

GRAM

# Surveying American Art:

**Social Studies through the Eyes of Artists**



*American Gothic, Washington D.C.*  
Gordon Parks

The following materials are intended to assist teachers in taking advantage of the unique learning experiences provided by the permanent collection at the Grand Rapids Art Museum.

# Tour and Teacher Resources

*Surveying American Art: Social Studies through the Eyes of Artists* was conceived to demonstrate how school tours of the Grand Rapids Art Museum can support active learning of the state mandated Social Studies curriculum.

The examples provided in this classroom resource model strategies to position works of art at the center of teaching about key issues, including U.S. and Michigan history, the American identity and landscape, and the Civil Rights Movement. Integrating art in your classroom and extending the experience to the unique setting of the world's first LEED Gold Certified Art Museum, will engage your students in a resonant form of inquiry-based visual literacy, which promotes participation in community, responsible citizenship, and analytical thinking.

This teacher packet includes the following:

- An overview of visual literacy and suggested discussion questions for pre-tour preparation
- Techniques to help students recognize the formal elements that artists use to create their work
- Background information and classroom connections for four works often seen on *Surveying American Art: Social Studies through the Eyes of Artists* tours
- Images of other relevant selections from the Art Museum's collection which can be requested as stops during your visit
- Related Vocabulary
- Information about the Art Museum's LEED Gold Certification

The works of art featured here and on view in the galleries are not merely illustrations of social and historical moments. They demonstrate how artists of the past saw and interpreted the world around them. Teaching with these works allows students to critically evaluate primary source documents from the nation's cultural tradition. We hope that this packet enriches your visit to the Art Museum and provides your students access to the transformative process of learning from our collection.

## Visual Literacy

A key to assisting students in the creation of meaning from art observation is to encourage the development of their oral and written communication skills in relation to authentic objects. Research has found that beginning viewers are "accountive viewers" meaning that they are inherently narrative and search for stories in artwork. Teachers can cultivate their students' visual literacy by providing images which can be interpreted narratively, by providing open-ended and developmentally appropriate questions, and by allowing students to participate in group discussions within their peer group – thereby encouraging the scaffolding of knowledge between and among students.

GRAM docents are trained to lead inquiry-based tours and will use specific questioning techniques on the tour to encourage a personal response by the students. This will allow students to participate in a guided group discussion while in the galleries. An inquiry-style, personal response approach to communicating about artwork can be useful in the classroom as well.

Beginning a personal response assignment or discussion can be as simple as first choosing an image with a narrative basis. Once the work of art has been chosen, students should be directed to spend some time quietly looking at the composition. They can be directed to let their eyes and mind wander as they take time to look closely at the image. When they have spent a few minutes looking intently, they should be directed to either complete a written response or prompted to begin a class discussion. A series of proposed questions is listed below:

What is going on in this picture? What do you see that makes you say that?  
What more can you find?  
What did you notice first about this work of art? Why?  
Where did your eye travel next?  
What does this work of art make you think of? What do you see that makes you say that?  
If you had to describe this work to a friend – what would you say about it? Why?  
What is the mood of this image? What do you see that makes you say that?  
How do you feel about having to spend time with this work? Why do you say that?  
Has your first impression changed now that you've spent time with it?

As you may notice, many of these questions have a follow up question, “What do you see that makes you say that?” This question, though seemingly arbitrary, asks viewers to begin to look at an image separate from their own past life experiences and to find evidence for their response *within the work itself* - a key concept for beginning viewers to understand and utilize to develop their critical thinking and communication skills.

## Formal Elements

The ability to analyze the formal qualities of a work of art is integral to a complete understanding of the art-making process. Formal qualities can be identified as elements such as composition, color, line, texture, scale, proportion, balance, contrast, and rhythm. By analyzing formal elements of art, students can understand the process and techniques that artists use to tell their story before constructing an interpretation of the work. Some general questions that could be asked are:

**Shape/Composition** - What shapes do you see? How do those shapes come together to create the finished work? Are the shapes symmetrical or asymmetrical? How does the configuration of shapes affect the artwork?

**Line** - What kinds of lines are used? Do the lines create a sense of motion? Depth? Stillness? Are the lines distinct or hard to see?

**Color** - What colors do you see? Are they mostly light or mostly dark? How are the colors organized? (Do they blend into one another, clash with each other etc.) Why do you think the artist chose these colors? How do the colors make you feel?

**Pattern/Texture** - Do you see any patterns? What do you think the object would feel like if you touched it?

**Light** - How does light affect the work? In the paintings, can you tell where the source of light is coming from?

**Subject/Function** - What is the subject of the work? Are there people depicted, and if so, how? Do you feel like a part of the artwork or just an observer? Where do you think this artwork was originally intended to be seen?

**Interpretation** – Why do you think the artist created this work? What do you think he/she is trying to say with it? What do these works say to you? Do you feel certain emotions associated with each artwork? What effect do you think the artist’s time period had on his work? What does this artwork mean to you? Which of your formal observations helped you to discern this meaning?

## Understanding the Artist

Another way to find meaning in a work of art is to understand the life and philosophy of the artist. Knowing about the artist’s education, partnerships and ideas about art can help the viewer to see a work with new insight. Below you will find short overviews of four artists and the works of art your students may see on their tour.

### Frederic Remington

American, 1861-1909

#### About the Artist

Frederic Remington was a life-long resident of the state of New York, yet as an artist, his name became synonymous with images of the American West. A trip west in 1881 inspired him to document the vanishing frontier and its peoples throughout his career as a painter, illustrator, sculptor, and writer.

After two years of formal art training at Yale University and the Art Students League New York, Remington returned with sketches from his initial trip out West, including one that he sold to Harper’s Weekly magazine. His career blossomed as an illustrator supplying Harper’s and other current publications with drawings and paintings and giving him a vehicle in which to preserve his beloved Western Region.



*Snow Indian of the Northwest Type*  
c. 1897

Early in his career Remington was considered a narrative painter, with the human figure taking precedence over the landscape in his pictorial stories. Noted Remington scholar, Peter H. Hassrick explained, “The ravaged Indian, the misunderstood soldier, the disappearing cowboy, the bygone trapper and the explorer were presented for what Remington thought them to be.” He viewed the West and its inhabitants as a place in time rather than a location on a map. Even the horses, which he depicted so skillfully,

were shown juxtaposed with man. He loved horses and in particular, horses in action, so much that he wanted his tombstone to read, “He knew the horse.”

Remington would head west three to four times per year to make sketches, gather props, and clothing for models, to use back East in his studio. It was on these trips that he gained first-hand experience with the U.S Cavalry, cowboys, and Native Americans. Artistically his repertoire grew to include bronze sculpture, oil paintings, and writings, in the form of short stories and books.

In 1895, Remington’s sculptures of cowboys and horses in motion, particularly one known as ‘The Bronco Buster,’ became very popular. The sculptures were seen in exhibitions and produced in multiples for large audiences. Artistically, he developed from an illustrator to a painter. His oil paintings moved away from his earlier visual records to a more impressionistic style, in which he increasingly romanticized the Western theme. Remington will always be known as an excellent draftsman, who created more than 2000 precisely rendered drawings of American West subject matter.

### **About the Work**

*Snow Indian of The Northwest Type* is an ink wash drawing on paper, likely completed for commercial reproduction. The illustration shows a Blackfoot Indian, wrapped in a blanket coat, sitting stately atop a majestically prancing horse. Remington included the Blackfoot Indian, who lived in the Great Plains of Montana and the Canadian provinces of Alberta and Saskatchewan, as subject matter after a trip to the West and Canada in 1890.

Remington, along with Henry Farny and Charles M. Russell, chronicled the American West at a time when the region spanning west of the Mississippi River to the Pacific Ocean was being developed by white settlers. The settlement that took place in the last quarter of the nineteenth century was often punctuated with violent events. Wild West and frontier art peaked between 1880 and 1910, when the depiction of cowboys and American Indians and their confrontations spurred a romantic perception of danger and excitement in people of the eastern United States.

As a testament to the popularity of Remington and his imagery of the American West, President Theodore Roosevelt stated,

*“He has portrayed a most characteristic and yet vanishing type of American life. The soldier, the cowboy and rancher, the Indian, the horses and cattle of the plains, will live in his pictures and bronzes, I verily believe, for all time.”*

### Classroom Connections

- Look carefully at Remington’s *Snow Indian of the Northwest Type*. What mood does this drawing convey? How has the artist used color, line, and facial expression to create this feeling?
- Remington made only two trips to the Dakota Territory, where he would have encountered the Blackfoot peoples. These occurred in 1887 and 1890. The date of this picture is 1897 and it was completed in his New York City studio. How might

time and distance have affected his depiction of the Blackfoot? To illustrate the point, ask students to describe the events of their day. How does this compare to their recollection of a day from last week, month, or year?

## **Paul T. Frankl**

American (b. Austria), 1886–1958

### **About the Artist**

Paul T. Frankl was the most prominent figure among a generation of Viennese modernists, who were educated just after the turn of the 20<sup>th</sup> century and immigrated to the United States about the time of World War I. Growing up in Austria's capital had a significant influence on the young Frankl, as Vienna was the center of a revolution that was sweeping through the art, architecture, and design world. He trained as an architect in Vienna and Berlin, before coming to the U.S. It is somewhat ironic that as a European, Frankl would go on to become a leading spokesman for modern American design, but it was his background that allowed him to recognize characteristics that made America unique, and integrate them into his designs.



*Skyscraper Bookcase Desk*  
c. 1926  
California redwood and black lacquer

When Frankl came to the United States in 1914, he began to design sets for the Theatre Guild in New York and pursue independent design commissions. By 1922 he had established Frankl Gallery in midtown Manhattan where he sold both his own work and imports. Along with other designers of the time, Frankl was seeking to find a fresh, new aesthetic suited to America's tastes and values—a design which was uniquely American. “Skyscraper” furniture, invented by Frankl, was the first such design to stand apart from European ideas and those of his contemporaries in the U.S. He wrote, “Decorative Arts and furniture design are already under the powerful modern architectural influence. This can only resolve into one thing, a decorative art that is in keeping with the country and the people who live in it.”

### **About the Work**

As early as 1925 Paul T. Frankl offered for sale in his New York gallery the first of his “Skyscraper” furniture – wooden cabinetry with flat surfaces, sharp angles, and stepped silhouettes. This furniture was inspired by the buildings constructed in Manhattan after the recent open-air ordinance mandated terracing and setbacks of the upper stories. His work was considered thoroughly modern and purely American —“as New Yorkish as Fifth Avenue itself.” But it was not completely independent of European precedents, particularly the ornamental style of his native Vienna.

While his book, *New Dimensions* (1928), in which this desk was illustrated, extolled the skyscraper as a “distinctive and noble creation...a monument of towering engineering and business enterprise,” Frankl did not support the industrialized methods that had given birth to it. He rejected the idea that modern furniture should be standardized and mass-produced, “just another factory-made machine product.” Instead he promoted individual craftsmanship and spelled out the same ideals of honesty, simplicity, and beauty in natural materials found in the writings of the Arts and Crafts Movement and of Frank Lloyd Wright.

### Classroom Connections

- Compare Frankl’s *Skyscraper Bookcase Desk* to the New York Daily News Building designed in 1925 by Raymond Hood. What elements are common to both the desk and this architectural landmark?
- The emergence of the skyscraper, which was made possible by steel frame construction, transformed the American landscape in the early 1900s. Ask students to think about recent inventions or an engineering feat that changed their world. Have them design a functional object based on the advancement they selected.

## **Lewis Luman Cross**

American, 1864-1951

### **About the Artist**

Lewis Luman Cross was born near Davison, Michigan, and moved with his family to Spring Lake, MI in 1872. He lived in the area for the remainder of his life. Cross built his home, known as “The Castle” from 1910-1914 near Spring Lake, in an area called Deremo Bayou, where he lived alone. He worked as a fruit farmer and painted mainly during the winter months, as he considered art a hobby.



Lewis Luman Cross  
*Bird's Eye View of Passenger Pigeons Nesting*  
1934

Cross received very little formal artistic education, studying drawing, penmanship and oil painting for six months during 1883-84 at the Indiana Normal School and Business Institute (now Valparaiso University) in Valparaiso, Indiana. The larger body of his work is oil on canvas and his business card read “landscape, marine and portrait artist.” Cross also offered painting lessons at his home studio.

An avid hunter and outdoorsman, Cross painted scenes of wildlife, seascapes, histories of Western Michigan, and copies of masterpieces. He is best known for his images of passenger pigeons. Prior to their extinction, and while passenger pigeons were still plentiful in the Great Lakes region, Cross shot and mounted one of these local birds. This passenger pigeon became the model for many of his paintings.

During his lifetime, Cross showed his work at the Detroit Institute of Arts in 1890. His work was also included in the *Early Michigan Paintings* exhibition organized by Michigan State University in 1976.

### **About the Work**

Painted in 1934, Cross has captured a time in history, during the 1870s and 1880s when passenger pigeons swarmed the state of Michigan. The oil painting, executed in autumnal colors, depicts flocks of pigeons as they come to nest in the trees along the riverbank. Men, possibly hunters who helped to drive the birds to extinction, are seen prowling in the woods as more birds fly in formation overhead.

The species that once numbered in the billions in North America were extinct by 1914. Cross, who regularly sketched and painted the bayou and river area where he lived in Ottawa county, once remarked, “The passenger pigeon has been extinct for more than 50 years, but I can remember back in the 70s when the sky would be so filled with them that the sun would be obscured for as long as an hour. At other times when the sun was in the right position, a flock would appear as a perfect rainbow caused by iridescent coloring.”

Naturalists of the time lamented that the thunderous clap of their wings would no longer be heard. Conservationist, Aldo Leopold, wrote,

*“There will always be pigeons in books and in museums, but these are effigies and images, dead to all hardships and to all delights. Book-pigeons cannot dive out of a cloud to make the deer run for cover, or clap their wings in thunderous applause of mast-laden woods. Book-pigeons cannot breakfast on new-mown wheat in Minnesota, and dine on blueberries in Canada. They know no urge of seasons; they feel no kiss of sun, no lash of wind and weather. They live forever by not living at all.”*

Others commented that mourning the pigeon was mere nostalgia and that if the hunter had not erased them, angry farmers would have. Cross’s large-scale canvas depicts a romantic, almost surrealist vision, of a species lost to time.

### Classroom Connections

- Examine Cross’s use of different types of lines. Search for examples of curved, diagonal, and straight lines. How has Cross used line to create a sense of movement and the expanse of the flock?
- Ask students to research the extinction of the passenger pigeon. Ask them to write a position piece advocating the preservation of the species that references Cross’s painting.

## Gordon Parks

American, 1912-2006

### About the Artist

Gordon Parks was the first African-American photographer to gain an international reputation in the twentieth century. Prior to his recognition in the early 1950s, African-American photographers were restricted to studio portraiture in black communities. Parks opened the field for other African Americans with his accomplishments in documentary and fashion photography.

Parks was born and spent his youth in Fort Scott, Kansas. Moving to Minneapolis, where he first took up photography, he traveled in the late 1930s to Chicago and began to make a name in fashion and documentary photography. During the years of World War II, Parks lived in Washington, D.C., following the award of a photography fellowship from the Farm Security Administration. During the later 1940s in New York, he established a reputation as an important fashion photographer with his photographs for *Vogue* magazine.



*American Gothic, Washington D.C.*  
1942  
Gelatin Silver Print

In 1948, Parks was hired by *Life* magazine, becoming their first African-American staff photographer. This publication, more than any other, elevated the art of photography in the minds of the American public. Parks' distinguished work for *Life* magazine was a pivotal influence on a new generation of African-American photographers, especially those who recorded the events of the Civil Rights Movement. Parks' photographs of the 1950s and 1960s are compelling images of America in an era of social change.

Parks also wrote books and poetry, composed music, and became one of the first African-American filmmakers to win major awards. Gordon Parks died in 2006 leaving a body of photographic work of prodigious significance.

### About the Work

While in Washington, D.C., Gordon Parks created one of his best known photographs, *American Gothic, Washington, D.C.*, which was named after Grant Wood's famous painting *American Gothic*. The photograph shows a black woman, Ella Watson, who worked on the cleaning crew at the Farm Security Administration building. She stands in front of an American flag with upturned mop and broom in hand, staring directly into the camera, as if in salute. Parks had been inspired to create the picture after encountering repeated racism in restaurants and shops, following his arrival in the nation's capital. It was in Washington D.C. that Parks "found out what prejudice was really like." He later recalled, "discrimination and bigotry were worse there than any place I had yet seen."

The photograph served as the frontispiece in Park's word-and-picture poem book called, *Moments without Proper Names*. It was also part of a larger series that chronicled the life of the charwoman, Watson. Parks intent was to use the camera to "expose the evils of racism, the evils of poverty, the discrimination and the bigotry, by showing the people who suffered most under it."

*American Gothic, Washington, D.C.* became one of many banner images for the emerging Civil Rights Movement after World War II. The image draws its strength from its controversial nature and its depiction of the subject as both victim and survivor.

#### Classroom Connections

- Describe Ella Watson's clothing and the objects she holds. Look carefully at her posture and expression. How would you characterize her?
- Compare the photograph to Grant Wood's iconic painting *American Gothic*. Discuss how Parks' decision to reinterpret this image created a powerful message about social inequalities in America.

# Curriculum Content Standards

## Arts Education

- All students will analyze, describe and evaluate works of art
- All students will apply skills and knowledge to create in the arts
- All students will understand, analyze, and describe the arts in their historical, social and cultural contexts.
- All students will recognize, analyze, and describe connections among the arts; between the arts and other disciplines; and between the arts and everyday life.

## Language Arts

- All students will focus on meaning and communication as they listen, speak, view, read and write in personal, social, occupational, and civic contexts.
- All students will use the English language effectively.
- All students will demonstrate, analyze and reflect upon the skills and processes used to communicate through listening, speaking, viewing, reading and writing.
- All students will apply knowledge, ideas, and issues drawn from texts to their lives and the lives of others.

## Social Studies

- All students will acquire information from books, maps, newspapers, data sets and other sources, organize and present the information in maps, graphs, charts and timelines, interpret the meaning and significance of information, and use a variety of electronic technologies to assist in accessing, and managing information.

## Surveying American Art: Social Studies through the Eyes of Artists

There are many works currently on view at the Art Museum that connect to themes in the Social Studies curriculum. The following objects may also be seen during your tour and can be requested as included stops.

1) William Merritt Chase, *The Opera Cloak*, c1890  
Oil on canvas

Classroom Connections:

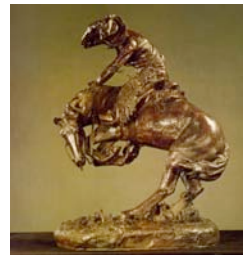
Social structures during the age of Industrialism, city life at the turn of the century, gender roles of the late 19<sup>th</sup> century



2) Frederic Remington, *The Rattlesnake*, c1903  
Bronze (posthumous cast)

Classroom Connections:

The myth of the American West, Theodore Roosevelt and the cult of masculinity, suspended narrative



3) Robert Henri, *Portrait of Gertrude Kaska*, 1904  
Oil on Canvas

Classroom Connections:

Children at the turn of the century, immigration during the early 20<sup>th</sup> century



4) Frederick Ballard Williams, *The Grand Canyon*, 1910  
Oil on canvas

Classroom Connections:

American geography/landmarks, the expansion of the railroad, Manifest Destiny



5) Henry Farny, *Moonlit Indian Encampment*, 1911  
Gouache

Classroom Connections:

Portrayals of Native Americans, Critical looking: is this an accurate portrayal of the realities faced by Native Americans?



6) Mathias Alten, *The Last Load*, c. 1935  
Oil on Canvas

Classroom Connections:

History of West Michigan, West Michigan landscape and geography



7) Thomas Hart Benton, *The Grand Tetons*, 1955-1960  
Oil on tin

Classroom Connections:

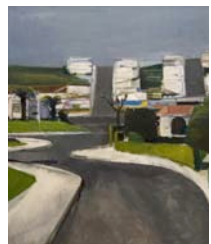
American landscape, life in rural America



8) Richard Diebenkorn, *Ingleside*, 1963  
Oil on canvas

Classroom Connections:

American landscape, life in postwar America, the development of suburbs



**Works on Paper:**

1) Winslow Homer, *Snap-the-Whip*  
Wood engraving on newsprint, published 1873 (post Civil War)

Curriculum Connections:

Post-Civil War America, rural life



## **Glossary**

**Wash.** A transparent layer or coating of color applied to a surface allowing underlying lines, shapes, or colors to show through.

**Draftsman.** An artist who draws.

**Decorative art.** Art that is concerned primarily with the creation of useful items (as furniture, ceramics, or textiles) —usually used in plural.

**California Redwood.** A very tall coniferous tree that grows chiefly in coastal California and yields reddish wood.

**Setback.** A building ordinance in New York City that required the recessing or terracing of the upper stories of tall buildings. The purpose was to provide more light, air, and direct sunshine to the workers in the offices located in the buildings as well as to allow more air and sun to penetrate the deep canyons of the city.

**Canvas.** A piece of cloth backed or framed as a surface for a painting

**Bird's Eye View.** A view from a high angle as if seen by a bird in flight.

**Documentary photography.** Refers to a type of photojournalism. The photographer attempts to produce truthful, objective, and usually candid photography of a particular subject, most often pictures of people.

**Freelance photographer.** A photographer who acts independently without being affiliated with or authorized by an organization.

**Gelatin silver prints** The standard black and white print. The dominant photographic process from the period of their introduction in the 1880s until the 1960s when they were eclipsed by consumer color photography.

## **Other useful Vocabulary**

**Abstraction.** The selection, simplification, and/ or rearrangement of the representation of natural appearance.

**Atmospheric (aerial) perspective.** The illusion of depth produced in graphic works by applying the following to objects as they recede: lightening values, softening details and textures, reducing value contrasts, and neutralizing color.

**Balance** A sense of equilibrium achieved through implied weight, attention, by manipulating the visual elements within an artwork.

**Composition.** The total arrangement of all the elements in an artwork. Sometimes interchangeable with the terms *design* and *form*.

**Contour.** The line that defines the edges of an object or a drawn or painted shape.

**Craftsmanship.** Aptitude, skill, or quality workmanship in the use of tools and materials.

**Curvilinear.** Stressing the use of curved lines.

**Design.** The underlying plan on which an artwork is based.

**Illustration.** An illustration is a visualization such as a drawing, painting, photograph or other work of art that stresses subject more than form. A visual representation.

**Limited palette.** The deliberate restriction of the number of colors that an artist uses in a painting,

**Mass.** The physical bulk of a solid body of material.

**Medium, media (pl).** The materials and means used to bring an artwork into existence.

**Narrative art.** A form of art that depends on subject matter to tell a story, either as a moment in an ongoing story or as a sequence of events unfolding over time.

**Negative space.** The unoccupied or empty areas in an art work defined by the positive elements created by the artist.

**Perspective.** A graphic system used to create the illusion of three-dimensional images and/or spatial relationships on a two-dimensional surface.

**Picture plane.** The actual flat surface on which the artist executes a pictorial image. In painting, the *picture plane* refers to the flat surface of the canvas or the physical material onto which the paint is applied.

**Pigments.** Color substances that give their color property to another material by being mixed with it or covering it.

**Proportion.** The comparison of elements one to another in terms of their properties of size, quantity, and degree of emphasis.

**Rectilinear shape.** A shape whose boundaries consist of straight lines.

**Repetition.** The use of the same visual element a number of times in the same composition. It may accomplish dominance of one visual idea, a feeling of harmonious relationship, or an obviously planned pattern.

**Representational art.** A type of art in which the subject is presented through the visual art elements so that the observer is reminded of actual objects.

**Rhythm.** A sense of movement achieved by the repetition of visual elements.

**Style.** A specific artistic characteristic or dominant trend of form noted during a period of history or during an art movement. Style also refers to the expressive use of media that gives an artwork individual character.

**Three-dimensional.** Possessing a dimension of depth, in addition to having the dimensions of height and width.

**Two-dimensional.** Possessing the dimensions of height and width.

**Value.** The relative degree of light or dark.

# LEED Certification

The tour also provides a starting point from which to teach students about how to impact our environment in a positive way. Nature has been an important theme and inspiration throughout the history of art. GRAM is committed to being a good steward of the environment so that we may preserve natural habitats for future artistic inspiration. GRAM is the first LEED Gold certified art museum in the world and has made specific choices in building the museum in order to conserve art and the environment for future generations to learn from and enjoy. Students will also learn some of the environmentally friendly aspects of GRAM during their tour.

According to the U.S. Department of Energy, building construction and operation use one-third of our total energy consumption, two-thirds of our electricity, and one-eighth of our water.<sup>1</sup> Building construction also produces 136 million tons of construction and demolition waste in the U.S.<sup>2</sup>. That is approximately 2.8 pounds per person per day.

GRAM worked to design a LEED Gold certified museum to significantly reduce or eliminate the negative impact of its building on the environment. Leadership in Energy & Environmental Design, or LEED, is a rating system designed by the U.S. Green Building Council, which provides a standard of measurement to define what is meant by “green” building. The LEED certification system is divided into six categories that span all aspects of the building from architectural design and construction to operation. These categories are: Sustainable Sites, Materials & Resources, Water Efficiency, Energy & Atmosphere, Indoor Environmental Quality, and Innovation & Design. Buildings earn points within each category that lead to one of four levels of certification when totaled: certified, silver, gold, or platinum. GRAM has earned a high level certification and has become the first newly constructed, LEED Gold certified art museum in the world.

A large portion of the sustainable sites category is the building location. GRAM has chosen to build on a previously developed site to reduce the environmental impact of its location. The location of the building also promotes the use of alternative transportation with its close proximity to many public bus lines and its inclusion of bicycle accommodations.

The materials and resources used to construct the art museum were carefully selected for their sustainable content and their ability to be recycled. Over 10% of construction materials have either post-consumer or post-industrial recycled content. To reduce the amount of transportation-related pollution produced by acquiring construction materials, GRAM used local manufacturers to provide over 20% of its materials, while 50% of the raw materials used were extracted from the region. This also supported the local economy. Alterations in construction standard practice insured that over 75% of the building construction, demolition and land clearing debris was diverted from landfills by reuse and recycling. Large dumpsters were used to sort metal, wood, plastic, and trash

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<sup>1</sup> U.S. Department of Energy, Energy Information Administration, March 2001, *Monthly Energy Review*.

<sup>2</sup> U.S. EPA 1998, “Characterization of Building-Related Construction and Demolition Debris in the United States”.

throughout the construction process. GRAM has also instituted a recycling policy that separates metal, plastic, glass, and paper from trash on a daily basis.

The building has many distinctive water systems designed to conserve water usage while providing beautiful retreats within the museum. An innovative water collection system gathers rainwater from the roof and stores it in large underground cisterns to be reused in the irrigation of the museum courtyards and landscaped areas and in restrooms. There are two separate cistern systems. The first set of cisterns store water for restroom use. Located under the building, these cisterns are each three stories tall and are filled with rainwater by the end of the Spring. The second set of cisterns, beneath the pocket park, stores water to be used by the water wall and landscape irrigation. By reusing collected rainwater in this way, GRAM reduces its demand for city treated water by 20%.

The Energy & Atmosphere category tracks the energy used to light and heat or cool the building. To create an atmosphere of comfort both for the visitor and the art, the museum is equipped with monitoring systems that continuously meter lighting, heating and cooling, and humidity. Seventy percent of the museum is naturally lit, providing visitors with multiple outdoor views and allowing for less energy to be used for artificial light. Window glass throughout the entire museum is UV rated, filtering out damaging ultraviolet rays. Motion sensors control artificial lighting in the office area and education center to reduce energy usage as well.

The building is also equipped with efficient heating and cooling systems that monitor temperature and humidity. This system is integrated with carbon dioxide monitoring sensors that detect the amount of carbon dioxide in the air. When the sensor detects low levels of carbon dioxide in the air due to low occupancy of the room, it adjusts the amount of ventilated air. This conserves the energy used to heat and cool the building. Similar to the Energy & Atmosphere category, the Indoor Environmental Quality category looks at aspects of the building that affect its interior conditions such as temperature and the amount of daylight entering the museum. However, it also takes into account chemical emissions that affect air quality. Materials such as wood, carpet, paint, adhesives, and sealants emit VOCs or Volatile Organic Compounds, which can be detrimental to air quality and occupant health. GRAM has used low VOC emitting materials in its construction to ensure the best air quality possible for occupants and artwork. The museum is also a non-smoking facility.

The Innovation & Design category accounts for any features that go above and beyond the requirements set by the LEED Rating System. The carbon dioxide monitoring system discussed earlier is one example of the innovations built into the museum. GRAM has instituted a Green housekeeping and maintenance program as well, which uses recycled and biodegradable products in the maintenance of the building including soaps and paper products. We have also produced educational materials to educate the public about Green building and the importance of sustaining both art and the planet.

# Additional Resources

## ***Snow Indian of the Northwest Type***

Shapiro, Michael Edward and Hassrick, Peter H. *Frederic Remington: The Masterworks, Peter H. Hassrick; with essays by David McCullough, Doreen Bolger Burke, John Seelye*: Abrams. 1988

Hassrick, Peter H. *Frederic Remington: paintings, drawings, and sculpture in the Amon Carter Museum and the Sid W. Richardson Foundation Collections*: Abrams, Inc. 1975

Hassrick, Peter H. and Thomas Gilcrease Institute of American History and Art. *Treasures of the Old West: Paintings and Sculpture from the Thomas Gilcrease Institute of American History and Art*: Abrams, Inc. 1984

Hassrick, Peter H. *The Elements of Western Art*

<http://www.tfaoi.com/aa/5aa/5aa87.htm>

Hassrick, Peter H. *They Are a Fine Outfit Those Blackfeet": Frederic Remington in Western Canada*

<http://www.tfaoi.com/aa/5aa/5aa182a.htm>

## ***Skyscraper Bookcase Desk***

Wilson, Richard Guy. *The Machine Age in America, 1918-1941*: Abrams. 1986

Frankl, Paul T. *New Dimensions*. Payson and Clarke LTD. 1928

Long, Christopher. *Paul T. Frankl and Modern American Design*: Yale University Press. 2007

## ***Bird's Eye View of Passenger Pigeons Nesting***

Geerlings, Clyde H. "The Recluse of Deremo Bayou" *Grand Rapids Press* (20 August 1950): 1, Feature Section.

Leopold, Aldo. *A Sand County Almanac*: Oxford University Press, 1953.

Leopold, Aldo. *Tribute to a Feathered Tempest*

[http://www.americanheritage.com/articles/magazine/ah/1981/1/1981\\_1\\_30.shtml](http://www.americanheritage.com/articles/magazine/ah/1981/1/1981_1_30.shtml)

American Heritage Magazine December 1981, Vol. 33, Issue 1

## ***American Gothic, Washington, D.C.***

Gordon Parks

The Library of Congress: American Memory

America from the Great Depression to World War : Black-and-White

Photographs from the FSA-OWI, 1935-1945

<http://memory.loc.gov/ammem/fsahtml/fachap07.html>

## **Surveying American Art: Social Studies through the Eyes of Artists**

### **Evaluation Form**

Please complete and return this evaluation via fax, mail, or when you arrive for your tour. Your feedback is greatly appreciated and will be used to guide the development of future teacher packets and educational resources.

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Grade Level and Subjects Taught:

Which parts of this teacher packet did you find to be most useful?

What information would have made this teacher packet more useful to you?

Additional comments:

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or  
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