

University of Tennessee at Chattanooga

Special Collections Lesson Plans

Using Local Primary Sources to Explore the Impact of Inventions and Innovations of the Industrial Revolution: Part I

Table of Contents

<i>Grade Level/Subject</i>	2
<i>Lesson Length</i>	2
<i>Central Focus</i>	2
<i>Context</i>	2
<i>Standards</i>	2
<i>Objective</i>	2
<i>Primary Language Function</i>	2
<i>Key Vocabulary</i>	2
<i>Syntax and Discourse</i>	3
<i>Accommodations</i>	3
<i>Formative Assessment Measure</i>	3
<i>Materials</i>	3
<i>Procedures and Timeline</i>	3
<i>Opening</i>	3
<i>Work Session</i>	4
<i>Closing</i>	4
<i>References</i>	4



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).

Grade Level/Subject

United States History and Geography

Lesson Length

One block, approximately 75-80 minutes.

Central Focus

This is part one of a two-day lesson plan which covers the impact of the major inventors and innovators of the Industrial Revolution. The purpose of this lesson is to build upon students' prior knowledge of analyzing primary sources, the Industrial Revolution, and Chattanooga history. Using primary sources, students will identify major figures of the Industrial Revolution and describe their impact on Chattanooga and United States history.

Context

The Tennessee United States History and Geography Standards state, "the reading of primary source documents is a key feature of United States history standards." Research conducted by Anna Stefaniak concluded that, "young people who learned about local history displayed increased interest in that history, greater place attachment, civic engagement intentions, and generalized social trust" (Stefaniak, et al.). This lesson plan, informed by artifacts held by the University of Tennessee Library's Special Collections, provides K-12 teachers with primary documents to use in their classrooms while meeting state standards and allowing students to reap the benefits of engaging in local history.

Standards

US.05 Describe the changes in American life that resulted from the inventions and innovations of business leaders and entrepreneurs of the period, including the significance of Alexander Graham Bell, Henry Bessemer, Andrew Carnegie, Thomas Edison, J.P. Morgan, John D. Rockefeller, Nikola Tesla, Cornelius Vanderbilt, and Madam C. J. Walker.

Objective

Students will be able to describe the changes in American life that resulted from the inventions and innovations of Alexander Graham Bell, Andrew Carnegie, Thomas Edison, J.P. Morgan, Nikola Tesla, and Madam C.J. Walker.

Primary Language Function

Describe

Students will describe the changes in American life that resulted from the inventions and innovations of Alexander Graham Bell, Andrew Carnegie, Thomas Edison, J.P. Morgan, Nikola Tesla, and Madam C.J. Walker through "think, pair, share," illustration, and summary in the form of an obituary.

Key Vocabulary

Alexander Graham Bell, Andrew Carnegie, Thomas Edison, J.P. Morgan, Nikola Tesla, and Madam C.J. Walker. Students will read/examine primary and secondary sources which describe the key individuals of this lesson.

Syntax and Discourse

- Opening: Students will use the rules of “think, pair, share” (syntax) to discuss with pairs and the class their takeaways from the Edison and Tesla video (discourse).
- Station 1: Students will use their skills of document analysis (syntax) to describe and answer critical thinking questions about the impact of Alexander Graham Bell (discourse).
- Station 2: Students will use the rules of a roadmap (syntax) to create a summary of the major accomplishments and contributions of Madame C. J. Walker (discourse).
- Station 3: Students will use the form of the obituary (syntax) to describe the accomplishments and impact of J. P. Morgan (discourse).
- Station 4: Students will use the conventions of annotating (syntax) to discern important information concerning Carnegie’s outlooks, accomplishments, and legacy from “The Gospel of Wealth” (discourse).

Accommodations

Students help each other by working in groups. The instructor is free to roam about class, helping individuals and groups as needed.

Formative Assessment Measure

The students will complete an activity at each station that will evaluate their mastery of the content of the station.

Materials

- Opening: Projector and computer to play Edison and Tesla video.
- Station 1: Station 1 handouts included in this lesson plan, pencils.
- Station 2: Station 2 handouts included in this lesson plan, one sheet of printer/construction paper or giant sticky note per group, pencils, colored pencils, markers, or crayons, and the following:
 - “Dedication to Madam C.J. Walker: Indiana Conference for Women 2014” <https://youtu.be/F010nv5iyFU>
 - “Madame C. J. Walker,” <https://kids.britannica.com/scholars/article/Madam-CJ-Walker/75942> Both should already be loaded on separate tabs on a laptop/iPad before students arrive.
 - Station 3: Station 3 handouts included in this lesson plan, pencils, a sheet of notebook paper for each group.
 - Station 4: Station 4 packet included in this lesson plan, pencils, one copy of “The Gospel of Wealth,” per group, accessible at <https://www.carnegie.org/about/our-history/gospelofwealth/>.

Procedures and Timeline

Opening

Students will take notes while watching the Department of Energy’s video, “Who Was the Better Inventor, Tesla or Edison?” The teacher should encourage students to focus on Edison’s and Tesla’s inventions and impact on society. Using the “think, pair, share” strategy, students should

come up with at least two ways the industrial revolution or the modern world would be different without each inventor. To the class, students will describe how Edison and Tesla impacted American life. The teacher should briefly explain the directions for the lesson and put them into their pre-assigned groups. The opening should take approximately 10 minutes.

<https://www.energy.gov/articles/video-who-was-better-inventor-tesla-or-edison>

Work Session

The teacher should divide each class into four groups before class begins. Each of the four stations should be set up before the class comes into the room with instructions and materials at each station. Depending on the school's bell schedule, each station should take between 15 and 16 minutes and groups will rotate stations after the timer sounds. The instructor should set a timer for the appropriate amount of time at the start of each station change. The instructor should display the timer on the projector if possible. The instructor will be free to roam from station to station, helping groups and individuals as needed.

- Station 1: students will analyze primary sources to describe the impact of Alexander Graham Bell.
- Station 2: students will watch a video about Madame C. J. Walker and read the Britannica article about her. Then, students will create a life roadmap about her.
- Station 3: students will read about J. P. Morgan in their textbooks to write an obituary for him.
- Station 4: students will read and annotate excerpts from Carnegie's "Gospel of Wealth," keeping in mind that on day two, they will create a character map about him.

Closing

The instructor will ask students to spend the last five minutes of class reflecting on what went well or did not go well in their group work today and how to improve tomorrow. The instructor will ask the students to share their findings with the class.

References

Bell, Alexander Graham, Thomas A. Watson, Gardiner Greene Hubbard, and Lewis B. Monroe. "Notebook by Alexander Graham Bell from 1875 to 1876." Notebook, n.d. Library of Congress Catalog. <http://hdl.loc.gov/loc.mss/magbell.25300201>.

Carnegie, Andrew. "The Gospel of Wealth," 1889. <https://www.carnegie.org/publications/the-gospel-of-wealth/>.

Greene, Matty. *Who Was the Better Inventor, Tesla or Edison?* United States Department of Energy. Accessed November 20, 2013. <https://www.energy.gov/articles/video-who-was-better-inventor-tesla-or-edison>.

Encyclopædia Britannica, Inc. "Madam C. J. Walker." *Britannica Scholars*, n.d. <https://kids.britannica.com/scholars/article/Madam-CJ-Walker/75942>.

Tyrone, McKinley Freeman. *Dedication to Madam C. J. Walker*. Presentation at the Indiana Conference for Women, 2014. <https://youtu.be/F010nv5iyFU>.

“Stanton House Postcard.” Postcard. Chattanooga, TN, n.d. CHC-2015-050-073. Chattanooga History Collections, Chattanooga Public Library and the University of Tennessee at Chattanooga Special Collections.

Stefaniak, Anna, Michal Bilewicz, and Maria Lewicka. “The Merits of Teaching Local History: Increased Place Attachment Enhances Civic Engagement and Social Trust.” *Journal of Environmental Psychology* 51 (August 2017): 217–25.
<https://doi.org/10.1016/j.jenvp.2017.03.014>.

Tennessee State Board of Education. “Academic Standards.” Tennessee Department of Education, n.d. <https://www.tn.gov/education/instruction/academic-standards/social-studies-standards.html>.