



Curriculum Units by Fellows of the Yale-New Haven Teachers Institute
2008 Volume III: Pride of Place: New Haven Material and Visual Culture

Breaking Down Fences -- Revealing The Past

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Introduction

Step onto the New Haven Green today, and take in the landscape-particularly the objects that surround the perimeter of The Green. Saunter along Dwight Street or through the Wooster Square historic District. Tour the Grove Street Cemetery or stroll around the surrounding Yale campus. Once again, look closely, for you will find fascinating-often overlooked-remnants of the past in the form of everyday objects... fences! Students will learn that these utilitarian objects were used as both functional objects and representations of class, cultural, and ethnic identities within the New Haven community spanning four centuries beginning with the early 1600s. To explore this reality, students will use a research-based form of inquiry: How do fences and gates speak to the history of New Haven? Did they exist long ago, and if so, how far back can they be traced? For what purposes were they made, and how did their creation impact the New Haven community? What resources and types of labor were used to create them? Who contributed to their creation, and how were they crafted? Are cultural and socio-economic diversity in any way reflected in these functional objects? Can this look at material culture be carried over into other communities? These questions and more will be explored and evaluated in my curriculum unit, *Breaking Down Fences - Revealing The Past*.

Breaking Down Fences takes an engaging, hands-on look at New Haven history. Targeted at students in Grades 3 and upward, this unit inspires young learners to question their surroundings, to speculate what life could have been like in our city past and present, and to delve into often overlooked aspects of the great city in which we currently reside. With camera in hand, our young researchers will tour specific New Haven locales as previously noted herein, closely examining fences. This exploration will be complemented by research visits to the Center Church on the Green, the New Haven Museum and Historical Society, the Yale Art Gallery and the British Art Museum, and Yale Sterling Library. Coupled with independent readings and creative writing exercises, our young historians will embrace life in New Haven from the 17th through 20th centuries. Using fences as material culture, students will describe, deduce, speculate, research, analyze, compare and contrast gathered information to grasp life in the New Haven community during each specified time period.

Breaking Down Fences will be implemented for an eight-week duration. Because of the outdoor nature of this interactive field study, excursions should be strategically planned for the spring. Implementation of the unit between April and June is strongly recommended. Bus reservations for spring excursions should be booked at the start of the school year, preferably reserved post month-end March, so that CMT prep and subsequent

testing schedules do not interfere with curriculum unit implementation.

Breaking Down Fences is aligned with New Haven Public School Curriculum Unit Standards, i.e., Language Arts/Writing Content Standard 2.0; SSCPS (students will demonstrate their understanding through written, verbal, visual, and/or technological formats and will pre-edit, draft, revise, edit and publish/showcase one or more final literary products) and Social Studies Curriculum Unit Standard S 3.0 (Using maps, architectural layout, globes, and related resources, students will identify specific locales within the New Haven district. They too will envision and embrace the people, culture, and societal trends that existed therein.)

This curriculum unit concludes with two engaging activities that reach students across academic abilities levels. Students will create a three-dimensional fence design, accompanied by a historical fiction journal-writing piece highlighting how and why the fence or gate was created. Through this interactive experience, students will reinforce and internalize their understanding of material culture as it pertains to community, culture, and history!

Note: To facilitate the process of implementing this unit, a Day Trip Time Line is included as a quick-reference resource.

Part 1: Setting the Tone

Motivating young learners to embrace a social studies unit may prove uninviting to today's computer-and-Wii-generation. Nevertheless, making such a unit enticing can be achieved by introducing it in an engaging manner:

“Boys and girls! Today marks the beginning of an unforgettable adventure-one that allows us to transport ourselves into the past despite the fact that we live in the 21st century! Before we take this exciting journey, we must remember this special term: material culture! That is what we will be examining. In this instance, we will look at specific objects that have been (and continue to be) used in our everyday lives-yet we often take them for granted! Through our adventure, we will become junior researchers and historians; when we are through, we will discover a rich and revealing story to share with others! This week marks the beginning of our study. Initially, we will need much walking stamina, a few pencils, informational notepad, and keen observational skills. Are you ready to partake in this adventure?...”

By setting such an engaging prelude, the response will be a unanimous “YES!”

The discussion later continues, emphasizing that we each will develop our logical thinking skills and exploratory know-how by examining our material culture focus-fences. Upon examining lifestyles in each of the four noted centuries, focus questions to be addressed are to include:

1. Was there a need for fences? If so, during what time period and why?
2. Where are the gates/fences situated, and why may they have been stationed in that locale?
3. From what materials were fences created? Were used materials reflective of social status? Cultural status? Economic status?
4. Who may have crafted the utilitarian objects?
5. Do shapes and forms within the fences/gates differ? If so, how? What might those differences indicate?
6. Were there any symbolic meanings behind the fences?
7. What feelings are evoked when you experience the fence/gate (exclusion, restriction, inclusion, receptiveness, poverty, elitism...)

Part 2: Gathering Background Information

It is important to provide a basic overview of New Haven’s early history prior to delving into an up-close examination of fences and underlying reasons for their need and use from a material culture perspective. Thus, snippet information should be provided concerning New Haven of old, complemented by an excursion to the New Haven Green and the New Haven Museum and Historical Society. Through the use of imagination and pictorial images made available at these sites, our children will visualize the New Haven landscape during the 17th, 18th and 19th centuries. Introducing students to vocabulary that embraces our study is crucial to spark conceptualization; vocabulary to be embraced at each juncture includes-but is not limited to-the following word list. Students will be required to know the definitions of each of these newly introduced vocabulary words:

aesthetic	agrarian	agriculture	architecture
artisans	assembly	barriers	blacksmith
blast furnace	boundaries	cast iron	cattle
chattel slavery	charcoal	cobblestone	community
common	farrier	fence	founder
heaving	industry	industrialization	indentured servant
ironworker	iron slag	ingot	joiner/carpenter
joined planks	metallurgy	metallurgist	manufacturing
Nine Square District	pig/pig iron	Puritans	rural
split rails	swine	timber	trespassing
town meetings	township	weathering	wrought iron

Related Excursions: Trip to the New Haven Green/Nine Square District, The Center Church, and Grove Street Cemetery; cameras required to photograph fences/gates.

Preliminary Brainstorming Activity

Based on information gathered during our excursions, students should begin contemplating why fences would have been a necessity during each specified century? Who would have needed to create them? Students working in groups of four will brainstorm possible explanations for their creation and will record their responses on the Ponder This Questionnaire form (see Worksheet 1, Attachment A). Responses will vary. Many young learners may immediately relate to use of fences in the 21st century, i.e., primarily as a source of protection, property ownership, and aesthetics. Taking into consideration snippets of early New Haven history that have been provided, however, students may speculate that fences were required to enclose animals, to connote ownership or boundaries, to enclose burial grounds, to show status, and more. The aim here is to get our students to get those thought processes going, to conceptualize the myriad need for fences. Post discussing their viewpoints in small groups and subsequently sharing their conjectures with the entire class, the following historical information can be reviewed.

New Haven Colony: The Formative Years

Prior to the arrival of Europeans during the 17th century, the New Haven colony was populated by the Quinnipiac-the aboriginal inhabitants of the region who resided and hunted in the lush woodland areas and fished along New Haven’s coastal regions. These Native Americans adapted to the verdant land. Working interactively with the environment, their communities dispersed and reassembled on a seasonal basis as social and ecological needs demanded. The Quinnipiac and other original indigenous inhabitants in the region, unlike their European counterparts, did not possess the concept of private land holdings. That viewpoint changed upon the arrival of Europeans. ¹

17th Century Life

By 1638, Reverend John Davenport, a Puritan leader from England, the London merchant Theophilis Eaton, and approximately 500 Puritan followers settled in the New Haven region, a colony that stretched across what we today know as Stamford, Milford, Derby, East Haven, Branford, and Guilford. In time, these townships established their own political and economic governance, and eventually became independent communities.

Abundant with woodland areas and what appeared to be fertile terrain, the New Haven colony was deemed a “new heaven” by many of its newcomers.

Eaton and Davenport played a major role in the city’s establishment: the two helped lay the plans for what we today refer to as the Nine Square District. They laid out a planned community with a large common in its center. A central meeting house was erected therein (where the Center Church stands today); it served as an essential gathering place for residents of the colony.

Residential areas comprised of a mixed economy surrounded the common. Initially, much of the land was used for agriculture. Farmers and their families raised corn, rye, hay, livestock, and more in the surrounding area. The common was used as pasture for cattle. Craftsmen, small shop artisans, and merchants involved in trade and commerce were also interspersed in the surrounding area. The New Haven community was predominately Eurocentric in composition. ²

Wood Fences: A Natural Evolution

Upon the Puritan inhabitants’ first arriving to this uncharted wilderness, they settled near New Haven’s shoreline. In time, the population increased; the colony’s residents moved further inland amid densely wooded areas. Land was cleared and cultivated. Ring-porous wood trees like oaks, chestnuts, and ash were chopped down in large numbers. ³ Timber was abundant. Farming communities and homesteads grew, and with it the increased use of this natural resource. Timber was not only used to create houses and other dwellings, but wood fences.

The use of easily split ring-porous trees made fence building an easy task: a row of stumps and large logs were set in place stacked in zigzagged formation resulting in a simple fence structures. Snake and rail fences were common. In time, sawn lumber was used to create picket-type and other structures. Simple or intricately designed, wooden fences lasted an average of six to eight years at best before having to be replaced.

Wooden fences were used to section off areas of the land for growing grain; to denote property ownership; and to serve as a warning sign and boundary for those indigenous inhabitants who first resided in the region. Using ring-porous wood for fence building proved useful for quick and easy replacement of deteriorated posts and rails. Should the need arise, farmers and their family members could get fence-making and fence repair jobs done themselves.

18th Century Life

The population of the New Haven colony remained homogenously Eurocentric during the 1700s. By 1784, approximately 3,500 people resided in the area. Puritans from England were the prevalent group, interspersed with a small number Anglicans, Protestants, Rogerenes (Quakers), and African slaves. ⁴ In time, the colony was comprised of societal classes of freemen or church members, free planters, indentured servants and apprentices, transient seamen, and wandering laborers-among them, a small number of free blacks. By 1786, the region we today call New Haven was incorporated into a municipality.

Farming and trade were major industries in the New Haven community. Huge ships were needed to transport sugar, rum, and other goods to the West Indies and abroad. More homes and buildings were needed for the ever-increasing population. Wood was also used as a major source of fuel-particularly for firewood and the manufacture of charcoal (which was also used by ironworkers in the manufacture of wrought iron products).

Wood, therefore, was a much-required resource.

In time, the increased use of this natural resource resulted in deforestation. Farming communities continued to thrive. Wealthy communities grew. Fences continued to be a necessity-but for many farmers and landowners, they proved costly. ⁵ With the depletion of woodland areas in the immediate vicinity came the need to venture farther into the surrounding forest areas for timber. The need for transportation, fence restoration, and labor contributed to increased costs. Although wood was a viable resource for fence making, for many, an alternative barricade was sought. What resource could serve as a feasible alternative? Nature once again provided a solution.

Stone Fences: The Available Alternative

Deforestation produced a welcomed phenomenon. Farmers and other property owners discovered myriad stones of different shapes and sizes emerged from beneath the earth's crust. Stones surfaced where land was cleared; seasonal changes-particularly heavy rains and cold winters-caused the ground to heave. The stones were so numerous that they had to be cleared from pastures and fields annually, a practice that sometimes occurred in the lives of farm owners for multiple generations. ⁶

The use of stone as an alternative fence-building material proved cost effective because of its abundance and availability. Clearing stones from the land, however, often proved a laborious task. Stones that dotted the terrain varied in weight and size and were often extremely heavy. Because of their weight, they were manually lugged or transported with assistance of oxen or draft horses. If lifted manually, stones were seldom hauled any further than necessary; many stone fences were constructed no taller than "thigh high" as a result.

Like their wooden counterparts, stone fences served many purposes: They were strategically stacked without mortar to create sturdy barricades. They were often used as boundary markers to deter trespassing or to demarcate property ownership. Stones were used to distinguish family plots and gravesites. They too were used for ecological purposes, to force rain to run along specific streams, to reroute small waterways, to drain the land, to enclose fertilizer, or isolate waste products. Stone fences were used to enclose livestock (although those who owned sheep and cows at times found it difficult to contain these farm animals, for they often climbed over and/or toppled the rocky barricades). Prosperous farm owners also used stone fences for aesthetic purposes and to connote wealth.

As held true for wood resources, stone fences battled time and elements of nature. Stone walls often crumbled with heavy rains or toppled because of herds of sheep butting into or crossing over them. Weather erosion also took its toll. Nevertheless, stone and wood fences could be found throughout the New Haven landscape.

19th Century Life

Related Excursion: Visit the New Haven Museum and Historical Society and Sterling Library; where applicable, view (and where possible make copies of) sketches and photos of the 17th, 18th, 19th, and 20th century landscapes.

With continued economic growth came increased change in the New Haven landscape. ⁷ By 1815, three churches were erected on what we today refer to as the New Haven Green. The former meeting house, where

common folk and neighborhood leaders gathered, underwent reconstruction to become the Center Church. By 1821, the burial grounds that lie adjacent to the area were moved to a neighboring locale we today refer to as the Grove Street Cemetery. Thriving businesses, buildings, and new thoroughfares soon emerged and, with them, the demarcation of property. Shipbuilding and commerce heightened during the early 1800s, with much trade occurring between New Haven, the West Indies, other New England townships, and European shores. With this expansion came an influx of new European immigrants. By 1820, over 600 blacks resided in the community, many of them freemen. As of 1830, a little over 10,000 people resided in the city.

By the mid to late 1800s, businesses and manufacturing companies like the New Haven Clock Company, Sargeant and Company, the Winchester Repeating Arms Company, and the New Haven Carriage Company were up and running. Iron shops specializing in cast, wrought, and pig iron supplies increased, accommodating the needs of new businesses. New streets like Temple, George, High, Wall, and Orange were laid and new buildings erected. Iron railings and interrelated parts on bridges were built to replace wooden structures. By 1872, the New Haven Railroad was up and running. Park space was divided into residential properties; the need for new buildings and offices expanded because of the increased population. New Haven had become a thriving metropolis. ⁸

Cast Iron Fences - An Aesthetic Stance

Commercialization was in the forefront during the 19th century. Wealthy populations grew. Affluent communities broadened. Property ownership expanded. Agricultural communities were pushed to the outskirts of New Haven. The need for wooden fences to control and direct the grazing of cattle had disappeared. Former pastoral grounds in the center of town were transformed into an aesthetic backdrop to Yale College and surrounding edifices. Cast iron fences with horizontal rails were created to enclose land stretches that formerly served as pasture. The need for fences had once again evolved. They were used more so to demarcate property ownership and took on an aesthetic stance.

Many farmers and common folk complained that a cultural divide was taking place—that constituents of Yale College and others who amassed wealth were attempting to keep certain societal members beyond its realm. Although Yale constituents deemed the social occurrence unintentional, new metal fences for many connoted division between the well-to-do and everyday people.

Ironworks At A Glance

Ironworking existed in the New Haven colony as early as the 17th century. Individuals adept in ironwork manufactured pots and hardware. During the colony's formative years, ironwork was done on a small scale by blacksmiths. These artisans used anvils, hammers, forge fires, wrought iron, and muscle to create metal objects. Wrought iron—a metal sometimes referred to as bar iron—was a malleable metal. It was created in bloomeries—types of furnaces used during that time period to smelt iron. Farriers used wrought iron for horseshoeing. Blacksmiths used it to repair imported ironwork, to create hardware (like nuts and bolts), and chains. Some smiths used it to create ornamental ironwork with complex shapes like those found in metal fences. They hammered and chiseled and filed it until it took on the desired finished form. For these artisans, working with wrought iron was more than an occupation; it was an art form.

Cast iron was also used during the early years. Cast (or pig) iron was made in blast furnaces. Melted at high temperatures, the liquefied iron was poured into molds and subsequently used to make everything from drinking vessels to railings to cannons. Unlike wrought iron, cast iron could not be shaped by hammering it. A

skilled iron founder (one who makes iron castings) could, however, easily duplicate and mass produce objects using casting molds.

By the 19th century, industrialization had taken hold in New Haven, and with it the increased use of cast iron. This metal was used to create railroad tracks, metal wheels, railings for bridges, and more. ⁹

20th Century Life

Civic improvement in New Haven was on the forefront from the early 1900s to the First World War era. Community revitalization, preservation of the New Haven Green, development of parks and fine buildings, and cultural venues-ultimately creating the City Beautiful-was the collective focus. ¹⁰ Yale too played a part in the revitalization effort, for its School of Forestry was influential in improving condition of diseased trees and increasing their number throughout the city. The University opened its art gallery to the general public on Sunday afternoons. The college's appreciation of art further extended to the community, for during the 1920s and 1930s, Yale contracted with Samuel Yellin to create intricately crafted gates and grilles for many of its campus sites. Among them were the wrought iron gates located at the Memorial Quadrangle, the Sculpture Hall Gate in the Yale Art Gallery, Harkness Tower on High Street, and the Sterling Library Manuscripts and Archives Room ¹¹.

Wrought Iron - The Artistic Comeback

Samuel Yellin was a master iron craftsman whose works were well known during this period. He stood firm on the belief that the use of wrought iron was not simply a craft, but an art form to be embraced and revered. Yellin worked out of a studio in Philadelphia, Pennsylvania. His intricately crafted designs heralded medieval-and-Renaissance-inspired European tradition. Yellin and his staff of approximately 200 craftsmen created gates, fences, and myriad iron-crafted objects. His contracted work stands as regally today as it did when it was first created during the early part of the 20th century. Samuel Yellin demanded meticulous work from those in his employ. Yellin's work connects us with the spirit of New Haven's past. Ironwork gates, fences, and grilles designed by this master artisan can be found throughout the Yale campus.

In a lecture he gave before the Architectural Club in Chicago, Illinois on March 9, 1926, he emphasized, "...[wrought iron] work should be done in the best possible manner. There is no other form of specification that the true craftsman understands. It has been said to me that all my workers must be artists, but many they are no different from other ironworkers, at least when they first come to my shop. But I always insist that all the work which leaves my shop should be honestly and beautifully executed... I am a staunch advocate of tradition in the matter of design."

Samuel Yellin is to be lauded for his ironwork creations. He demanded the best of himself, and his artisans. Yellin's Philadelphia staff consisted of immigrants from Italy, Poland, other European countries, and a minute number of ironworkers of African descent ¹². He allowed his workers to put a bit of themselves into their work. Although his product was impressive, it can be stated that he was not alone in his gate and fence creations.

Ironwork Artisans: An Omitted Reality

History often omits that major businesses, industries, and business owners often get sole credit for work created by people in their employ. This reality particularly holds true with regards to African Americans.

With this point in mind, we can look at iron fence work from a wide variety of viewpoints. A look at cast and wrought iron fences found throughout New Haven, for example, reveals myriad designs. Some herald French, Italian, and Romanesque influence. They too appear to contain designs common in West African culture. ¹³

To be taken into consideration when examining wrought iron fences is that many African slaves/artisans were transported from West Africa to American shores. Many of them hailed from such regions as Ghana, where the use of Adinkra symbols, animals and human images were used as a visual communicative form. Iron and woodcrafting artisans incorporated these images into their hand-crafted creations. Their artisan know-how was transferred and incorporated into the American framework without recompense or recognition. History does reveal, however, that the works of black artisans-particularly from South Carolina and Philadelphia-were shipped to other regions both within and outside of the United States. By the early 19th century, small establishments run by individual proprietors offered black artisans the opportunity to try out their ideas; this invitation was exclusive of the south, where ironmasters often blocked the free exchange of ideas between black artisans and entrepreneurs. ¹⁴ The key point is that the designs of black artisans could be recreated by other masters of the craft. It is, thus, imperative that teachers stimulate the minds of young learners to question diversity within the American framework, or the lack thereof (see Attachment D).

PART 3 - SHOW WHAT YOU KNOW

As we have learned, much work went into the creation of wood, stone, and iron fences. Who contributed to their construction? We can speculate that many individuals had a hand in creating them, among them:

African slaves - Many of these individuals were brought over from West African shores, from such regions as Sierra Leone, Cote D'Ivoire, and Ghana. Many Ghanaian captives were of the Asante people; many of their males were master ironworkers, stonemasons, and wood carvers. They were recognized for the creation of "talking symbols" known as Adinkra. Traditionally, the use of Adinkra symbolism was limited to the royal family, heralding their character and/or status within their realm. The symbols were also used (and continue to be used) during funerary rites as a sign of remembrance and characterization of a deceased loved one ¹⁵. The symbols not only signified an individual's relationship with the Creator, but the spirit and personality of the dearly departed. Asante artisans were adept in crafting decorative symbols into wood and metal objects; although often unheralded in the archives of history, many iron works and wood-crafted objects of the 17th and 18th century seem to indicate the infusion of African tradition. Note too that most slaves received no remuneration or recognition for services rendered. Some, however, were able to work at their craft to pay for their freedom.

Apprentices - these individuals learned under would be or master artisans; they rigorously worked, assisting specialists in the creation of functional objects. These workers' reward was to become skilled tradesmen.

Farmers - the common farm owners and their family members often participated in clearing the land. Wealthier owners often hired wandering laborers or indentured servants and slaves to execute needed tasks.

Indentured servants - They aided in clearing the land, cutting down and sawing timber and creating and creation of wood, stone, and iron fences. Unlike slaves, indentured servants were contracted oftentimes to forgive a debt without monetary compensation. They could work at their craft to eventually release themselves from their obligation.

Wandering laborers - these workers worked under contractual agreement for a set duration in return oftentimes for meager monetary compensation; the help of additional workers was particularly sought after during harvest time.

Ponder This - “Walking In Their Shoes” Brainstorming Activity

Based on the above-noted information coupled with info acquired from Museum visits, and walking tours, students will consider the labor force used to create wood, stone, and metal fences. Students will imagine physical and psychological challenges faced by these individuals. Working in groups of four and using the Ponder This Questionnaire/Worksheet 2 (see Attachment B) as a framework, students will step into the shoes of the select fence maker. Responses will once again vary. Based on gathered Post discussing their viewpoints in small groups and subsequently sharing their conjectures with the entire class, the following information can be revealed.

Note that elements from Worksheets 1 and 2 (see Attachments A and B) will be used as an informational framework for the Journal Writing Activity.

The assessment process will take the form of a visual/written presentation. Students will create a journal insert and accompanying fence sample to demonstrate their understanding of unit subject matter. Our young historians will self-critique upon the completion of their unit project. A rubric is provided for student use (see Attachment C).

PROJECT 1 ACTIVITY - FENCE/GATE DESIGN

Related Excursion: Visit to Yale Campus, Grove Street Cemetery, side streets along Dwight, Chapel, and Howe. With camera in hand, students will take snapshots of various ironwork fences. Children will zero in on fence-work design within the outlying community as compared to wrought iron fence work designs on Yale campus created by Samuel Yellin.

Duration:

Two 45 minute periods.

Task:

Pretend you are a resident of New Haven during a specific century. You have been asked or hired to create a fence for a specified purpose. Sketch a sample of your fence design. Keep in mind the series of questions explored when we closely examined fences throughout our unit study. Use all of these elements to create your a sample portion of your three-dimensional fence/gate. Although your three-dimensional figure will reflect but a small part of our utilitarian object, your sketch will give us a truer picture of where it will be situated and how it will be used. Think about the challenges you face as you design your fence/gate (i.e., what type of

material will you use to create it (wrought iron, wood, or stone) and why would you use? What type(s) of design will you use (i.e., simplistic, intricate, symbolic...)? What factors will impact the type of fence you create (cost, customer status, use...)? Through this activity, you will step into the shoes of the 19th century farmer, blacksmith, woodcraftsman, or stone crafter.

Skills Focus:

Creating symmetrical patterns, identifying line (i.e., horizontal, vertical, oblique), distinguishing size and color variations, utilizing (and for some youngsters strengthening) fine motor skills, comparing and contrasting, the use of logical thinking skills as it applies to layout and design.

Materials:

Brown, red, white, black acrylic paint
Krylon antique silver, black, and bronze metallic paint
Paint brushes
Plaster of paris
Clay
Plywood and/or Popsicle sticks
Sketch paper
5" x 7" display board
Charcoal pencils and kneaded erasers
Scissors
Newspaper
Paper towels
9-ounce cups (2 per group of 4 students)
Sample photo images of gates and stone, metal, and wood fences (photo images of New England stone walls/fences, pictorial images of wooden fences, fences by Samuel Yellin, Phillip Simmons, et al; set of 5-6 assorted images per group)

Set-Up:

This activity should be conducted in groups of four and can be used as a center-based activity. Student will use media that best suits their fence design (e.g., clay and acrylic paints will be used for stone walls and fences; wood media will be used for creation of wooden fences; metallic paints and clay will be used for metal fences).

Procedure:

Spread newspaper on tables.

Provide white construction paper on which children will sketch their fence design. (For those creating iron fences, encourage students to create symmetrical patterns). Allow students to be creative, urging them to keep in mind the purpose for creating the fence. Images can be created in horizontal or vertical patterns. The entire page should be completed. Have each student sketch the landscape for which the fence has been created.

Step 1.

Distribute white 6" x 8" drawing paper. Using #2 pencils have each student create the landscape for which his/her fence is being designed. Upon completion, set drawing to the side. Child should include his/her name neatly printed in the lower right hand corner of his/her finished drawing.

Step 2.

Distribute white 6" x 8" tracing paper. Again using # 2 pencils, create a fence/gate design. Encourage students to use symmetrical patterns. The created pattern should repeat itself at least three to four times on the page. Students should examine the width and length of used shapes and designs, ensuring that the entire page is utilized.

Step 3.

Cover tables with newspaper. Place 2 cups of water per table, along with 2 paint brushes per student. Provide each student with necessary art materials. Let their creative juices flow. Have students label their creations with their names. Set completed work aside and proceed with Activity 2 below.

Step 4.

After completion, aesthetically mount fence sample, scenic illustration, and writing on display. Showcase for the entire school community and visitors to experience.

PROJECT 2 ACTIVITY - HISTORICAL FICTION JOURNAL WRITING

Duration:

Four 45 minute periods.

Task:

To write a journal insert highlighting your task in creating the fence, as outlined in Project Activity 1. Put yourself in the shoes of the craftsman or artisan. Think about the challenges you may have faced in creating your fence as noted in your recorded responses on your Brainstorming Activity Worksheets #1 and #2. Discuss the type of material you used to create your fence, your occupation, how you felt as you created the structure, and more.

Skills Focus:

To create a memoir-like journal insert, descriptively highlighting the purpose and reasoning behind creating your fence. The reader should hear, feel, see, and overall experience your effort.

Materials:

Lined loose leaf writing paper
Pencils
Classical music
Timer
Writing storyframe

Set-Up:

Using background information gathered from school excursions, Ponder This group brainstorming sessions, and select readings, students will create their journal inserts on an individual basis. Provide students with paper, pencils, and storyframe.

Procedure:

Set a relaxing atmosphere by playing classical or soft contemporary music

in the background. Set your timer for 45-minutes, informing students that they will have an opportunity to complete this work during another session if it is not completed within the 45-minute time frame. The first two sessions will be used to create and edit the journal insert. The third session will allow extended time for those students have not completed the written portion of their project and/or to mount completed work.

Culminating Activity:

Hold an “Author’s Tea” where students will read aloud and showcase their literary creations before an audience of invited parents and school visitors. (Showcasing of student work at community-based venues, i.e., the children’s section of the Mitchell and Main Elm Street Branch Libraries, New Alliance Bank, and Board of Education headquarters at Gateway Center, will be scheduled.)

Related Excursion:

Visit to Yale Campus, Grove Street Cemetery, side streets along Dwight, Chapel, and Howe. With camera in hand, students will take snapshots of various ironwork fences. Children will zero in on fence-work design within the outlying community as compared to wrought iron fence work designs on Yale campus created by Samuel Yellin.

Conclusion

The New Haven colony underwent a major transformation between the 17th through 20th century. That transformation included a need for fences for myriad reasons and uses by diverse groups of people. By examining fences as material culture, we have obtained an up-close-and-personal view of New Haven history.

New transformations are taking place in 21st century, as populations and economic conditions shift and new

New Haven communities develop. Centuries from now, others interested in knowing the history of our great city may use our research approach to evaluate **OUR** past. You-young researchers-may be the future historians and specialists to bring this study to the forefront through the use of fences as material culture!

Related Activity :

Extend the unit study to encompass modern-day fences as they relate to the New Haven community. Have students brainstorm, record, and write about their observations, using the same activities and research format noted herein.

DAY TRIP TIME LINE

Week 1

Day Trip Visual Research Photo Exercise

Students take a day trip to the New Haven Green. Visit the Center Church, Grove Street Cemetery, and Nine Square locales. With disposable cameras in hand, seek out and take photos of fences and gates in the vicinity. No preliminary info will be given. Children will brainstorm on purposes for which fences (and gates where applicable) would have been created, recording their findings on informational worksheet (Exhibit 1, Attachment A). They will zero in on the intricacy or simplicity of design, what the object is made of, condition of the functional object and whether the objects seems to modern, old, or refurbished.

Week 2

Visit to the New Haven Museum & Historical Society. View New Haven Minutes of Meeting from 18th and 19th centuries, and look at sketches and documents that provide descriptive images of New Haven during said periods. Determine types of materials used to make fences information discoveries, deduce why fences were used during the period, who crafted some of the gates and fences, industries that existed during the time. Introduce the ironworks of Samuel Yellin and correlating data re: ironworks industry in East Haven. Also, find info on the Wooster Square community in New Haven. Students will record their findings, incorporating acquired information with previously obtained data.

Week 3

Take an hour-long walking tour of Wooster Square where we will seek out vintage gates and fences and collect additional photographic images regarding these specific functional items in the Wooster Square community. Students will subsequently visit to the Sterling Library to observe architectural layout and designs of New Haven landmarks, buildings, and architectural design of the New Haven community in the 18th century. Students will additionally take a tour of Sterling and will be encouraged to find the works of Samuel Yellin within their surrounding. Urge students to closely examine the craftsmanship of the structures, comparing and contrasting them with ironwork fences experienced during previous excursions. (Permission to take photos within the library will be requested by the students to acclimate them to the protocol of working within a library environ.)

Weeks 4 and 5

Using a follow-up journal writing activity framework and scoring rubric (Attachments B and C), students will create draft, rewrite, edit and complete an informational essay that highlights what they have learned about the New Haven community, and reveals their understanding of gates and fences as material culture.

Weeks 6 and 7

Working in conjunction with our in-house Art staff, students will create a three dimensional design for a fence or gate. They will determine the purpose for the functional object's creation, highlighting the community and people for whom it will be created. Pretending that they live in 19th century New Haven and incorporating much of what they have learned about the period through our hands-on research initiative, students will create a journal insert to conceptualize aspects of the fence-making experience.

Week 8

As a culminating activity, students will present their work during a special parent interactive Author's Tea. Their journal writing piece accompanied by their fence creation will be showcased during this time. Students will meet with parents and guest visitors to explain all that went into completing their individual projects. Subsequent display in community-based venue will also take place.

Attachment A

PONDER THIS - A FOLLOW-UP BRAINSTORMING ACTIVITY

BREAKING DOWN FENCES - REVEALING THE PAST

WORKSHEET #1

Team Member Names

On a separate sheet of lined paper, collectively answer the following questions:

(1) Why might wooden fences have been used during the early 17th century, when European settlers first arrived to the New Haven colony?

(2) Who may have benefited most from using wooden fences? Explain.

(3) In view of the change in population between the mid-1700s to the early 1800s, stone

fences became popular and widely used? Why might that have happened?

(4) Who may have benefited from the use of stone fences? Explain.

(5) By the early to mid 19th century into the early 19th century, wrought iron fences became popular. Why might this trend have occurred?

(6) Who do you think benefited most from the use of wrought fences? Explain.

PONDER THIS - BRAINSTORMING SHEET FOR FOLLOW-UP JOURNAL WRITING ACTIVITY BREAKING DOWN FENCES - REVEALING THE PAST

WORKSHEET #2

Team Member Names

(1) What were possible challenges faced by farmers, apprentices, and wandering laborers in the creation of fences?

(2) What advantages might farmers, apprentices and wandering laborers have as opposed to indentured servants and African slaves? Explain.

(3) What were possible challenges faced by indentured servants and African slaves? Were their challenges different? Similar? Explain.

(4) How did farmers, apprentices, and wandering laborers benefit from their hard work?

(5) Did indentured servants and slaves benefit from their labor? Explain.

(6) How did each of these groups of individuals contribute to their New Haven community? Society overall? Explain.

Attachment B

Student Name: _____ Date _____

FENCE DESIGN PROJECT WITH JOURNAL INSERT RUBRIC

Your BREAKING DOWN FENCES – REVEALING THE PAST UNIT PROJECT has been graded. Your scores in each area are circled and your final score is noted below.

	1	2	3	4
Evidence of Research	No note-taking or research was done during and post our designated excursions.	A little note-taking or research was done during and post our designated excursions.	Adequate note-taking and research was done during and post our designated excursions.	Much note-taking and research was done during and post our designated excursions.
Sketch & 3-D Fence/Gate Creation	Your sketch contains only one pattern and is not clearly shown. Your sample fence creation does not correspond with your original sketch.	Your sketch contains two simplistic patterns and is somewhat clear. Your sample fence creation somewhat corresponds with your original sketch.	Your sketch contains three to four patterns and is clearly designed. Your sample fence creation generally corresponds with your original sketch.	Your sketch contains three to four intricately designed patterns. Your sample fence creation elaborately conveys your original sketch.
Journal Insert Accompaniment	Your journal insert does not answer each "Ponder This" worksheet questions. It does not contain detailed info to support your fence creation.	Your journal insert has only a few paragraphs responding to some of the "Ponder This" worksheet questions. You responded with minimal detailed info to support your fence creation.	Your journal insert includes paragraphs for each "Ponder This" worksheet questions. You responded with some detailed information to support your fence creation.	Your journal insert contains paragraphs for each "Ponder This" worksheet questions. You responded with impressively written detailed info to support your fence creation.
Effort	Your fence project and complementary journal insert are not your neatest work. They contain spelling and/or grammatical mistakes, and do not contain enough information.	Your fence project and complementary journal insert contain some spelling and/or grammar mistakes. They contain a limited amount of information.	Your fence project and complementary journal insert is neat and has no spelling or grammar mistakes. It contains adequate information.	Your fence project and complementary journal insert are well thought out and designed. They have no spelling or grammar mistakes. They also contain a wealth of information.

Total Score: _____ Date _____

15-16 = Excellent 13-14 = Very Good 10-12 = Good 7-9 = Fair 6 and Under = Poor

Teacher Comments: _____

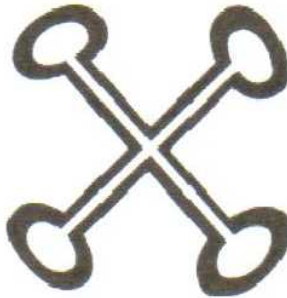
Attachment C

WORTH INVESTIGATING!

Ironwork fences, gates, and grilles found throughout New Haven (and across many parts of the United States) reflect cultural diversity within the Eurocentric realm. Although not readily heralded in the archives of American History, many wrought and cast iron designs found in metal fences too convey craftsmanship indicative of West African origins. It is a subject worth investigating. Let's speculate!



This Adinkra symbol, called Dwinmemen, symbolizes humility. A similar pattern is often found in cast iron fences, gates, and door grilles, as pictured in the painted cast iron door grille to the right. What do you notice?



"Nyame Nnwu Na Mawu" meaning "God never dies!" is heralded via this Adinkra symbol. Compare it with the wrought iron railing design located on Crown Street. How are the designs similar?



Sankofa, an Adinkra symbol that means "one must examine the past in order to move forward," is a common figure found in wrought and cast iron fencing throughout the City of New Haven. Can you find a similar pattern in the pictured door grille?

Attachment D

Teacher Bibliographic Resources

Agbo, Adolph H. *Values of Adinkra Symbols*. Ebony Designs and Publications, Kumasi, Ghana (1999) The invaluable resource presents myriad Adinkra symbols and their meaning; adages are included to help one grasp the depth of Adinkra symbolism.

Andrews, Jack. *Samuel Yellin: Metalworker*. Skipjack Press, Cincinnati, OH, October 1992. This vintage work takes a detailed look the ironwork masterpieces created by this artisan; includes speeches, correspondence, photo images and more.

Chidsey, Donald Victor. *East Haven the Iron Works Village*, ed. by Clifford Nitchke, East Haven Historical Society 1996 Ref 974.67. Contains info on New Haven's ironworks industry.

Clarke, Mary Stetson. *Pioneer Iron Works*. Illustrated by Joshua Tolford. [1st Ed.] Philadelphia, Chilton [1968] 80, [1] p. illus. 25 cm. Bibliography: p. [81]

Connecticut's Ames Iron Works: Family, Community, Nature, and Innovation in an Enterprise of the Early American Republic (review) Technology and Culture - Volume 42, Number 2, April 2001, pp. 349-350. Article on early American ironworks industry in New Haven, CT.

Cronon, William. *Changes in the Land: Indians, Colonists, and the Ecology of New England*. Hill and Wang, New York, NY, 1983. An invaluable resource providing an ecological history of Colonial New England.

Franklin, John Hope. *From Slavery To Freedom*. Vintage Books, New York, 1992. An in-depth look at African Heritage from pre-slavery to the 21st century.

Gordon, Robert B. *American Iron: 1607-1900*, Johns Hopkins University Press, Baltimore, MD (1996). Rich with photos and extensive data on all aspects of ironwork.

Greene, Claire Y. *Keeper of the Gate: Designs in Wrought Iron by Philip Simons, Master Blacksmith*. Philip Simmons Foundation, Inc., 1993. A handy resource for students Grades 3 and up, this book is a catalog of black and white photos of fences created by a legendary African American blacksmith.

Harris, Middleton A., *The Black Book*. Random House, New York, NY, 1976. Provides select photo images and support info re: ironwork fences created by African artisans.

Kagan, Myrna. *Vision in the Sky: New Haven's Early Years, 1638 - 1783*. Linnet Books, Hamden, CT, 1989. An up-close look at the New Haven colony during its formative years.

_____. *From Puritans to Yankees-New Haven's Growing Years 1783 - 1861*. Hillhouse Press, New Haven, CT, 2007. A continuance of the history of New Haven.

Levermore, Ph.D., Charles H., Ph.D., *Republic of New Haven: A History of Municipal Evolution*. Kennikat Press. Inc., Port Washington, NY, 1886. An up-close look at the New Haven colony and its evolution during the early years.

Osterweis, Rollin G., *Three Centuries of New Haven, 1638-1938*, Yale University Press, New Haven, CT, 1953. This vintage work contains maps, background information re: the New Haven colony during noted eras.

Taylor, Robert Joseph. *Colonial Connecticut: A History*. KTO Press, New York (1979) Provides a wealth of background information on the formative years of the New Haven colony.

Sletcher, Michael. *New Haven: From Puritanism to the Age of Terrorism* . Arcadia Publishing, Charleston, SC, 2004. A historical look at New Haven spanning three centuries.

Thorson, Robert M. *Stone by Stone* , Walker & Company, New York, NY (2002). A pictorial history of stone fences in New England crammed with insight into their creation.

Vlach, John Michael. *By the Work of their Hands: Studies in African American Folklife* . This work provides background describing the evolution of Black material cultural clearly visible and often undocumented and found throughout the United States.

_____. *The Afro-American Tradition in Decorative Arts*. From basketry to woodcarving to blacksmithing and architecture, this eye-opening work sheds light on the contributions of blacks to material culture in America. A must-have reference item!

_____. *Charleston Blacksmith: The Work of Philip Simmons* . The University of Georgia Press, Athens, GA (1981): The University of South Carolina Press, Columbia, SC (reprinted, 1992 and 1997). This book serves as a bibliographic resource regarding a South Carolinian blacksmith whose ironwork is evident in the South and replicated in other states in America.

Woodward, Sarah Day. *Early New Haven* . Edward P. Judd Company, New Haven (1929). A memoir recollection of events as experienced through the eyes of Horace Day, father of the author. "In memory of the Old Guard" this work begins. Among its members were Messrs. Thomas Trowbridge, Henry Blake, Captain Nathan Beers, and more. This work, retold by Sarah, paints a vivid picture of life in the early history of the New Haven colony. An enlightening read.

Student Bibliographic Resources

Thorson, Kristine, Thorson, Robert M., and Moore, Gustave. *Stone Wall Secrets*. Good realistic fiction resource; examines stone walls via geology, history, art, and geography.

Lyons, Mary E. *Catching the Fire: Philip Simons, Blacksmith*. Houghton Mifflin Publishers, New York, September 1997.

Website Resources

A History of East Haven, CT. <http://www.rootsweb.ancestry.com/~ctceasth/history.html> Background information of landmarks and map information re: East Haven as a New Haven suburb during the 17th through 19th centuries.

A History of the Grove Street, Grove Street Cemetary. http://www.grovestreetcemetery.org/history_of_grove_street_cemetery.htm Provides background information re: this New Haven landmark.

The Nine Squares of Ancient New Haven (1641 Brockett Map) <http://www.rootsweb.ancestry.com/~genepool/nhmap.htm> Nine squares map, showing 17th century boundaries of New Haven district.

Citizens All: African Americans in Connecticut/Introduction into Connecticut Stories.

<http://www.yale.edu/glc/citizens/stories/module1/intro.html> An invaluable audio-visual Gilder-Lehman website that provides background information in the original New Haven Connecticut colony.

West African Wisdom: Adinkra Symbols & Meanings With Corresponding Index.

<http://www.welltempered.net/adinkra/htmls/adinkra/epa.htm> Adinkra design website from which Adinkra symbols can be downloaded. Adinkra symbols can be accessed and used free of charge for educational purposes and non-profit use. *Twi* definitions for each symbol and English translations are provided.

Philip Simmons. <http://www.usca.edu/aasc/simmons.htm>. Brief bio on this honored African American ironwork master.

Events That Influenced Some of the First Planters to New Haven to Remove from Their Native Land to New England.

<http://www.quinnipiac.edu/other/abl/etext/colony/chapter2.html> Background information on the reasons why British settlers left their original homeland to settle within New England shores.

Smithsonian Archives of American Art. . <http://www.aaa.si.edu/collections/oralhistories/transcripts/simmon01.htm> This interview session (part of the Nannette L. Laitman Documentation Project for Craft and Decorative Arts in America, conducted on April 4 and 5, 2001 by Mary Douglas with wrought iron master Philip Simmons) relives the evolution of wrought iron blacksmithing as seen through the eyes and experience of this adept craftsman.

One Hundred Years of Change in East Haven. <http://www.townofeasthaven.com/ehschange.html> Earliest known photo of East Haven Iron Works Company along with other snapshots of 18th and 19th century East Haven.

New England Stone Walls. <http://www.stonewalljack.com/photos14.htm> Photos of stone fences around New England by photographer Jack McConnell. Enclosed cows image is particularly impressive. Captions provide invaluable info .

The Stone Wall Initiative. <http://stonewall.uconn.edu/> Coordinated by stone wall expert and UCONN Professor Robert Thorson, this site provides background info on the use of stone walls in New England. This site promotes the conservation, preservation, and study of stone walls in the region. Offers contact info to reach experts in the field.

Samuel Yellin.Com Historical Website. <http://www.samuelyellin.com/history/pictures/index.html> This site contains invaluable images of ironwork master Samuel Yellin and his extraordinary staff, among them his draftsmen laying the foundation for Yale's Harkness Memorial Gates. Note too that most of his Philadelphia workforce were of European extraction, however, a small number of African Americans were among his employees. All photos are downloadable for classroom use. Additional info is accessible by contacting infosamuelyellin.com or Samuel Yellin Metalworkers Co., 721 Moore Avenue, Bryn Mawr, PA 19010-2208, Phone: 610 527 2334, Fax: 610 527 2412.

School Excursions

Center Church Crypt
250 Temple Street
New Haven, CT 06511
203-787-0121

The New Haven Museum & Historical Society
114 Whitney Avenue
New Haven, CT 06510
203-562-4183

The Yale Art Gallery
1111 Chapel Street at York Street
New Haven, CT 06510
203-432-0600

Yale Center of British Arts
1080 Chapel Street
New Haven, CT 06520-8280
203-432-2858 (2 weeks advanced notification required)

The Yale Sterling Memorial Library
130 Wall Street
New Haven, CT 06520-8240
203-432-2798

Notes

1. Cronon, William. "Seasons of Want and Plenty" in *Changes In The Land* , Page 38.
2. Kagan, Myrna. *Vision in the Sky: New Haven's Early Years, 1638 - 1783*
3. Cronon, William. "Taking The Forest" in *Changes in the Land: Indians, Colonies, and the Ecology of New England* , Pages 108-126
4. Van Deusen, Albert E. "Social, Economic, and Religious Patterns in the Eighteenth Century" in *Connecticut: A Fully Illustrated History of the State from the Seventeenth Century to the Present* , Pages 105-116
5. Cronon, William. "Taking the Forest" in *Changes in the Land: Indians, Colonists, and the Ecology of New England* . Pages 119-120
6. Thorson, Robert M. *Stone by Stone*
7. Osterweis, Rollin G. "New Haven: 1800-1861" in *Three Centuries of New Haven: The Tercentenary History*, Pages 191-221.
8. Van Deusen, Albert E. "Trade, Transportation, and Industry" in *Connecticut: A Fully Illustrated History of the State from the Seventeenth Century to the Present*, Pages 315-336.
9. Gordon, Robert B. "The Rise of American Iron: 1720-1860" in *American Iron, 1607-1900*, Pages 55 - 89
10. Osterweis, Rollin G. "Civic Improvements" in *Three Centuries of New Haven: A Tercentenary History* , Pages 390-400
11. Beeby, Thomas H., et al. *Samuel Yellin: Metalwork at Yale*
12. Myers, Eben. "The Shop" in *Samuel Yellin.Com - The On-Line Home of Samuel Yellin Metalworkers Co.* (2008), <http://www.samuelyellin.com>>
13. "Blacksmithing" in *The Afro-American Tradition in Decorative Arts* , Pages 108-121
14. Gordon, Robert B. *American Iron : 1607-1900*, Pages 2-3, 118
15. Agbo, Adolph H., *Values of Adinkra Symbols* , Pages 1-5

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