

Mechanization of the American Farm and the Role of the Barn

Subject: Social Studies: Agriculture

Grade Level: 6-8

McRel Standards: US History Era 6: The development of the Industrial United States (1870-1900)

Benchmark: Understands how the rise of corporations, heavy industry, and mechanized farming transformed American society.

Iowa Model Core Literacy: Writing: Uses writing as a tool for learning

Curriculum: Uses an effective writing process
Uses knowledge of purpose, audience formant, and medium in developing written communication.

Anticipatory set: How has technology and mechanization transformed America's agrarian society and affected the use of the traditional barn?

Objective: The student will learn how farming has grown through technology and mechanization by creating a Venn diagram comparing Iowa farming practices and equipment from the late 1800s, middle 1900s, and today. After completing the first diagram, students will create another Venn diagram comparing Iowa farmsteads—focusing on barns and out buildings using the same periods listed above.

Purpose: Through this study, students will be able to understand how technology and mechanization have changed the way people farm today. They will also understand how the role and design of barns have changed to meet the needs of the Iowa farmer today.

Teaching to the Objective:

1. Have students discuss the lifestyle of a farmer in the late 1800s, middle 1900s, and today. Have students search the internet sites to find brief descriptions of different farm equipment farmers used during each time period. Students will need to make lists of the different types of equipment used and what the farmsteads looked during each timer period. Have them pay particular attention to the barn and its role on the farmstead.
2. After students have researched the different farming time periods, have them work in groups to brainstorm and create a Venn diagram comparing the three farming time periods.
3. Discuss with the students the technological/mechanization changes in farming and how this would impact the used of barns and out buildings on a farmstead.
4. Have the students create another Venn diagram show how the needs of the

farmer has changed with respect to the traditional barn.

5. After the Venn diagrams have been completed, post them around the room and have the students do a gallery walk to see how other student group saw the changes in farming and the impact on the design and use of the traditional barn.
6. Students will be provided a graphic organizer for the journal entry to organize their thoughts before they begin writing. Students may choose to work with a partner to fill out the graphic organizer and share information.

Assessment: The students will prepare three journal entries where they will pretend that they are the farmer on each time period farm. Students should reflect on the mechanization used on the farm and explain the importance and relevance of the barn during each time period. Have students include the different equipment used on the farm and how the barn is used during the time period. Students can also illustrate their journal entry by drawing the period farmstead including the barn and one piece of equipment used during that time period.

Web sites:

1. <http://ag.smsau.edu/cweqpt.htm>

This is a web site that has a great description and drawings of the equipment used during the years 1865-1872. This is a great site to use when you are teaching about the different types of farming equipment used during this time.

2. <http://www.lhf.org>

This web site features Living History Farms in Urbandale, Iowa. The farm features an 1700 farm, and 1850 farm, and 1900 farm. There are activities for students to participate on each farmstead. There is also the Wallace's Exhibition Center to see how Iowa's farms impact the world today.

3. <http://www.orgsites.com/ia/carstens/index.html>

This web site features the restored Carstens Farm outside of Shelby, Iowa. **Carstens 1880 Farmstead** is a living history exhibit of how farming practices have evolved from hand labor to horse machinery to tractors giving visitors a look at the things that have formed our rural heritage.

4. Camp Silos <http://www.campsilos.org/index.htm>

Camp Silos is an educational web site focusing on the development of American agriculture. Targeting students in grades 4-8, the site provides online educational material related to the natural prairie, pioneer farm life, early agricultural technology, the story of corn from its early Indian

origins to the present, and 21st century technological advances including applications of GPS and biotechnology. Activities and lesson plans feature such diverse activities as virtual field trips, mystery photos, group games, problem-based activities, primary source materials, scavenger hunt and history detective research using online resources and links to national standards.

5. Investigating Camp Silos Excursion
<http://www.campsilos.org/excursions/index.html>

Camp Silos Excursions offers learning materials through virtual field trips to Iowa's historic and cultural resources in the Silos & Smokestacks National Heritage Area. Fourth through eighth grade students become museum curators and explore historic photographs, letters and artifacts depicting pioneer farm life and the development of agriculture. Web-based research activities and pre- and post-field trip lesson plans are linked to national standards in the areas of language arts, social studies and history.

6. http://www.webfamilytree.com/farming_through_the_century.htm

The web site gives a time line of information on how farming went from horse pulled equipment to the tractor we know today.

7. <http://www.horsedrawnfarmequipment.homestead.com>

This web site has photographs of the farm equipment that used horses to power the equipment.

8. <http://school.discovery.com/schrockguide/aged.html>

This web site provides teachers with ideas on agriculture lesson plans.

9. [Iowa Agriculturist http://www.campsilos.org/mod2/teachers/r1.shtml](http://www.campsilos.org/mod2/teachers/r1.shtml)

Describes the types of plows used by American farmers from the pre-1800s until the 1860's.

9. [Pioneer Farming http://www.connerprairie.org/historyonline/farming.html](http://www.connerprairie.org/historyonline/farming.html)

Describes crops, farm implements, and livestock on pioneer farms in Indiana in the early-to-mid-1800s.

10. [John Deere Self-Polishing Cast Steel Plow
http://web.mit.edu/invent/iow/deere.html](http://web.mit.edu/invent/iow/deere.html)

Describes John Deere's invention of improved plows beginning in 1837 and the impact of that equipment on Midwest agriculture.

11. [Farmers and the Land http://www.usda.gov/news/pubs/99arp/timeline.pdf](http://www.usda.gov/news/pubs/99arp/timeline.pdf)

Presents a timeline of the important developments in American agriculture from 1776-1990 including statistics on the number of farms and the total farm population.

12. [A History of American Agriculture](http://www.agclassroom.org/gan/timeline) <http://www.agclassroom.org/gan/timeline>

A History of American Agriculture. by decade, by category. 17th-18th Centuries · 1800 · 1820 · 1840 · 1860 · 1880 · 1900 · 1910 · 1920 · 1930 · 1940 · 1950 ...

13. [Farming Today And Tomorrow - A Day in the Life of a Farmer](http://www.campsilos.org/mod4/students/lifea.shtml)
<http://www.campsilos.org/mod4/students/lifea.shtml>

This web site provides information about what it is like to be a farmer today.