

The Industrial Revolution

The Growth of America's Production System

Grades 6-8

Overview

This is a set of lesson plans that deal with the growth of inventions and how that ushered in the Industrial Revolution. These lessons have a broad United States theme, but you can easily adapt these lessons for a good Indiana history study and how industrialization affected Indiana.

These lesson plans have been based on a series of lesson plans by Ms. B. Karns, a teacher in the Alaskan public school system. Feel free to adapt these plans to your teaching style.

Lesson Plans

Purpose: This unit is designed to last one quarter, so that the student will be immersed in the history of the United States and labor practices/philosophies. At the end of the quarter (or time period you choose), students will be able to discuss the evolution of America's production system from the Industrial Revolution through today.

Week One: INVENTIONS

Goal: Students and teachers will learn about the inventions/inventors in the 19th century. Discussing how dramatically life must have changed and comparing that to today's technological revolution will be the main thrust of the lesson. Students will also be exposed to how the Michiana area inventors contributed to the history of America.

Objectives for this week:

1. Use various sources to find information in the library or online.
2. Design an eye-catching poster to advertise the invention. Post it for all to see. If you have access to a presentation software package (Microsoft PowerPoint, Corel Presentations, etc.) each student should create a slide (a single slide) for an invention slide show that you can present to the entire class.
3. Explain invention to the class.
4. Listen/take notes

Activities:

1. Day 1: Library or Internet
 - a. Give directions of assignment (in **ACTIVITIES SECTION** of this package). Allow two class periods to assemble research (who, what, where, when its significance in history).
 - b. Review the website addresses given in the **BIBLIOGRAPHY** section of this package (if you have internet access).
2. Day 2: Library or Internet
 - a. Continue doing research from activity section.

3. Day 3: Speeches and slide show
4. Day 4: Continue speeches and slide show (if necessary).
 - a. Mini lesson: What is a revolution? Read some of The Jungle by Upton Sinclair. Explain and explore about social class during the Industrial Revolution (good place to talk about Victorian Etiquette and Social Manners—located in this packet of material); tell about workers and rich people. Explain about having no government regulations on businesses. How is this different from the government today? How much should the government control? A good story is about the Triangle textile company (you should be able to find this at your local library, also may be on video) fire that killed hundreds of workers because of management's negligence and no government safety standards.
 - b. Assignment: Interview parents or grandparents...what technology did they have in their homes/businesses? What didn't they have when they were your age? How much government control over business should there be in their opinion?
5. Day 5:
 - a. The start of the industrial revolution. Putting Out System (hiring families in their homes), early factories here in South Bend and the Michiana area, Eli Whitney (interchangeable musket parts). The change from an agricultural community to an industrial populace.

Week Two: HORRORS OF THE WORKPLACE

Goal: Students will understand how the factory workers worked and lived in the city.

Objectives for this week:

1. Become a factory worker.
2. Learn about Henry Ford and James Oliver.
3. Discover the living conditions of workers and owners.
4. Compare the workplace of yesteryear and today.
5. Explain the rise of unions.

Activities:

1. Day 1: Henry Ford and James Oliver (**for the history of James Oliver and the Oliver Company, see the Oliver history section in this booklet**)
 - a. The Ford assembly line
 - b. James Oliver's patent and his plow factory
 - c. Give directions for tomorrow's activity
2. Day 2:
 - a. Assign places on the "assembly line"
 - i. You can align the desks in rows
 - ii. Each student has a specific piece of a product (use your imagination-could be as simple as a paper car/plow or plastic model)

- iii. Each student assembles his part of the product and passes it on to the person in front of him. No talking, must work faster each time, etc...
 - b. Assign supervisors who monitor the "production" and correct students' errors during the assembling of the product.
 - c. 20 minutes of assembly
 - d. Have student complete a paragraph about how they felt during the simulation.
3. Day 3:
 - a. Introduce life as a worker (check **Activities** section for research material)
 - b. Have groups of students research on the Internet or library about the life of a worker during the industrialization revolution. Have student groups report to the rest of the class their findings.
 - i. Students should take notes on each other's presentations.
 - c. What was the conclusion? Was life good or bad for a worker? How did a worker's life compare to that of a slave's life?
 - d. Homework: Research and look for current child labor practices of modern day companies.
4. Day 4: US Corporations Finding Cheap Workers
 - a. In pairs, have students find one or two facts about how much a worker in the late 1800s made and what hours they had to work.
 - b. Have students share their facts with the rest of the class. Having the students take notes (possible test later???)

Week Three: BIG BUSINESS

Goal: Students will view the Industrial Revolution from the point of view of a rich tycoon (factory owner).

Objectives for this week:

1. Learn about J.P. Morgan and the banking business.
2. Learn about J.D. Rockefeller and Standard Oil.
3. Learn about Carnegie and railroads (steel).
4. Learn about Studebaker and car/wagon production.
5. Learn about Oliver and agricultural products.
6. Compare these with Bill Gates and Microsoft.
7. Explain and discover the meaning of the Anti-Trust Act.
8. Explain and discover Laissez Faire.
9. Investigate Social Darwinism.

Activities:

1. Day 1:
 - a. Introductions to Carnegie/Morgan/Rockefeller/Studebaker/Oliver
 - b. Give some of your students a different tycoon to research.
 - c. The remainder of students are to become muckrakers. Have them research the history of muckrakers. They should "dig up dirt" on the tycoon they are assigned to research.

2. Day 2:
 - a. Continue research
3. Day 3:
 - a. Have students write a two-minute speech that defends the business practices of the tycoon they researched.
 - b. The students that are the muckrakers need to confront the tycoons about their business practices and the "dirt" they found in their research.
4. Day 4:
 - a. Watch Walt Disney's "Newsies." How were the rich living as opposed to the poor?
 - i. You could optionally use "Les Miserables" or "Oliver Twist" to get the same effect.
5. Day 5:
 - a. Review and possible test?

Week 4: Production

Goal: Students will synthesize what they have learned about production, learn about Japan's production using a Total Quality Approach and predict the United States' future style of production of goods.

Objectives for this week:

1. Review production history
2. Introduce South Bend factories and their production techniques.
3. Show Japan's factories of the 1970's using Total Quality Approach.
4. Investigate U.S. companies using the T.Q.A. (i.e. Saturn Automobile Company)
5. What do students think of this process?
6. Quality versus quantity: process the results; post the best from assembly line as well as the best from Total Quality Approach.

Activities:

1. Day 1: Review production history in U.S.
 - a. Handmade
 - b. Interchangeable parts
 - c. Assembly line
2. Day 2:
 - a. Lecture about Edward Demming's idea of production
 - i. Japan utilized his model of Total Quality production; the U.S. did not (that's why he took his idea to Japan).
 - b. Interesting comparison: look at the production history. Now look at the school system history. Compare and contrast.
 - i. Learn what your parents taught you at home
 - ii. One room school house
 - iii. Grade levels, K...1...3...7...12 graduation (finished products). Similarities?
3. Day 3:

- a. Reconstruct assembly line done on week one, day two. This time, however, do it in the Demming style of production.
 - i. Set up groups of 4-5. Each person at his/her desk is an expert. Let them have 10 minutes to plan their areas of expertise (assemblage of wheels, cab, lights, etc...) Give groups the same time as the assembly line simulation. They can talk, help each other, sing, sit, whatever.
 - ii. Discuss the output. Discuss and explore quality versus quantity.
4. Day 4:
 - a. Do research on several businesses that operate today (i.e. McDonalds, Subway, AM General, etc...)
 - i. What type of production system are they using?
 - ii. Research and find out how each business (or the business you were assigned) controls quality.
 - iii. Are there any businesses moving toward or practicing Total Quality?
5. Day 5:
 - a. Testing and/or review

Suggested Test/Essay Questions

1. Why was this period in history called the Industrial Revolution? Include at least five inventions. (Start with a topic sentence that tells what the paragraph is about. Finish with a conclusion sentence that concludes your thoughts)
2. According to the movie "Newsies," there were three main standards of living in New York City at the turn of the century. Explain their differences. How did the Sears catalog begin to change that?
3. Describe Henry Ford's new factory and how it worked. Why was the assembly line a new idea?
4. Describe the philosophy the capitalists used for their reasons not to have a welfare program at the turn of the century. Where did they get that idea? What's your opinion of it?
5. Why was Teddy Roosevelt's presidency such a radical switch from that of his predecessors?
6. The workers of the late 1800s and early 1900s organized themselves into various groups to benefit their causes. Describe unions and strikes, anarchists, socialists and tell why someone would join those groups.
7. Currently there are around 400 million children working in the world. Describe some of the child labor situations that are happening today. In your opinion, should the United Nations step in and stop companies from exploiting children?
8. Who was Upton Sinclair? What book did he write? What did it describe? Why did he name it that?
9. Compare and contrast the three big capitalists of the Industrial Revolution: Morgan, Rockefeller and Carnegie. How did their businesses compare/contrast with the business of James Oliver and the *Oliver Chilled Plow Works*?