

Values and Vision: Contrasting Historical Building Types in Two Different Geographical Locations

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We must consider "how the environment we build works on us physically and psychologically, and what historical and symbolic messages it carries." -- Leland Roth

Introduction

The primary objective of this class is to teach American history and literature through an integrated humanities approach. The curriculum unit emphasizes the study of architecture in the Southwest and New England.

Using architecture as a way of approaching American history and literature makes sense. First, architecture is familiar and accessible in ways that other art forms may not always be. Everyone lives in a dwelling place of some sort and has commerce with larger buildings, both visually and physically, but few understand what they are seeing. Perhaps they have not studied architecture nor traveled widely enough to have increased their awareness of different vernacular styles. This curriculum will encourage visual as well as verbal interpretation of the environment, which should result in greater appreciation and understanding of the world around them.

Second, architecture is the study of more than the built environment. This curriculum focuses on how architecture reflects the aesthetic vision and values of various cultures. For instance, in the contemporary Southwest, the influence of Native American and Spanish/Mexican cultures on architecture is widely seen in public and private buildings. Buildings at the University of New Mexico in Albuquerque, the state capitol building in Santa Fe, and neighborhood homes feature typical Southwestern architectural elements of adobe or stucco walls, vigas, straight, clean lines, and earth tone colors. The use of the vernacular architecture makes a strong statement about the connection between past and present in New Mexico. Choice of materials and forms is often based on the climate of the building site, too. Heat and glare are always on the minds of architects and residents eager to find coolness and shade in the Southwest. New England's climate makes different demands on its residents and architects. As a result of studying architecture in this unit, students should demonstrate increased ability to see details and deduce community values in historic architectural styles in the Southwest and in New England as well.

Finally, the study of architecture is not an only an end, but a means to an end. The study of United States history and literature focuses mainly on the eastern part of the nation. Many of my students who have not traveled or read widely feel disconnected from the East where so much of our national history occurred. By making connections between New Mexican and New England communities and the vernacular architecture, they will better understand the eighteenth and nineteenth century history and literature which make up a great deal of our curriculum.

Strategies for Learning

This class will adopt a studio design model. In addition to whole class lessons, students

will work individually and with their peers to complete projects such as models and posters, thus demonstrating their understanding in both verbal and non-verbal ways. My reasoning is based on my understanding of what middle school students need to do in order to learn. Students' enthusiasm and understanding increase in direct ratio to the amount of direct participation in the curriculum being taught. At-risk students make up an increasing percentage of our population. Many of these young people have had little success with traditional methods of instruction or evaluation, so perhaps this will be a more successful method. Studio design fosters informal interaction with teachers and peers, more individual creativity, and more emphasis on visual rather than verbal skills, which should reach reluctant learners. Howard Gardner's work on "multiple intelligences" has shown that students can achieve through a variety of methods. Most middle school students have strong visual and kinesthetic learning styles, yet schools tend to emphasize verbal/linguistic or mathematical/logical styles. Conducting a studio-based classroom which emphasizes visual/spatial intelligence, in conjunction with more traditional methods of learning, implies a good balance of thought and activity. Finally, if the students' experience of learning about architecture is successful, they will begin to see their community with new eyes. Architecture will become an interesting part of their everyday lives, and perhaps they will begin to consider some new career possibilities.

Assessment

It is important to give students an overview of their assessment requirements early in the unit so that they will be able to see what is expected of them and everyone will be on the same page. Students will complete a portfolio of their work in architecture, history, and literature, including samples of the following visual and verbal requirements, which will be distributed early:

1. Vocabulary of architecture with definitions and visuals
2. Studio Model notebook of basic architectural drawings (see list below)
3. Response to literature in a verbal/visual journal
4. Illustrated historical timeline of periods studied
5. Presentations including art, written, and spoken work
6. Reflective writing on all work, both process and product

Pedagogy of Architectural Literacy

In order to move from a traditional classroom to a studio, the use of physical space in the classroom will have to change. Large tables will replace traditional student desks. Wall space will be covered with bulletin board material to create canvases on which students' work will be displayed for observation, presentation, comparison, and aesthetic appreciation.

The tools that students use will also be non-traditional. In addition to notebooks, books, pens, and pencils, they will have access to an overhead projector, slide projector, computers, drafting tools including pens, paper, markers, a compass, a French curve, rulers, straightedges, a scale ruler, glue, chipboard, tracing paper, t-square, clay carving implements, and more. They will keep visual/verbal journals in which to observe and reflect on their work as well as working portfolios to document their process.

In a classroom design studio, the teacher is more a facilitator than an instructor. After having given direct instruction, the teacher should move around the room, observing, encouraging, giving quick suggestions to students who need them, but otherwise, staying out of the way. This

is the same method that many teachers use in reading and writing workshops: teach directly and briefly, provide tools, time, and a good working environment, and then give students a chance to practice and to demonstrate their understanding, either singly or in groups.

The following are some examples of activities used to teach basic architectural design skills, "expressing concepts which illustrate action, movement through space, sound patterns, and areas of activities." (Taylor, 1991). They make great warm-ups.

Schematic Drawings

1. The Life and Death of a Bubble: students will observe bubbles being blown and sketch their progression in chronological order from bubble pipe to the ground using directional arrows and simple sketches. They will write poems based on their observations.
2. The Great Balloon Race: three balloons of different colors will be released. Students will sketch their progression as they fly around the room and finally land, deflated, by using simple line drawings and directional arrows.
3. Schematic of mechanical devices: students will sketch a small wind-up toy and will "draw" the mechanical device which moves it. Similarly, they will plot the movement of a slinky and graphically "illustrate" the sound that it makes.
4. Section drawing: students will sketch a piece of fruit or vegetable which has been cut in half. They will pay attention to details and label each part.
5. Scale: students will isolate part of the drawing by cutting out a hollow square of paper and placing it over the section; they will then draw that section in greater dimensions, further emphasizing details by using color or dark lines.
6. Sketching: using gray and black markers, students will observe slides of buildings showing strong contrast of light, shade, and shadow and will sketch them rapidly to develop visual observation skills. While observing photos of ancient cliff dwellings or modern pueblos, they will list adjectives which describe the picture. The class will compile a list and use the vocabulary for writing poetry.
7. Perspective: students will learn one- and two-point perspective by using tracing paper to extend the lines of photographed buildings outward to their vanishing points. In addition, they will sketch the shapes of people against the buildings to show scale. People will have one, two, and three-part proportions of head, body, and legs.
8. Plan drawing: students will first draw bubble diagrams and then will formalize those in plans (birds-eye views) of buildings. They will mark walls, doors and windows and other design elements. They will write a descriptive paragraph of the building as if they were walking through it, using directional wording.
9. Elevation drawing: students will draw elevations (side views) showing architectural details of the wall shown based on plans.
10. Tracing: students will trace on tracing paper (called flimsy) pictures from slide projectors, overhead projectors, or light tables.
11. Model building: students will make 3-D models of buildings or communities (clay, chipboard, foam board) using plans. After building a clay model, they will write a poem from the building's point of view.
12. Posters: students will create display posters with attention to strong visual and verbal communication of a central idea.

Vocabulary of architecture

An important tool is a common vocabulary. Students will write definitions, illustrate some of the words, and use these words in their writing and speaking.

adobe	building bricks made out of mud, straw, and liquid (from the Arabic word, at-tub)
arch	curved or pointed structure that supports the weight of material over an open space
balustrade	a series of pillars or columns supporting a handrail
beam	a horizontal form resting on vertical supports or posts
bubble diagram	circles or bubbles which represent spaces and relationships
column	a supporting pillar consisting of a base, a cylindrical shaft, and a capital
cornice	a crowning projection over windows or doors
capital	the top part of a post or column; it can be plain or decorative
colonnade	a row of columns
corbel	a decorative element that supports part of the roof
elevation	a view of one of the structure's sides
facade	the front part of a building
fogon	rounded corner fireplace
gable roof	a triangular wall section at the end of a pitched roof or as decoration over a window or door
gambrel roof	a roof with two slopes on each side, a steeper pitch to the lower outer portion and a gentler pitch to the center
latillas	sticks laid herringbone fashion across vigas to form a ceiling
perspective	a drawing which shows how an object appears to the eye by using reference points to relate distance or depth
pilaster	a column of shallow depth, perhaps attached to the wall
plan	drawing what the structure looks like from a bird's eye view
plaza	an open space surrounded by buildings
portal	an opening at the entrance of a wall or building; also a shaded porch
ramada	an outdoor space partially shaded by beams
spire	the tapered termination of a tower, especially on churches
schematic diagram	a visual way of representing time, space, or motion
section drawing	drawing the object as if the outer layer had been peeled away
tracing	drawing the object's lines using tracing paper placed over slide projections, overhead projections, or light tables
vernacular	a type of architecture peculiar to a specific region or culture
viga	a beam that holds up the roof and protrudes from walls
zaguan	heavy double door or gateway

History and Architecture in the Southwest and New England

United States history does not begin when the first English colonists settled Jamestown in

1607 or the Pilgrims landed on Plymouth Rock in 1620. Long before that, Europeans were on this continent. Spaniards entered what is now the Southwestern United States in 1540 seeking the fabled wealth of Cibola. They found instead adobe pueblos older than the cities of Europe, built by time-honored methods appropriate to the climate and the culture. These methods still influence modern Southwestern architecture. The continued use of native materials, colors, shapes, and design details in the Southwest demonstrate cultural and practical ties to the past. The influence of Native American architecture is strong in the Southwest. This is to be expected, since native people have inhabited the high desert and mountains from time immemorial. Climate and religion have influenced materials and their use. Visit Mesa Verde in Colorado, Chaco Canyon in New Mexico, and Canyon de Chelly in Arizona to see stone and earth constructions which "exemplify the unity of house and land" (Roth, 1979). These clusters of rooms were built onto natural caves high on canyon walls; they created places that were safe, cool, and conducive to cultural stability.

These Anasazi communities were built at around the same time, 1000 to 1100 A.D. Ancient circular, subterranean pit houses with central firepits and smokeholes evolved into multiple units based on cubes. These cubes, still containing central firepits and smokeholes, were pushed together for protection, first in rows, then in D or E shapes, and later into pyramidal constructions such as Pueblo Bonito at Chaco Canyon, which could house many hundreds of people. Taos Pueblo in northern New Mexico exemplifies a multi-story pueblo made of adobe. The pueblo's earth colors, straight lines, massive adobe walls, small windows and doors, strong contrast of sun, shade and shadow, and slightly rounded thick walls are still keynotes of Southwest architectural style.

The Arabic name *at-tub*, a straw-earth-liquid mixture, was brought to the region by the Spaniards, but adobe has long been a traditional building material in the Southwest. Although stuccoed wooden or block houses with the desired lines and shape often substitute for adobe today, the property of natural temperature control is sadly lacking in non-adobe homes.

The pueblos were built of adobe or mud brick held together with slip and covered annually with layers of mud stucco. Roofs were built by placing long cedar poles called vigas atop beams. These protruding vigas were topped by latillas, small branches placed in herring-bone fashion, which then held grass or brush and additional layers of mud bricks in the multi-story pueblos. Roofs became the terraces for the housing units above. Smoke holes in each roof allowed ancient families to enter via ladders which offered protection as well as imitated the cosmological reference to coming out of the navel of the earth, the sipapu, into one layer of several new worlds. (See figure 1.)

Modern pueblos, although often built on one or two levels in U shapes, have exterior doors, but the tradition of using ladders and living on the terraces as well as other outdoor areas still exists. The individual is part of a community in the traditional structure of a pueblo, which is Spanish for village. No one's house is separate from or different from his neighbors', and the entire tribe shares a common area, the plaza, for community religious events. The living space for families expanded or contracted as needed by adding on to the core dwelling place or closing off rooms for storage.

Native American communities, like Hispanic and Anglo communities, were influenced by the climate and the availability of building materials as well as by cultural values. For example, the Pueblo culture exemplified by Taos Pueblo built permanent structures near their agricultural fields, but the Navajo's traditional hogans were scattered widely across the deserts and plains, separated from other hogans because the arid land could not support dense population or grazing. A hogan is a one-room, six- or eight-sided mud and log structure which appears round. Based on the Navajo cosmology, the single door always faces east to greet the rising sun. (See figure 2.)

The Spanish, who entered the Southwest in 1540 and have lived there almost constantly since, adopted adobe as a basic building material for their own communities. For individual families, small houses in the form of an L, with a central living space and perhaps a few additional rooms, were constructed on or near a central plaza, which is defined as a square which serves to protect as well as to invite commerce and community. Houses were traditionally placed on the site so that prevailing winds would strike the back walls with few small windows, and the rising sun would warm the front of the house. Additional rooms could be added to that structure, Pueblo style. Sometimes separate homes were built nearby to create, eventually, a hacienda of connected houses in U shape or a square with doors opening on the central patio shared by the extended family.

The Native Americans who built the Spaniards' houses eventually began to use molds to make fairly uniform mud bricks. In Santa Fe, they used adobe to build the long, colonnaded Palace of the Governors along one side of the town's central plaza according to Spanish plans. Homes were built near to the plaza and along the roads radiating out from it. The seventeenth-century church-missions built in the region were modeled after European cathedrals, but their thick adobe walls and protruding vigas, reminiscent of pueblo architecture, provided cool, safe spaces for the missions' inhabitants and visitors.

Just as Southwestern natives used locally available materials and methods, the Eastern woodlands tribes and the English settlers also built homes appropriate for New England's cultures and climates. The Algonquin tribes of the Eastern woodlands were hunters and gatherers who lived in round, bark-covered shelters called wigwams. These homes were easily moved from place to place to accommodate their nomadic lifestyle. The free-standing wigwams were placed together to create villages of from fifty to five hundred families. Each wigwam was built by tying flexible saplings together to form dome-shaped frames which were then covered by available materials: bark, hides, or woven mats. Each wigwam had an entryway and a smoke hole to allow the escape of smoke from a central firepit. The wigwams measured from 10 to 16 feet in diameter, about 10 feet high, and usually housed two or three families. Some wigwams called longhouses, which measured as large as 100 by 18 feet, housed many more families and stored food as well. Whether round or long, Algonquin wigwams were clustered around a central common area, much like the Pueblo plazas and New England commons, where celebrations and civic discussions could take place. Some villages had protective walls, but most did not and were easily dismantled for moving when weather or animal migration made it necessary.

Why did the Pilgrims arriving in New England in the early seventeenth century not build homes

like the wigwams which had served native populations so well in all kinds of weather for hundreds of years? They did for a while. Earthen dugouts and huts made something like wigwams with bark-covered frames served as shelter for the first years on this continent, but these European settlers considered the natives to be heathen and their homes unworthy of imitation. Yet the daub and wattle (mud and stick) homes with thatched roofs that the earliest settlers imitated from their English homes did not work because they were inappropriate for the bitter New England climate. The wind blew through the walls, and the thatched roofs that had stayed moist in England often caught on fire in the dryer climate of New England, so they had to try other architectural styles. Soon the little cottages were winter-proofed with narrow boards, called clapboards, and roofing shingles were made from the abundant timber in the community. Left unpainted, the wood weathered to shades of brown and gray.

Seventeenth-century Massachusetts Bay Colony homes, in keeping with their Puritan and medieval European traditions, were plain wooden structures sturdy enough to withstand harsh New England winters. Beams were left clearly exposed. "In every room the mark of the broadax still showed up and down the rugged frame, for no one planed or sanded the beams. This wasn't a showplace, it was a plain house for a plain life. Decoration in home or meetinghouse could only signal precious time, the Lord's gift, squandered." (Bruce, 1975). Windows were small or non-existent, glass being expensive to import from Europe and other materials not especially translucent, so the rooms were usually dark. The interior space was divided into several small, low-ceilinged rooms which were not specific to household tasks. These houses were usually two stories high. The front door would open to a narrow hall entryway with a winding stair wrapped around the chimney core and leading up to two small bedrooms which were also used for storage. Although two rooms on either side usually backed onto the chimney for warmth, the family would spend most of its time in one of them, the keeping room, "a little like today's wide-open modern houses with kitchen, dining room, and living room all flowing together. . . All the work in the house centered in that room, around the enormous kitchen fireplace." (Bruce, (1975). At night, the keeping room often served as the parents' and smallest children's bedroom, too. One room downstairs was usually a formal sitting room. There were no closets or bathrooms in the house. (See figure 3.) A later transformation of this basic housing style added one and one-half stories on the back, with a sloping roof that covered it. It resembled a saltbox, and so it was called. The additional rooms might be a separate kitchen or bedroom and storage areas.

In Massachusetts Bay Colony villages, which were Puritan congregations more than anything else, all buildings were supposed to stand clustered within one-half mile of each other, close to the village green or commons area. This was a way to demonstrate their strong interdependence as well as to keep an eye on the neighbors. Cattle grazed and farmers plowed their fields some distance from the towns where their homes were located. The roads all converged on the central commons area where the meetinghouse, the school, and the stocks or the jail were built. Living in such close proximity was hard for non-conformists, many of whom moved to Connecticut and Rhode Island.

Puritan church-meetinghouses, central to the community's life and centrally located on the Common, were architecturally different from village churches and cathedrals in England. They were built for the spoken human voice, civic leaders as well as ministers, rather than sung or

chanted liturgy. The entire community was welcome to participate, not separated from the principals by a choir screen. One of the remaining old-style buildings Old Ship Meetinghouse, Unitarian, in Hingham, Massachusetts, 1682. The building is large and rectangular with box pews and galleries. Its ceiling shows sturdy timber trusses such as a barn or a ship might have.

It was "the individual and the full community represented in a visual symbol. . .first of all a house of worship, but. . .concerned. . .in the social and economic affairs of the community." (Mutrux, 1982).

Changing styles marked houses built around 1700 and later. Builders of new homes dropped the idea of the overhang, built larger sash windows and basically built two-story boxes with a gable or a gambrel roof, with more head space in the upstairs bedrooms. Often new houses were added onto or built around old ones as more generations joined a household. The village still focused on the green, but new houses sprawled farther out into the countryside on lots allocated by the town governors. The Puritan community became more widespread and less controlled.

As New England farmers, sailors, and merchants became more independent and prosperous, the styles of their homes changed as well. By the late eighteenth century, homes from Maine to Georgia began to resemble houses in England, no matter what the nationality of the current residents. This was due partly to the fact that England was the only country with which colonists could trade and partly to the fashion of the time. Georgian Colonial homes, named after England's King George III (1760-1820), were usually two or three stories high and two rooms deep, covered in white clapboard or local stone. Most Georgian homes had their chimneys placed on the outside walls, a more sophisticated style than the early colonial practice of clustering chimneys as a heat source in the middle of the house and winding staircases around them. The houses were built symmetrically around a center axis, with public rooms on either side of a hall and private rooms upstairs. By then, separate rooms were built for specific purposes, such as cooking, dining, sitting, and sleeping. New England villagers requested God's approval of their industry with wealth, so they didn't shy away from displaying their favor by decorating their substantial homes with Ionic columns or pilasters flanking an embellished central door or multi-paned, double hung windows with decorative caps.

The old-fashioned Puritan meetinghouses were mostly torn down in the eighteenth century and replaced by what is now the symbol of New England, Greek Revival style churches. These are white wooden churches with a spire pointing heavenward. The use of neoclassical forms such as columns, pediments, cornices, and pilasters, as well as the Roman domes and arches now associated with our federal government buildings, were used to imply the rational nature of the new country and its leaders.

Now that you know a little bit about the architecture of the times, it should be easier to help your students visualize the setting of three historical fiction novels. For those in New Mexico, perhaps your students will be able to compare and contrast small towns in the Southwest and the Northeast.

Literature and Architecture: An Interdisciplinary Unit

New England town greens surrounded by tall white clapboard houses are very different from the dusty central plazas and single-story adobe and stucco homes of the Southwest, but

they serve the same purpose of providing safety and a central meeting place for the community. This curriculum will make comparisons between familiar vernacular architecture and the different kind described in the novels that we read in literature class so that students can visualize the settings, including the community, specific buildings, and the events that unfold around them. Three novels described here are *The Light in the Forest*, *The Witch of Blackbird Pond*, and *April Morning*. Others would perhaps work as well. Students will form literature groups to read these three novels. Members of each group will designate the number of pages to be read daily and will use class time to read and discuss their reading. In addition, they will work as a group to complete the work for class presentations.

Light in the Forest.

This novel is about the forced return to his original home and family of a white boy, John Butler, captured as a child by a Delaware chief. As the adopted True Son of his Indian father, he has a great deal of trouble adjusting to the ways of white townspeople in a small Pennsylvania town.

Requirements:

1. Read the book carefully and contrast the styles of True Son's two homes by taking verbal and visual notes about each in your reading log. Draw the floor plan of each as it is described in the book or as you imagine it.
2. Draw a map of both communities described in the novel. Consider these questions:
 - a. Where is the center of each community?
 - b. How are the homes placed in relation to one another?
 - c. What does this say about the community?
3. Write a five-paragraph essay in which you explain at least three reasons why Johnny/True Son might have been troubled by having to leave the forests to adjust to life in the town. Which does the author seem to think is the better environment?
4. Keep a visual/verbal journal with responses to readings.

The Witch of Blackbird Pond

A young orphaned girl leaves Barbados to live with her aunt and uncle in Wethersfield, Connecticut in 1687. She is immediately struck by the difference between the two communities. In her former home she was free to wear bright colors, read widely, and swim. In Wethersfield, she must wear modest clothing, read only the Bible, and work hard. Only witches can swim—in which case they are hanged. She meets a lonely Quaker woman who has been ostracized from the town but whom she finds to be very sympathetic.

1. Compare the construction of two houses to show differences between the Puritans and Quakers. Matthew Wood, a prosperous citizen of Wethersfield, lives in the third house beyond the town's Common.

Two and a half stories it stood, gracefully proportioned, with leaded glass windows and clapboards weathered to a silvery gray." (Speare, 1958). The doorway of Matthew Wood's house led into a shallow hallway from which a narrow flight of stairs climbed steeply. Through a second door. . . (was) the great kitchen. In a fireplace that filled half one side

of the room a bright fire crackled, throwing glancing patterns of light on creamy plaster walls. There was a gleam of rubbed wood and burnished pewter (p.33).

Compare that to Hannah Tupper's house in a meadow near the town—but separate from it.

The little hut with its sparsely thatched roof sagged at one corner. It looked as though it could never survive a stiff wind, let alone a flood. . . The one small room the house contained was scoured as a seashell. There was a table, a chest, a bedstead with a faded quilt, a spinning wheel, and a small loom. A few ancient kettles hung about the clean-swept hearth. (Speare, 1958, p. 87).

2. Draw a house plan of each house, paying close attention to the text. Compare a picture of the Parson Capen House (1683), Topsfield, Massachusetts, available in many books about Puritan living, to the description of the Wood family's house in the novel.

3. Draw a map of Wethersfield, Connecticut, as described in *The Witch of Blackbird Pond*. Include the common, the meetinghouse, the stocks, the Wood home, the road to Saybrook, the Connecticut River, the meadow, and Hannah Tupper's cottage. Include a compass rose with directional arrows. (Extra credit: Use the internet or other source to find a map of this town today. Compare the two maps.)

4. Keep a visual/verbal journal with responses to reading.

April Morning:

The novel details the events of April 18-19, 1775, when shots fired on the Lexington Green signaled the start of the Revolutionary War. After creating a map of the town and the surrounding area, including the common with its church-meetinghouse and adjacent homes, readers will see more clearly how the events of the times played out along the dirt roads and stone walls of Lexington, Massachusetts.

1. Students will copy a timeline of events of British occupation of Boston, noting especially the dates of April 18 and 19, 1775. They will receive a copy of the book, *April Morning*, and will form reading groups for the purpose of conferring and presenting with their peers.

2. Chapter three, "The Night," (p.51-78) details the events of a night riders' progress through Lexington toward Concord to warn the sleeping farmers that the British were coming. Read the poem, "Paul Revere's Ride," and compare these two versions of the nights' events. Then, if possible, get a copy of *Lexington and Concord* and read even more versions of the same events, some from primary sources. Draw conclusions about why history is told so many different ways.

3. Show overhead transparency or slides depicting the setting of *April Morning*, Lexington and Concord, Massachusetts. Students will receive a copy of a map of Lexington which they will detail and annotate as they read the book.

4. Discuss the layout of the town and compare it to that of a typical New Mexican town, also centered on the plaza or common area. As the class continues, students will fill in more of the map to show specific sites mentioned in the book.

5. Lay out the town plan for Lexington in 1775. Include the town green and the meetinghouse. Label individual houses mentioned in the novel. Add roads and directional symbols pointing to Boston and Concord. Mark the scene of the Battle of Lexington with an X. (See figure 4.)
6. Create a schematic map of the British soldiers' movement from Boston to Concord and back. Sketch in a stone wall such as the one that protected the American Minute Men.
7. Draw a plan of a typical Georgian house of the sort that Adam's family might have inhabited.
8. Keep a visual/verbal journal based on your reading. Write summaries, evaluations, questions, predictions, and comparisons. Focus on the effect of the battle on the Cooper family, Adam Cooper, the townspeople, and the rest of the colony.

After reading the book and completing the tasks, groups will make presentations based on their interpretation of events and their work together.

Language and architecture activities

These activities are unrelated to the readings but possibly interesting ways to integrate architecture into your teaching.

1. A house or building tells a story. It is full of characters, events, and points of view. Make a building model, and then write that story or tell that story.
2. Recall a house that you have lived in or visited. What do you remember about it? How did you feel while you were in it? What did you like or not like? Write a poem, essay, or short story about your experience.
3. Draw a bubble diagram of your home. Measure one/your room and create a plan drawing which is accurate according to a scale of 1 inch = 1 foot. Describe your room in writing.
4. Character study: choose a character from literature or real life (or other) and describe in great detail the perfect room for that person.
5. Find passages about houses or buildings in readings. Discuss how setting informs the text.
6. Have your class make a list of idioms relating to houses or other dwelling places. Discuss meanings. (Examples: A man's home is his castle; house built on the rock/sand; eyes are the window of the soul; child has a good foundation; I've knocked, but no one is home;)
7. Students can select an architect to research. They should then create a poster with samples of the architect's work including a building model, pictures/tracings, a paragraph or more, design details.
8. Students can enter an architectural design contest.
9. Take field trips and learn about architectural history in your neighborhood. Walking tours may be available.
10. Students interested in an architectural career can interview an architect and see a design studio.

Today's Architecture: Culminating Activity

Considering what you have learned about the architecture, let's put it to work today. You have received a letter from a client who wishes to move to Albuquerque, New Mexico from New England. If she decides to move here, she will bring her successful architectural firm and her first job will be to improve the school building and grounds. She doesn't have much time to come out to visit personally, so she has hired this class to do some of the preliminary work for her. She wants to live in a city which values community and art, including architecture, and she has heard that Albuquerque may or may not be that city. Here are her questions.

Team 1. When you look at the city of Albuquerque, where is its center? What brings the people together for a sense of community that might formerly have been found in a plaza or a green? Document your findings in drawings or photographs and write a short explanation of your thinking.

Team 2. How does the city reflect the natural world around it? What does the city do to show its awareness of and celebrate the natural world around it? Document at least five examples of this in drawings or photographs.

Team 3. Does the city contain interesting buildings? Take a field trip to several sections of the city. Choose at least five buildings that you would give "orchids" and then label five "onions." Draw or photograph them, and then write a report in which you describe their good or not-so-good architecture. Create a checklist of architectural design qualities that will guide your thinking.

Team 4. Write a short report on an architect who has worked to make Albuquerque more beautiful. Take a field trip to look at the work of some local architects (John Gaw Meem, Brad Prince, and Antoine Predock are some of the more famous ones here.) Draw or photograph at least five examples of the architect's work and explain how this architecture reflects or does not reflect the community in which it was built. You may also give your opinion of the architecture.

Team 5. Look around our school. What is good about its architecture? Does it reflect the vernacular culture? Is it welcoming to students? Do visitors know where to enter the school? What could be improved to make it a better place in which to learn? Write a survey and circulate it to at least 25 people outside of this family. Using their ideas and some of your own, redesign the school to make it a better environment for learning.

Be prepared to explain your ideas to the architect when she arrives.

Student Reading List

Fast, Howard. (1961). *April Morning*. New York: Bantam Books.

Speare, Elizabeth George. (1958). *Witch of Blackbird Pond*. New York: Dell Publishing.

Richter, Conrad. (1953). *Light in the Forest*. New York: Bantam Books.

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