Where the past is present

DETROIT HISTORICAL SOCIETY

TEACHER RESOURCE LESSON PLAN

ON THE ASSEMBLY LINE



1914 Ford Model T *Courtesy of the Walter P. Reuther Library, Wayne State University*

INTRODUCTION

This lesson was originally published in *Telling Detroit's Story: Historic Past, Proud People, Shining Future* curriculum unit developed by the Detroit 300 Commission in 2001.

Through these activities and information found in this lesson, kindergarten through second grade students will develop a base understanding of economic production and labor. By having students actually participate in a working assembly line, they will apply what they learned through the reading and make connections to real-life activity.

LEARNING OBJECTIVE

Students will:

- Understand the role Detroit played in the automobile industry and Henry Ford's development of assembly lines in his factories.
- Explain how an assembly line can be an efficient process for making products.
- Use the assembly line process to explain the meaning of division of labor.

BACKGROUND ESSAY

From the late 1800s to the present, cars have been an important industry in Detroit. In the 1920s, Detroit became known as the Automobile Capital of the World because so many cars were produced here. Detroit is still known as "The Motor City" today.

The first time a gasoline-powered car was driven in Detroit was in March 1896 by Charles B. King. A few months later, Henry Ford drove the car he had been working on in the shed behind his house onto the streets of Detroit. The first cars manufactured were individually constructed with the same person putting all the parts together.

In 1913, Henry Ford began a new way of making cars. He used an assembly line to build cars. Instead of employees all working on one car at a time, a car would move along a belt as it was being put together. Workers added parts to the car as it moved along. By using an assembly line, Ford would make cars faster and cheaper.

The first hand-made Oldsmobiles sold for \$2,382. The mass-produced models sold for about \$625. Henry Ford's first car, which he called the "Quadricycle," and the shed where it was built can be seen at Greenfield Village. Ford's popular Model T sold for as little as \$275. By 1924, Ford's assembly line technique began to put ownership of an automobile within reach of most Americans.

In 1914, ten thousand men sought jobs at Ford's Highland Park Plant, responding to Henry Ford's offer of an unprecedented \$5-a-day wage for autoworkers, more than double the prevailing pay rate for an eight-hour day. Ford's theory proved correct; pay workers more, reduce turnover in the plant, and make more cars more efficiently. Sales increased, prices dropped, and the workers could afford to buy the Model T's they built.

Factors leading to the establishment of the

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auto industry in Detroit included the availability of skilled labor, investment dollars from those who had exploited timber and mining, and the raw materials for paints, chemicals, metal parts, plus gasoline used by the local boating industry.



Ford Mustang, 1983 Courtesy of the Walter P. Reuther Library, Wayne State University

MATERIALS USED

- Reading: "On the Assembly Line"
- Pictures: Automobile assembly lines
- Picture: Henry Ford and the Quadricycle
- Paper
- Envelopes
- Address labels
- Stamps

LESSON SEQUENCE

Opening the Activity:

- Show pictures of assembly lines on an automobile manufacturing plant. Questions for class discussion: What are the workers doing? Can you see a finished car? Why or why not? How is the work divided?
- 2. Show a picture of Henry Ford together with his Quadricycle. How is this picture different from the pictures of the automobile plant? How is it the same? Why?

Developing the Activity

1. Ask six students to come to the front of the class. Have one student work alone while four

others work as a team. Their project will be to fold a letter, insert it into an envelope, put an address label on it, and put a stamp on the envelope. Have individuals and the team each assemble five letters. Have each team member perform one specific task: one to fold the letter, one to put the letter into the envelope, one to place the address label on the envelope and one to put the stamp on the envelope. Tell them NOT to seal the envelope.

2. The sixth student will serve as a timekeeper, recording the time to complete the task for both the individual and the team.

Concluding the Activity

- Discuss how long it took the group to complete the task verses how long it took one student to complete the task, and which was more efficient.
- 2. Discuss why division of labor produces goods faster.

Extending the Activity

- 1. Plan a trip to an automobile plant to see workers on the assembly line
- 2. Bring people who worked on the assembly line into the classroom.

ASSESSING THE LEARNING

- Have students draw pictures illustrating the process of making cars on the assembly lines.
- Have students imagine that they are the next Henry Ford. Have them design their own car and write about the uniqueness of their creation.

For more information about the Detroit Historical Society, or to schedule a field trip to the Detroit Historical Museum or Dossin Great Lakes Museum,

visit detroithistorical.org

PICTURE: HENRY FORD AND THE QUADRICYCLE



Courtesy of the Walter P. Reuther Library, Wayne State University

PICTURE: MAGNETO ASSEMBLY LINE, HIGHLAND PARK PLANT, 1913



Courtesy of the Walter P. Reuther Library, Wayne State University

PICTURE: FORD MODEL T ASSEMBLY LINE, 1923



Courtesy of the Walter P. Reuther Library, Wayne State University

PICTURE: FORD ASSEMBLY LINE, 1929



Courtesy of the Walter P. Reuther Library, Wayne State University

PICTURE: CADILLAC PLANT ASSEMBLY LINE, 1955



Courtesy of General Motors Media Archive

PICTURE: DAIMLERCHRYSLER ASSEMBLY LINE, 1995



Courtesy of DaimlerChrysler