

Fencing the Open Range During the Industrial Revolution



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Peter Loso
Grosse Ile High School

Lesson Overview:

The last phases of the American Industrial Revolution are remembered, world wide, more for the inventions of Thomas Edison (light bulb) and Alexander Graham Bell (telephone) than that of Michael Kelly and Joseph Glidden (barb – barbed wire). For those Americans living in the Great Plains Area of the United States, though, the latter two gentlemen may have had a more profound effect. Students will interact with primary source materials dealing with the act of fencing the Open Range regions of the prairie states. The cattle ranch industry depended solely on the open ranges and herding of their cattle to market during the late American Industrial Revolution Era (1870 – 1900). Students will be given a series of visual and literary primary source clues in which they will be expected to develop conclusions regarding the pros and cons of using fencing and choosing different fencing materials. The Transcontinental Railroad was completed in 1869. This opened up opportunities for a huge number of Easterners to flood the Western states and territories. It also began the conflict between small farmers (Easterners/immigrants) and the ranchers. Thus the need for fencing arose.

Objectives:

Students will gain experience in analyzing visual, audio and/or literary historical information as it relates to changing technological and social needs. They will become aware of the far reaching effects of newly developed tools on seemingly unrelated activities.

Standards:

USHG ERA 6 – THE DEVELOPMENT OF AN INDUSTRIAL, URBAN, AND GLOBAL UNITED STATES (1870 -1930)

6.1 Growth of an Industrial and Urban America (*Included in Grade 8; begins SS. HSCE*)

NSS-USH.5-12.6 ERA 6: THE DEVELOPMENT OF THE INDUSTRIAL UNITED STATES (1870-1900)

- Understands how the rise of corporations, heavy industry, and mechanized farming transformed the American people.
- Understands massive immigration after 1870 and how new social patterns, conflicts, and ideas of national unity developed amid growing cultural diversity.
- Understands the rise of the American labor movement and how political issues reflected social and economic changes.

Time Required: 2 to 3 days (depending on time constraints and/or educational level of students). 45 to 55 minute periods.

Recommended Grade Level(s):

9 – 12

Topic(s):

Science, Technology, American Industrial Revolution

Era:

1870 – 1900

Preparation:

- **Materials:**
Visuals and Sound Bytes of “the open range”, cowboys, Native Americans and buffalo
- **Resources: I.**
<http://www.droverhouse.com/images/A-texas-Cowboy.gif> (a. open range cowboy & cows)
- <http://hdl.loc.gov/loc.pnp/cai.2a12204> (b. native Americans and buffalo)
- <http://www.loc.gov/pictures/item/99613912/> (c. cattle drive)
- http://memory.loc.gov/cgi-bin/query/D?lomaxbib:14:./temp/~ammem_SUah::@@@mdb=aasm.ftvbib_berl_lbcoll_rbpbib_tccc_cwband_coplan (d. Cowboy song)
- [http://memory.loc.gov/cgi-bin/query/r?ammem/gmd:@field\(NUMBER+@band\(g3701p+rr004340\)\)](http://memory.loc.gov/cgi-bin/query/r?ammem/gmd:@field(NUMBER+@band(g3701p+rr004340))) (e. RR map)
- Text - The Americans – Reconstruction to the 21st Century, copyright 2005 p 209 (f. cattle drive map)
- Piece of barb (barbed) wire. (local hardware store)

Procedure: I

- **Activities**
I. Introduce the topic by defining “Open Range”. Areas of cattle/buffalo grazing in the prairie (west of the Mississippi river) with no fences.
Display hard copy pictures or use the above web sites to display images of the open range. (a,b,c)
Play the cowboy song to portray the feeling of the immense size and solitude found on the prairie at this time. (Use above web site - d.) Use the attached LOC *Thinking About Songs* work sheet. (LOC Teachers/Lyrical) to analyze the lyrics and melody.
Use the Railroad map along with the cattle drive map to show how much of the Prairie was divided up by “progress”. (e. & f.)
Refer to the textbook, The Americans – Reconstruction to the 21st Century, McDougal Littell, copyright 2005 pp210-211, for further discussion.
Have students relate any experiences they may have had with an “open range” concept.

- **Resources: II.**
- Text - The Americans – Reconstruction to the 21st Century, copyright 2005 p211 (g)
[http://memory.loc.gov/cgi-bin/query/r?ammem/psbib:@field\(DOCID+@lit\(p14219\)\)</persistent_url](http://memory.loc.gov/cgi-bin/query/r?ammem/psbib:@field(DOCID+@lit(p14219))</persistent_url) (h. sod fence)
- <http://hdl.loc.gov/loc.afc/afc96ran.45287> (i. plank fence)
- <http://cdm15330.contentdm.oclc.org/u?p15330coll22,16152> (j. rail fence)

- <http://cdm15330.contentdm.oclc.org/u?p15330coll22,73923> (k. rail fence 2)
- <http://cdm15330.contentdm.oclc.org/u?p15330coll22,10503> (l. rail fence 3 good comments)
- <http://cdm15330.contentdm.oclc.org/u?p15330coll22,22592> (m. square wire fence)
- <http://memory.loc.gov/afc/afc96ran/438/43830v.jpg> (n. single wire fence)
- <http://memory.loc.gov/afc/afc96ran/447/44775v.jpg> (o. barb wire fence)
- http://en.wikipedia.org/wiki/Barbed_wire (p. definition)
- Text - The Americans – Reconstruction to the 21st Century, copyright 2005 pp210-211 (q. narrative.)

Procedure: II

• Activities

- I. Explain that the need for a more efficient means of rounding up livestock and getting them to the marketplace called for a change in the “Open Range” concept. The increase in population from Chicago moving west due to homesteading, gold fever, and the desire to explore caused a huge demand for fresh food. Farms sprung up and the cattle drives grew in intensity until the years between 1884 and 1887. *Resource (g.)* The old “roundups” from the huge open prairies, were time consuming and labor intensive. The smaller ranchers and farmers developed fencing to protect their livestock and crops from these large cattle drives. Many fencing methods were tried. Refer to the resources section for different fencing techniques (h – o). Use the attached *LOC Artifact Analysis Worksheet #1, 4a & b* (LOC Teachers/Artifact) to analyze the fencing types and the pros and cons of using each type. Refer to p. ie **Rocks**- scarce, labor intensive, **Wood** – scarce, expensive, short lived, **Sod** – erode fast, Single Wire – too easy to break, **Barbed Wire (Kelly)** – barbs would spin, **Barbed Wire (Glidden)** – locked barbs and mass produced, injured livestock and wildlife.

- II. Have students work in teams and research the ramifications to the cattle industry and local inhabitants of the fencing of the open range. ie. Native Americans – lost their freedom to roam, cattle ranches – the herders became obsolete, (the cowboys of the movies were not needed, to any large extent, anymore).

• Extension Activities

- Expand on the effect the “closing of the prairies” had on the Native Americans.
- Expand on the effect the “closing of the prairies” had on the rise of small farming.
- Expand on the effect the “closing of the prairies” had on politics in the Prairie States.

• Evaluation:

Students should, by teams or individually, give a report on what types of “new” fencing materials/methods have been developed to help eliminate the problems posed by barb wire.

-OR-

Students should, by teams or individually, give a report on “Other Uses of Barbed Wire besides for Fencing”.

Use the enclosed “Oral Report” Rubrics as a scoring guide.

Oral Presentation Rubric : Other uses of Barbed Wire Besides Fencing

CATEGORY	4	3	2	1
Comprehension	Student is able to accurately answer almost all questions posed by classmates about the topic.	Student is able to accurately answer most questions posed by classmates about the topic.	Student is able to accurately answer a few questions posed by classmates about the topic.	Student is unable to accurately answer questions posed by classmates about the topic.
Stays on Topic	Stays on topic all (100%) of the time.	Stays on topic most (99-90%) of the time.	Stays on topic some (89%-75%) of the time.	It was hard to tell what the topic was.
Preparedness	Student is completely prepared and has obviously rehearsed.	Student seems pretty prepared but might have needed a couple more rehearsals.	The student is somewhat prepared, but it is clear that rehearsal was lacking.	Student does not seem at all prepared to present.
Primary Sources	Student uses more than two Primary Sources.	Student uses two Primary Sources.	Student uses one Primary Source.	The student uses no Primary Sources OR the Primary Sources chosen do not apply to the subject.
Content	Shows a full understanding of the topic.	Shows a good understanding of the topic.	Shows a good understanding of parts of the topic.	Does not seem to understand the topic very well.

Oral Presentation Rubric : Alternatives to Barbed Wire

CATEGORY	4	3	2	1
Comprehension	Student is able to accurately answer almost all questions posed by classmates about the topic.	Student is able to accurately answer most questions posed by classmates about the topic.	Student is able to accurately answer a few questions posed by classmates about the topic.	Student is unable to accurately answer questions posed by classmates about the topic.
Stays on Topic	Stays on topic all (100%) of the time.	Stays on topic most (99-90%) of the time.	Stays on topic some (89%-75%) of the time.	It was hard to tell what the topic was.
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Thinking About Songs as Historical Artifacts

	<i>Illustration</i>	<i>Lyrics</i>	<i>Music</i>
<i>Looking at the Song</i>	Look at the physical format and graphical elements. What do you see?	What people, places and events are mentioned?	What do you notice about the music (fast, slow, catchy, dull)?
<i>Responding to the Song</i>	What are your personal reactions to the image?	What are your personal reactions to the lyrics?	What emotions might this song produce when sung or played?
<i>Thinking about History</i>	Why do you think the artist wrote this song? Why is the music important to this song?	For what audience was the song written?	What does the song tell you about what life was like during this period in history?

Artifact Analysis Worksheet

1 *Type of Artifact. (shown in the picture)*

Describe the material from which it was made: bone, pottery, metal, wood, stone etc.

2 *Special Qualities of the Artifact. (shown in the picture)*

Describe how it looks, feels: shape, color texture, weight, movable parts anything stamped or written on it.

3 *Uses of the Artifact. (shown in the picture)*

A. What might it have been used for?

B. Who might have used it?

C. Where might it have been used?

D. When might it have been used?

4 *What does the Artifact Tell Us? (shown in the picture)*

A. What does it tell us about the technology of the time in which it was made and used?

B. What does it tell us about the life and times of the people who made it and used it?

C. Can you name a similar item today?

5 *Bring a Sketch, a photograph, or the artifact listed in 4C above, to class*