



***Between Fences* Teacher's Guide**
Maryland State Curriculum



This guide as been prepared for the Maryland Humanities Council by Amy Federman 2010.

Introduction

We live between fences. We may hardly notice them, but they are dominant features in our lives and in our history. ***Between Fences*** is a traveling exhibition that explores how tightly the fence is entwined with American history, politics, industry, and daily life. This exhibit, developed by the **Smithsonian Institution's Museum on Main Street**, will tour Maryland between September 2010 and August 2011. You and your students will have the opportunity to visit ***Between Fences*** at an institution close to your school through a relatively local field trip; this visit will create a unique learning experience for your students and also meet specific State of Maryland educational requirements monitored by administrative staff.

This teacher's guide is designed to match the Maryland State Curriculum item by item. It should be used in conjunction with the Teacher's Guide for ***Between Fences***, downloaded from the Museum on Main Street website: http://www.museumonmainstreet.org/admin/fences_admin/fences_local/teachers_guide_fences.pdf.

These two guides outline specific ways you and your students can explore the themes of the exhibition and connect to the Maryland State Curriculum. They will also give students a specific way to broaden their experiences while gaining recognition for student achievements in local community institutions.

The teacher's guide provides four engaging lessons and a scavenger hunt. The lessons are designed to promote the development of critical thinking skills and help students meet the learning objectives specified in the national standards for U.S. history, math, and language arts. Please use your knowledge of your students' capabilities to adapt the lessons to meet your students' needs. The scavenger hunt covers each of the exhibition's five sections and encourages students to engage with the photos, text, artifacts, and themes. Finally, the classroom poster's "How Do We Build Our Fences" lesson introduces students to the exhibition themes. It asks them to consider the reasons people build fences and then to examine the fences in your community. Six of the poster's images can be used as prompts for related discussions and writing projects.

We are happy to provide copies of the poster (Please contact us at the website below) or it can be downloaded from the Smithsonian Institution's website, www.museumonmainstreet.org/educate.htm.

All of the lessons, which can be taught before or after a visit to ***Between Fences***, give students the opportunity to create products that can be shared with your entire community in the local component of the ***Between Fences*** exhibition.

Please contact your local ***Between Fences*** hosts before the exhibition arrives to coordinate plans for inclusion of your students' work. Your hosts may also be able to provide additional fence-related resources, serve as guest speakers, and offer other assistance as your class pursues its fence projects.

www.mdhc.org

Two Worlds Meeting Across a Fence

Introduction

This lesson uses skills required in **Grade 4 and Grade 5 Reading/Language Arts** to comprehend and evaluate both primary sources and informational text to identify points of view. This lesson also captures key concepts of **Grade 4 and Grade 5 Social Studies** by putting these texts in a historical context. It challenges the students to investigate how cultural differences between Native Americans and English colonists sometimes created misunderstandings and conflicts, for example, how they defined the word "property". It uses concepts learned in **Peoples of the Nation and World, Geography, and History**, and then uses skills learned in the **Social Studies Skills and Processes** and **Speaking** curriculum of **Grades 4 and 5** to fulfill the designed project.

Grade 4 Social Studies

Addressing Standard 2.0 Peoples of the Nation and World

A. Elements of Culture

A.1.a. Using first person accounts, define how culture of Native Americans and English colonists, including their food choices, influences them in their daily life.

1. d. Compare the early cultures of the Native Americans and the English colonists, particularly how it relates to their homes.

Addressing Standard 3.0 Geography

B. Geographic Characteristics of Places and Regions

B.1.a. Using primary source 1793 historic map and first personal narratives, compare physical characteristics of the New England landscape, including natural/physical features, weather and climate, soil, vegetation, minerals and animal life.

B. 2. a. Compare human characteristics of Native Americans and English colonists, including human-made features, language, religions, political systems, economic activity, and population distribution described in the accounts.

D. Modifying and Adapting to the Environment

D.1. Describe how Native Americans and English colonists adapt to, modify and change the natural environment.

D.1.b. Describe ways and reasons people in New England modified the natural environment and the consequences of modifications.

D. 1.c. Explain how the growth of communities had consequences on the environment, loss of farmland, and pollution, especially compared to England.

D. 1. d. Describe how land use is influenced by governmental decisions, compared to England.

Addressing Standard 6.0 Social Studies Skills and Processes

E. Organize Social Studies Information

E. 1. a - e. Collect information, categorize, and find relationships between Native Americans and English colonists, between Kewenusk and John Miller. Categorize information from maps and from personal narratives.

F. Analyze Social Studies Information

F. 1. a - e. Interpret information from maps. Analyze personal narratives to determine point of view and perspectives of author, including identifying bias and prejudice of author.

Grade 4 Reading/Language Arts

Addressing Standard 2.0 Comprehension of Informational Text

1. a. Develop and apply comprehension skills by reading Native American and English colonist personal narratives as informational texts.
1. b. Use graphic aids, the two maps, to amplify texts.
6. Read critically to evaluate [informational texts](#) and compare two points of view.

Addressing Standard 4.0 Writing

1-7. Prepare a script for a television news report, developing content from personal narratives and addressing specific questions of journalism-- "Who, What, Where, Why and How." Compose, edit, revise and document sources as part of script.

Addressing Standard 7.0 Speaking

1-2. Present television news report highlighting the two parties' differing points of view using effective presentation strategies. State a position and using props when appropriate.

Grade 5 Social Studies

Addressing Standard 2.0 Peoples of the Nation and World

A. Elements of Culture

A.1. Describe how the two cultures in colonial societies interacted daily, and how the landscape challenges the two groups in their daily life.

B. Cultural Diffusion

B.1. a. Compare perspectives of Native Americans and English colonists in terms of their use of word "property."

C. Conflict and Compromise

C.1. a. Analyze how conflict affected relationships among Native American and English colonists.

Addressing Standard 3.0 Geography

A. Using Geographic Tools

A. 1. a. Use map elements to interpret and construct a map of the two different viewpoints based on the clues of the personal narratives.

A.2. c. Use landscape map and drawings to describe the New England geography.

A. 2.d. Compare geographic locations and geographic characteristics of colonial settlements of New England to Jamestown, Plymouth, Boston, Philadelphia, Charleston, and New York City.

B. Geographic Characteristics of Places and Religions

B. 1. a. Examine the similarities and differences of regions in Colonial America, starting with New England as described in the first person accounts.

B. 1. c. Explain how geographic characteristics affect how people live and work, and the population distribution of New England.

C. Movement of People, Goods, and Ideas

C.1.a Using maps, explain how geographic characteristics of New England influenced its settlement patterns.

C.1.b. Using personal narratives, analyze the consequences of migration between the colonies and immigration to the colonies, such as Europeans and Africans immigrating to the east coast of the United States, especially in terms of the Native Americans.

D. Modifying and Adapting to the Environment

D.1.a. Compare ways Native American societies used the natural environment for food, clothing, and shelter.

D. 1 .b. Describe specific ways that New England colonists adapted to and modified the environment, such as using mills and farming.

Addressing Standard 6 Social Studies Skills and Processes

D. Acquire Social Studies Information

- D. 1. a. Gather and read appropriate print sources, such as personal narratives included in materials.
- D.1.b. Read and obtain information from texts representing diversity in content, culture, authorship, and perspective.
- D.1.c. Locate and gather data and information from maps and personal narratives.

E. Organize Social Studies Information

- E. 1. a -e. Collect data, find relationships between Native Americans and English colonists, between Kewenusk and John Miller. Categorize information from maps and from personal narratives.

F. Analyze Social Studies Information

- F. 1. a - e. Interpret information from primary source 1793 map and secondary source personal narratives. Analyze first person accounts to determine point of view and perspectives of author, including identifying bias and prejudice of author.
- F. 2. a. Compare information from two sources.

Grade 5 Reading/Language Arts

Addressing Standard 2.0 Comprehension of Informational Text

- 1 a. Develop and apply comprehension skills by reading Native American and English colonist. personal narratives as informational texts
- 1. b. Use graphic aids, the two maps, to amplify texts.
- 4. Determine and analyze important ideas in personal narratives, analyzing two points of view.

Addressing Standard 4.0 Writing

- 1-7. Prepare a script for a television news report, developing content from nonfiction personal narratives and addressing specific questions of journalism -- "Who, What, Where, Why and How." Compose, edit, revise and document sources as part of script.

Addressing Standard 7.0 Speaking

- 1-2. Present television news report highlighting different points of view between two parties. Use effective presentation strategies. State a position and use props when appropriate.

Supplemental Books for Reading/Language Arts

Developed by Smithsonian Institution for Ages 9 - 12

Cruz, Maria Colleen. *Border Crossing: A Novel*. Pinata Books, 2003.

When 12-year-old Cesi Alvarez overhears her grandmother accusing her father of being ashamed of his heritage, Cesi leaves home and travels to Mexico on her own. Along the way, she learns about the prejudice her parents and grandparents have had to face.

Desimone, Shelly. *Paulo's Wall*. Perfection Learning, 2002.

In this novel, gang members try to claim Paulo's street and his wall, but when Paulo fights back with paint can, the territorial dispute escalates.

MacLachlan, Patricia. *Sarah, Plain and Tall*. Harper Trophy, 2004.

Winner of the Newberry Medal in 1986 and numerous other awards, MacLachlan's novel is about a Maine schoolteacher who travels to the Kansas prairie to become the wife of a widowed homesteader with two young children. Other books by MacLachlan in the *Sarah, Plain and Tall* series: *Skylark* (Harper Trophy, 1997) and *Caleb's Story* (Harper Trophy, 2002).

Neufeld, John. *Gaps in Stone Walls*. Bt. Bound, 1999.

Set in a small community in Martha's Vineyard in 1880, this is the story of a twelve-year old deaf girl who struggles to clear her name after being accused of murder. Realistic descriptions of New England's rock-walled countryside highlight this fast-paced crime drama and help to create a vivid sense of history and place.

Patneade, David. *Thin Wood Walls*. Houghton Mifflin, forthcoming in 2004.

When a Japanese American boy named Joe Hanada is forced to leave his home near Seattle and move with other Japanese Americans to an internment camp, he turns to his journal to record his feelings and his struggle to survive.

Purcell, Martha and Jason Roe. *Barbed Wires of Hate*. Perfection Learning, 2002.

This is the story of a Japanese American boy, Hiroshi, and his family who are forced by the U.S. Government to leave their home in California and live in a detention camp with other Japanese Americans during World War II.

Stanley, Jerry. *I Am an American: A True Story of Japanese Internment*. Crown Books for Young Readers, 1996.

An American Library Association Notable Children's Book and a Horn Book Fanfare Honor Book, *I Am an American* introduces readers to the history of Japanese internment camps. Stanley uses the experiences of a Japanese American teenager, Shi Nomura, to describe the camps and place them in a larger historical and social context.

Thorson, Kristine, Gustav Moore and Robert M. Thorson. *Stone Wall Secrets*. Tilbury House Publishers, 2001.

Adam's grandfather receives a letter from a stonemason who wants to buy the rocks that make up the walls around his New England farm. As his grandfather considers the offer, he and Adam walk the property and talk about how the stones are part of the history of the place and their family.

Wilder, Laura Ingalls. *Little House (Nine Books, Boxed Set)*. Harper Trophy, 1994.

The nine books in the classic series by Laura Ingalls Wilder share tales of a family's joys and struggles as pioneers in the Midwest of the late 1880s.

Don't Fence Me In

Introduction

This project clearly relates to the content required in the **8th grade Social Studies** and **9th grade American History** classes as well as the **AP United States History classes**. It focuses on the multiple ways that industrialization affected agriculture in the 19th century. It also would be a great fit for the AP United States History Document Based Query focus, especially for 9th grade students. Finally, it directly ties to the use of informational texts in **8th grade English** classes.

This curriculum looks at a process, the way that industrialization affected ranching across the United States, by comparing this process with other types of economic transitions in American history. The students, divided into groups, use primary documents and higher level thinking skills to establish the parameters of this transition, focusing on rural Texas. The lesson then addresses the economic specifics of range wars. The historic text of the song lyrics, used as warm-up, leads into the centerpiece of the lesson. It uses the primary source quotes from Texas lawmen who mediated between different groups to understand the historical development of the fundamental concepts and processes of authority, power, and influence. It includes **political science, economics, geography, and history**, with particular emphasis on democratic skills and attitudes necessary to become responsible citizens.

Grade 8 Social Studies

Addressing Standard 1.0 Political Science

A. The Foundations and Function of Government

A.1.a. Using the history of the free ranging cattle in the primary sources of the lesson, explain and summarize the principles of federalism, popular sovereignty, rule of law, consent of the governed, and limited government. Evaluate these ideas on the stakeholder's worksheet. Using the primary source quotes, evaluate the impact of the Texas Rangers on the functioning of government.

A. 5. Create a state law to address this situation and compare them to the *Texas Fence-Cutting Law of 1884*.

Addressing Standard 3.0 Geography

A. Using Geographic Tools

A. 1.a. Use geographic tools to analyze geographic issues and problems in the special qualities of the Texas landscape that make it attractive for cattle, and review why each stakeholder was effective. Use geographic concepts and processes to examine the role of barbed wire technology in its spatial connections to the history of 19th century Texas.

B. Geographic Characteristics of Places and Regions

B.1.a. Analyze how geographic characteristics, especially those discussed in the primary sources such as the letters and personal recollections, influenced the location of ranches on the Great Plains.

C. Movement of People, Goods, and Ideas

C.1.a. Using primary sources of the lesson, analyze population growth of farmers and ranchers migrating and settling in Texas.

C.1.b. Explain why Americans migrated west to Texas lands, where lands offered fertile soil and economic opportunity, and the impact on the resources of the region.

D. Modifying and Adapting to the Environment

D.1. Analyze why and how people in the United States built fences of the new industrial product, barbed wire, and modified their natural environment, and the impact of those modifications.

- D.1. a. Analyze the trade offs of using resources to pursue economic opportunities v. preserving the environment, such as the growth of ranches in the Great Plains and the loss of free range ranches.
- D. 1. c. Identify and explain land use issues of ranchers that illustrate the conflict between economic growth and using the environment in different ways.

Addressing Standard 4.0 Economics

A. Scarcity and Economic Decision-making

A.4.c. Describe the economic reasoning, including opportunities and obstacles, faced by ranchers in 19th century Texas.

Addressing Standard 5.0 History

C. Conflict between Ideas and Institutions

C.3. Using primary sources and personal histories, analyze the influence of barbed wire production as an example of industrialization and technological developments on ranchers in 19th century Texas.

C. 3.a. Describe changes in land and water transportation, including the expanding network of roads and railroads, and their impact on the barbed wire imports to Texas.

Addressing Standard 6.0 Social Studies Skills and Processes

A - E. Use each of the steps in the social studies skills and processes to analyze the period song lyrics and other primary source recollections of the struggles of the ranchers. Ask the students to analyze these documents and construct an advertising poster, a visual representation, of the claims of the different stakeholders. Identify different points of view when creating a law to represent the work of the Texas legislature.

F - G. Discuss how analyzing primary sources brings perspectives to light. Examine how the laws created by the lesson impact the stakeholders, thereby getting an understanding how conflicting viewpoints, including any biases or viewpoints, can be incorporated to understand a chain of events and help understand historic context.

Grade 8 Reading/Language Arts

Addressing Standard 3.0 Comprehension of Literary Text

1. Refine comprehension skills by reading and analyzing song lyrics, "I'm Going to Leave Old Texas Now" including evaluating perspective of the writer within the time period.
2. Analyze and evaluate text features of lyrics and of personal recollections to facilitate and extend understanding of literary texts.

Grade 9 United States History

Addressing Standard 5 United States History

A. Reconstruction and Expanding America (Reconstruction - 1897)

A. 1. Using this case study in its entirety, analyze the cultural, economic, political, social and technological developments stemming from the introduction of barbed wire. Evaluate the causes and consequences of westward expansion, fueled by diverse attitudes toward it. Use the different types of primary sources, from song lyrics to personal recollections, to engage students and enrich their understanding of this complex time.

1. a. Analyze the factors of westward expansion, including the rise of industrialization, the concept of Manifest Destiny, and opportunities to acquire land for ranchers.

1. b. Describe the impact of geography and technology on the settlement of the west, such as ranching and the environmental consequences of the introduction and widespread use of barbed wire.

1. d. Evaluate the impact of government actions, such as the Homestead Act of 1862 and state land grant acts, on migration and settlement patterns. Use laws like those created by the students as part of this lesson to contrast these differing viewpoints.

The Great Fence Crisis

Introduction

This lesson works for both upper elementary **Grade 4 and 5 students** who have some advanced math skills, including algebraic concepts, and **Grade 8 and 9 students** who work at an introductory level with mathematics and who are studying American history, the required Social Studies and American History curriculum. For both levels of students, this lesson introduces primary source materials to solve common problems in an innovative way. It challenges them to develop a budgeting sense in history of the costs of new technologies as well. It also as the students design an advertising poster for the new product, barbed wire, requiring use of communication and presentation skills. The analysis also includes a listing of age appropriate books developed by the Smithsonian Institution.

Grade 4 Social Studies

Addressing Standard 3.0 Geography

A. Using Geographic Tools

A.1.a. Use Great Plains Map to describe its physical characteristics of region, including natural features.

A. 1. d. Use primary source quotes, such as one from the Agricultural Commissioner, to identify human-made features of the Great Plains.

B. Geographic Characteristics of Places and Regions

B. 1. a. Compare physical characteristics of Great Plains and regions of Maryland, including natural/physical features, weather and climate, soil, vegetation, minerals and animal life.

B. 1. b. Compare human characteristics of Great Plains and regions of Maryland the United States, including human-made features, language, religions, political systems, economic activity, and population distribution.

B. 1. c. Describe how geographic characteristics of Great Plains changed over time and were affected by ranchers and farmers.

C. Movement of People, Goods, and Ideas

C. 1. a. Explain how geographic characteristics of the Great Plains influenced settlement patterns in the region.

D. Modifying and Adapting to the Environment

D. 1. b. Describe ways and reasons ranchers and farmers of the Great Plains modified the natural environment with fences and the consequences of modifications. Design advertising poster to address these changes.

Grade 4 Mathematics

Addressing Standard 1.0 Knowledge of Algebra, Patterns, and Functions

A. Patterns and Functions

A. 1. b. Using data from pricing of household goods, create a one-operation (+ or -) function table to design a budget for the household.

A. 1. c. Complete the table using a one operation (+, -, \times , \div with no remainders) rule.

B. Expressions, Equations, and Inequalities

B.1.a. Represent numeric quantities using operational symbols (+, -, \times , \div with no remainders).

B. 2. a. Represent relationships in budget between different items using relational symbols (>, <, =) and operational symbols (+, -, \times , \div) on either side.

B. 2. b. Find the unknown in an equation with one operation

Addressing Standard 7.0 Processes of Mathematics

A. Problem Solving

A. 1. Create summary household budget using information from equations.

B. Reasoning

B. 1. Describe how math concepts are used in a real world example from 19th century.

Grade 5 Mathematics

Addressing Standard 1.0 Knowledge of Algebra, Patterns & Functions

A. Patterns and Functions

A. 1. b. Using data from pricing of household goods, create a one-operation (+ or -) function table to design a budget for the household.

A. 1. c. Complete the table using a one operation (+, -, \times , \div with no remainders) rule.

B. Expressions, Equations, and Inequalities

B.1.a. Represent numeric quantities using operational symbols (+, -, \times , \div with no remainders).

B. 2. a. Represent relationships in budget between different items using relational symbols (>, <, =) and operational symbols (+, -, \times , \div) on either side.

B. 2. b. Find the unknown in an equation with one operation

Addressing Standard 7.0 Processes of Mathematics

A. Problem Solving

A. 1. Create summary household budget using information from the equations.

B. Reasoning

B. 1. Describe how math concepts are used in a real world example from 19th century.

The Great Fence Crisis

Suggested Books Developed by Smithsonian Institution for Ages 9 - 12

Cruz, Maria Colleen. *Border Crossing: A Novel*. Pinata Books, 2003.

When 12-year-old Cesi Alvarez overhears her grandmother accusing her father of being ashamed of his heritage, Cesi leaves home and travels to Mexico on her own. Along the way, she learns about the prejudice her parents and grandparents have had to face.

Desimone, Shelly. *Paulo's Wall*. Perfection Learning, 2002.

In this novel, gang members try to claim Paulo's street and his wall, but when Paulo fights back with paint can, the territorial dispute escalates.

Frost, Robert. *You Come Too: Favorite Poems for Readers of All Ages*. Owllet Paperbacks, 2002.

In this collection, easy-to-read Frost poems are compiled for intermediate readers. A forward by Noel Perrin introduces first-time readers to the poet's life and work. The collection includes the poem "Mending Wall," devoted to the observation of nature.

MacLachlan, Patricia. *Sarah, Plain and Tall*. Harper Trophy, 2004.

Winner of the Newberry Medal in 1986 and numerous other awards, MacLachlan's novel is about a Maine schoolteacher who travels to the Kansas prairie to become the wife of a widowed homesteader with two young children. Other books by MacLachlan in the *Sarah, Plain and Tall* series: *Skylark* (Harper Trophy, 1997) and *Caleb's Story* (Harper Trophy, 2002).

Neufeld, John. *Gaps in Stone Walls*. Bt. Bound, 1999.

Set in a small community in Martha's Vineyard in 1880, this is the story of a twelve-year old deaf girl who struggles to clear her name after being accused of murder. Realistic descriptions of New England's rock-walled countryside highlight this fast-paced crime drama and help to create a vivid sense of history and place.

Patneau, David. *Thin Wood Walls*. Houghton Mifflin, forthcoming in 2004.

When a Japanese American boy named Joe Hanada is forced to leave his home near Seattle and move with other Japanese Americans to an internment camp, he turns to his journal to record his feelings and his struggle to survive.

Purcell, Martha and Jason Roe. *Barbed Wires of Hate*. Perfection Learning, 2002.

This is the story of a Japanese American boy, Hiroshi, and his family who are forced by the U.S. Government to leave their home in California and live in a detention camp with other Japanese Americans during World War II.

Thorson, Kristine, Gustav Moore and Robert M. Thorson. *Stone Wall Secrets*. Tilbury House Publishers, 2001.

Adam's grandfather receives a letter from a stonemason who wants to buy the rocks that make up the walls around his New England farm. As his grandfather considers the offer, he and Adam walk the property and talk about how the stones are part of the history of the place and their family.

The Great Fence Crisis

Grade 8 Social Studies

Addressing Standard 3.0 Geography

A. Using Geographic Tools

A. 1. a. Use Great Plains map and primary source quotations to locate places and describe the human and physical characteristics of the Great Plains, such as settlement patterns, migration, population density, transportation, and communication networks.

A. 1. b. Explain interrelationships among physical characteristics of the land that affected both farmers and ranchers.

B. Geographic Characteristics of Places and Regions

B.1.a. Analyze how geographic characteristics influenced the location and development of economic activities, such as farms and ranches in the Great Plains.

B.1. b. Describe how changes in transportation systems, such as railroads, made barbed wire available and how it affected the expansion of settlement.

D. Modifying and Adapting to the Environment

D.1.a. Using primary sources such as historic photographs and first person accounts, analyze why and how people in the Great Plains modified their natural environment and the impact of those modifications on daily life.

Addressing Standard 4.0 Economics

A. Scarcity and Economic Decision Making

A. 3. a. Using primary sources, describe the effects of barbed wire, a significant new technology, on economic growth in the Great Plains.

A.3.c. Describe the economic opportunities and obstacles faced by farmers and ranchers before and after the Civil War.

B. Economic Systems and the Role of Government in the Economy

B.1. a. Analyze how 19th century societies answered the basic question of what, how, and for whom to produce barbed wire as an example of the growth of industrialization.

Addressing Standard 5.0 History

B. Emergence, Expansion and Changes in Nations and Empires

B.1.a. Using primary sources, analyze the growth and the development of the United States, focusing on the Great Plains.

B.2. Evaluate Manifest Destiny and its impact on territorial expansion of the nation, especially as it relates to the Great Plains and the relationship between farmers and ranchers.

B.3. a. Explain the political, economic, and social factors that motivated people to move west.

C. Conflict between Ideas and Institutions

C. 1. c. Analyze the advantages and disadvantages of early industrialization on the economy and society using the growth of barbed wire as a case study.

Grade 9 American History

Addressing Standard 5 United States History

EXPECTATION 1. Demonstrate understanding of the cultural, economic, political, social and technological developments from Reconstruction to 1897.

A. Reconstruction and an Expanding America (Reconstruction - 1897)

A. 1. Analyze the factors that led to and characteristics of Industrialization in the late 19th century United States, using the growth of the frontier, and the conflict between ranchers and farmers as a case study.

A.1. a. Analyze the causes of industrialization, including improved use of resources, technology, labor, capital and transportation networks on late 19th century life in the Great Plains.

A. 1.c. Use the details of this lesson as a specific case study to illustrate the impact of new technologies and inventions in agriculture, transportation, communication, manufacturing and the impact on individuals, groups and regions.

A. 3. Examine the economic, political and social impact of industrialization, using new product, barbed wire, as a case study.

A. 3. b. Evaluate the impact of industrialization on regional development, settlement patterns and quality of life, using new product, barbed wire, as a case study.

A.4. a Using primary sources to analyze the factors of westward expansion, including the rise of industrialization, concept of Manifest Destiny, perceptions of overcrowding, and opportunities to acquire land using conflict between ranchers and farmers.

A.4. b. Describe the impact of geography and technology on the settlement of the west, especially ranching, using barbed wire as a case study and evaluate the environmental consequences.

A. 4. d. Evaluate the impact of government actions on migration patterns, such as the Homestead Act of 1862, state land grant acts, and the development of the Transcontinental Railroad on ranchers.

Grade 8 Mathematics/ Algebra Core Learning Goals (Grade 8 or Grade 9)

Addressing Standard 7.0 Processes of Mathematics

The Great Fence Crisis lesson allows all students to evaluate the problems of running a household and the supplies need to establish a home and run it on a day to day basis in the 1870s. In addition, it brings the **Topics of Grade 8 Math, specifically Problem Solving, Reasoning, Communications and Connections, and Expectations 1.1 and 1.2 of Algebra Core Learning Goals for Algebra/Data Analysis** to the fore.

The lesson contains specifically designed work products needing all concepts of algebra skills to: evaluate these costs, present the data in a chart form, do the extension activity of designing a poster, and most significantly integrate the history lessons of Social Studies and History into Mathematics curriculum.

It also uses real world problems using patterns, functions, and algebra to analyze a wide variety of patterns and functional relationships **using the language of mathematics and appropriate technology**. It applies math equations to solve situations faced by individuals in the 1870's.

Good Fences Make Good Neighbors

Introduction

This curriculum is well designed to be functional for 8th and 9th Grade English students. The students will evaluate an important poem in American literary history and relate its significant theme to the content of this exhibit about the role of boundaries and paths in larger human experience. It asks the students to consider the relationship between the theoretical road and the physical road, the relationship between the maturing of the mind and the maturing of the American landscape. It provides specific analysis worksheets to support student learning.

The lesson also includes an extension activity where students analyze primary sources, historic photographs, taken from the exhibit and addressing this very issue. In addition, a book list developed by the Smithsonian Institution staff which includes some sophisticated challenges of literature.

Grade 8 Reading/English Language Arts

Addressing Standard 1.0 General Reading Process

E. General Reading Comprehension

1. Apply and refine comprehension skills to "*Mending Wall*".

1. Use aspects of the poem to explain that its central issue is the purpose and value of walls. Ask how walls can be constructed representing diversity in content, culture, authorship, and perspective, excluding areas such as race, gender, disability, religion, and socio-economic background. Use strategies to prepare for reading (before reading) and draw inferences and/or conclusions and make generalizations.

Addressing Standard 3.0 Comprehension of Literary Text

1. Use "*Mending Wall*" Analysis worksheet to analyze the poem's central theme, as illustrated in the two apparently contradictory lines of the poem, "Something there is that doesn't love a wall" and "Good fences make good neighbors". Evaluate how structural features of the text distinguish what type of poem it is and how these help determine its meaning.

4. Evaluate how fences are a universal theme in human experience.

5. Explain the implications of the text for the reader and for society (also relate to general themes of exhibit, **Between Fences**).

Grades 9-12 English (Emphasis on Grades 9-10)

Addressing Goal 1: Reading, Reviewing, and Responding to Text

1.1.1. If possible, view the images from the Classroom Poster download and even the **Between Fences** exhibit in advance of reading the poem, "*Mending Wall*". Synthesize background materials from the visuals and text of the exhibit to define a context for reading the poem.

1.1.2. Use this background while reading to the poem.

Analyze relationships between ideas within the exhibit text and its photographs and other primary sources, and the poem itself. Use context to assist in understanding the meaning of words and phrases of the poem, especially two lines of the poem, "*Something there is that doesn't love a wall*" and "*Good fences make good neighbors*."

1.1.3. Confirm understanding after reading poem text. Paraphrase and/or summarize significant ideas in the exhibit text and in the poem texts.

1.2.2. Determine the critical or central idea of a poem; explain the theme(s) of the poem; explain the experiences, emotions, issues and ideas in the poem that give rise to universal literary themes; extend ideas and issues of the poem that may have implications for readers or contemporary society.

1.2.4. Interpret the poem by using a critical approach. Determine the structural characteristics of the poem and interpret the poem using them. Analyze the philosophical arguments presented in the poem and their relationship to the author's position on those arguments.

Addressing Goal 2: Composing in a Variety of Modes

2.1. Analyze and evaluate the poem.

2.1.1. Analyze organization, structure, and syntax that reveal an author's purpose.

Explain the effectiveness of organization, structure, and syntax in accomplishing the poem's purpose.

Determine and/or explain the significance of the following as each contributes to the author's purpose: allusion, analogy; figurative language, imagery, symbolism; a particular speaker or point of view.

Supplemental Books Developed by Smithsonian Institution for Ages 12 and up

Krisher, Trudy. *Spite Fences*. Laure Leaf, 1996.

A realistic novel set in 1960s Georgia, *Spite Fences* is the coming of age story of a thirteen-year-old girl who struggles with the truth in a town divided by race, subdivided by class, and governed by an inviolable social code.

Lee, Harper. *To Kill a Mockingbird*. Little, Brown and Company, 1988.

This Pulitzer Prize winning novel is told from the point of view of eight-year-old Scout Finch whose father, attorney Atticus Finch, defends a black man wrongfully accused of raping a white woman. As the trial progresses, Scout struggles to understand the absurdity of adult behavior guided by prejudice. Since its publication in 1960, *To Kill a Mockingbird* has been a perennial favorite with adults and younger readers.

Levine, Ellen. *A Fence Away from Freedom: Japanese Americans and World War II*. Putnam Publishing Group, 1995.

This book is based on the oral histories of Japanese Americans who were children during World War II when thousands of innocent Japanese Americans were forced to leave their homes and live in internment camps, an excellent introduction to this episode in American history.

Rawlings, Marjorie Kinnan. *The Yearling*. Scribner, 2002.

Originally published in 1938, this Pulitzer Prize winning novel is about a boy's coming of age on a farm in the Florida wilderness. The struggle between man and nature is heightened when Jodie Baxter adopts a fawn as a pet.

Twain, Mark. *The Adventures of Tom Sawyer*. Gramercy Books, 2002.

This classic nineteenth-century novel is the author's first book about the childhood escapades of Tom Sawyer and his friend Huckleberry Finn. The episode in which Tom tricks other children into whitewashing a fence for him is arguably the most remembered and celebrated event in American literature. In the context of the novel, whitewashing the fence is a complex social and ethical metaphor for what people can accomplish when they work together and the power of the individual to rise above the group.