students.

Learning Activity

Activation & Discussion

What does modernization look like? The 100 years between 1820 and 1920 was a time of great change in New Hampshire and the nation. If you have completed other lessons in the industrialization unit, students will have an idea of how people lived, but if you have not, ask students what life was like in the early 1800s, using the questions below as prompts.

- Where did most people live? In the countryside or cities?
- How did people get their food?
- How did people travel from place to place?
- Where did people work?
- How did people communicate with each other over distances?
- How did people heat their homes, do activities after dark, and cook their food?

Possible outcomes:

- The majority of people lived in rural areas on farms. In 1840, 90% of New Hampshire's people lived in agricultural villages.
- People grew, raised, and processed most of their own food or bartered with others to get these items.
- People traveled by foot or horse, either on horseback or in a horse-drawn wagon or carriage.
- People worked at home on the farm or in rural villages in essential roles like shopkeeper or blacksmith.
- People communicated by writing letters or sending messages through others who were traveling.
- There was no electricity, so candles were burned for light, the dishes and laundry were washed by hand, and food was cooked over a fire or a stove heated by a fire. Food was kept cool in cellars or, more likely, preserved by being smoked, salted, or dried so it did not have to be kept cold.

As you discuss how people lived in the early 1800s, write the word "modernization" for students to see. Break the word into its component parts and focus on the word "modern." What does modern mean to students? Do ideas about what is "modern" change over time?

- **Modern:** using or having the newest ideas, methods, or technology

The Industrial Revolution was a time of modernization because there were many inventions and developments in society that changed the way people lived. It created not only our modern world but also affected everything from how people cooked to how they traveled and communicated. To begin to understand these ideas, students will investigate primary sources and find evidence of modernization.

Distribute the “Modernization in New Hampshire: Identify It!” worksheet. Put students in groups with copies of the sources or display each of the images for the class and discuss them together. Give students time to analyze the scene and identify evidence of modernization. Then invite the students to share what they have identified and why it represents modernization.

Student Reading

Modernization in New Hampshire. Before moving into Guided Practice, direct students to read Unit 11: Learn It! “[City Life](#),” pages 4 to 11.

Guided Practice

Experiencing modernization. Set up stations A, B, C, D, and E around the classroom and project or write the focus question: How did New Hampshire modernize because of the Industrial Revolution? Give students the station packet “Modernization in New Hampshire: Experience It!” Explain that at each station, students will learn about how life modernized because of industrialization. Some stations use primary sources, and some do not. Divide students into groups as best for your class and give students time to work on the stations.

Circulate to support learning; ensure students are understanding the material and pushing their creativity. Pause the lesson as necessary for your class.

Teaching Tip: If time does not allow all students to complete all stations, consider dividing up the stations and having students complete them jigsaw style.

Teaching Tip: “Station A: Electricity” does not require additional resources, so would be a good go-to for students who finish other stations early.

Teaching Tip: Two explainer videos, “[The Invention of ‘Free Time’](#)” and “[Railroads in New Hampshire](#),” enhance the learning for Stations C and D. Find them on the “Moose on the Loose” website on the Unit 11 [Find It!](#) page. Consider making them available to students if time and resources permit.

Formative Assessment & Discussion

Demonstrating learning. Once students have completed the stations, have groups work together to draw a scene showing the different ways life has changed due to modernization. Give students “Drawing Modernization” planning worksheet if desired. Consider giving students large paper on which to draw so that they can include many details.

Reinforcement

1. **Timeline.** Use the "Timeline of New Hampshire Modernization" worksheet and "Moose on the Loose" timeline to create a timeline showing when different aspects of modern life developed during the Industrial Revolution.
2. **Create an advertisement for a new product.** Students select a product or activity that modernized people's lives in the early 1900s and create an advertisement to market it using the "Modern Invention Advertisement" worksheet.

Extension

1. **Writing to the past.** Modernization did not happen at the same time across our society because the cities experienced modernization before small towns and the countryside. Invite students to imagine they are living in a city during the Industrial Revolution and are writing a letter back to their grandparents who live on the farm telling them all about "modern" life in the city. What would it say? Have students use their imaginations to write a letter about their experiences living in this modern life. What innovations are they glad for? What aspects of life do they wish were more like the past?

Supporting Materials

New Hampshire Historical Society Resources

1. Women Marching in Concord, 1915
2. Dover in 1910
3. Printing Company Employees, 1915
4. Rotary Telephone, circa 1950-1960
5. Wall Telephone, 1906
6. Desk Telephone, 1910-1930
7. U.S. Time Zone Map, 2020
8. Winter Carnival Poster, 1924
9. Electric Car in the Snow, 1910
10. Hampton Beach and Casino, 1904–1909
11. United Colonies Currency, 1776
12. Merrimack River Bank Currency, 1862
13. Hillsborough Bank Currency, 1808
14. Piscataqua Exchange Bank Currency, 1844–1863
15. Pine Island Park, 1902–1962
16. Old Man of the Mountain carte de visite, 1850–1904
17. Artist in the Country, 1869

Other Resources

- Westinghouse Electric Advertisement, 1914
- Mobile Telephones, 1983–2004
- Push Button Telephone, 1980
- Federal Reserve Currency, 2009

New Hampshire Telephone Museum: www.nhtelephonemuseum.org/. A fun and informative website.

Mystery Science Mini-Lesson, "How Do Phones Work?"
mysteryscience.com/mini-lessons/phones#slide-id-9376

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)
- ✓ Students will understand that as transportation developed and all of New Hampshire was more accessible to the public, tourism grew and developed in the state. (3-5.T6.1)

“Moose on the Loose” Skills:

- ✓ Gathering, Interpreting, and Using Evidence (3-5.S1.1)
- ✓ Communicating and Critiquing Conclusions (3-5.S2.1, 3-5.S2.2)
- ✓ Effective Historical Thinking (3-5.S3.1)
- ✓ Understanding Economics and Economic Systems (3-5.S5.1, 3-5.S5.2)

New Hampshire Social Studies Frameworks:

- ✓ Economics: Financial Institutions and the Government (SS:EC:4:4.1)
- ✓ US / NH History: Economic Systems & Technology (SS:HI:4:4.1, SS:HI:4:4.2, SS:HI:4:4.3)

NCSS Themes:

- ✓ Theme 2: Time, Continuity, and Change
- ✓ Theme 7: Production, Distribution, and Governance
- ✓ Theme 8: Science, Technology, and Society

C3 Frameworks:

- ✓ Construction Compelling Questions (D1.1.3-5)
- ✓ Exchange and Markets (D2.Eco.5.3-5, D2.Eco.9.3-5)
- ✓ Change, Continuity, and Context (D2.His.2.3-5)
- ✓ Historical Sources and Evidence (D2.His.13.3-5)
- ✓ Causation and Argumentation (D2.His.16.3-5)
- ✓ Gathering and Evaluating Sources (D3.1.3-5)
- ✓ Developing Claims and Using Evidence (D3.3.3-5, D3.4.3-5)

Common Core ELA Grade 3:

- ✓ Craft and Structure in Informational Text (RI.3.4)
- ✓ Integration of Knowledge and Ideas in Informational Text (RI.3.7)
- ✓ Text Types and Purposes in Writing (W.3.3, W.3.3d)
- ✓ Production and Distribution of Writing (W.3.4)
- ✓ Comprehension and Collaboration in Speaking and Listening (SL.3.1, SL.3.1c)
- ✓ Vocabulary Acquisition and Use (L.3.6)

Common Core ELA Grade 4:

- ✓ Craft and Structure in Informational Text (RI.4.4)
- ✓ Text Types and Purposes in Writing (W.4.3, W.4.3d)
- ✓ Production and Distribution of Writing (W.4.4)
- ✓ Comprehension and Collaboration in Speaking and Listening (SL.4.1, SL.4.1c)
- ✓ Presentation of Knowledge and Ideas (SL.4.6)
- ✓ Vocabulary Acquisition and Use (L.4.6)

Common Core ELA Grade 5:

- ✓ Craft and Structure in Informational Text (RI.5.4)
- ✓ Text Types and Purposes in Writing (W.5.3, W.5.3d)
- ✓ Production and Distribution of Writing (W.5.4)
- ✓ Comprehension and Collaboration in Speaking and Listening (SL.5.1, SL.5.1c)
- ✓ Presentation of Knowledge and Ideas (SL.5.6)
- ✓ Vocabulary Acquisition and Use (L.5.6)

Lesson Vocabulary

currency	(noun) Money in any form
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
leisure	(noun) Using free time for enjoyment
modernization	(noun) When society, people, and activities change to include recent technology or information
product	(noun) An object made by labor, either by hand or by machine
rural	(adjective) An area of land that is primarily used for farming, where there are no large towns or cities
standardize	(verb) To measure items or activities based on one measurement of the item or activity
urban	(adjective) A large town or city, where there are lots of buildings and people