

MEDICAL SCIENCE ON CANVAS: *THE GROSS CLINIC*

In addition to studying drawing at the Pennsylvania Academy of the Fine Arts, Thomas Eakins enrolled in anatomy classes and observed dissections and operations at Jefferson Medical School. He was fascinated by the particulars of the surgical process and sought to create detailed visual records of actual operations in a number of paintings and sketches. Though it was a technical tour de force, *The Gross Clinic* was shocking to the majority of the public at the end of the nineteenth century. Today, we recognize that a painting like this can be an important tool in the study of the history of medicine in this country.



8 feet x 6 feet 6 inches (243.8 x 198.1 cm)
Gift of the Alumni Association to Jefferson Medical College in 1878 and purchased by the Pennsylvania Academy of the Fine Arts and the Philadelphia Museum of Art in 2007 with the generous support of more than 3,600 donors, 2007
2007-1-1

Curricular Areas

Science, History

Grade Level

For grades 9–12 (Science)

PA Academic Standards

SCIENCE

- 3.2: Inquiry and Design – 1.A
- 3.8: Science, Technology, and Human Endeavors-1.A, 2.B., 3.C.

ART

- 9.2: Historical and Cultural Contexts – 1.A., 3.C., 4.H.

Art Images Required

Click on the title below to view high-resolution photographs on the Philadelphia Museum of Art website. Images that are available in the ARTstor Digital Library are indicated by an ID number or search phrase. Entering that number or phrase into the ARTstor search bar will direct you to the corresponding image in that database.

- [Portrait of Dr. Samuel D. Gross \(*The Gross Clinic*\), 1875,](#)
by Thomas Eakins
ARTstor search: gross clinic painting
COMPARE this image with a photograph of a modern-day surgery

Lesson Process

1. Compare two images of surgery side by side. Specific questions may depend on the modern photograph chosen for the comparison.

PHILADELPHIA MUSEUM OF ART

- What is similar about the images?: They both depict operations, but can you tell what part of the body is being operated on? *The Gross Clinic* shows an operation on a young boy suffering from osteomyelitis, a bone infection in his left thigh.
 - What is different?: Using ARTstor's Offline Image Viewer, download *The Gross Clinic* and zoom in on the image. Have students notice different parts of the painting. Responses might include:
 - The doctors in *The Gross Clinic* are wearing street clothes
 - The doctors in the modern-day surgery are wearing gloves and face masks
 - In the modern-day scene, every part of the patient's body is covered, except for the part that is being operated upon
 - There is a cloth being held over the patient's face
 - The operating room in *The Gross Clinic* is not very bright
2. Break up the class into groups and assign each group one of the questions listed below. Have students report on their findings. As an alternative, have each student choose one of the four topics and write a report.
- The doctors in the modern scene of surgery have their faces and hands covered and are not wearing street clothes. When did doctors stop wearing suits during operations and why? What discovery led to this change?
 - Why does the patient in *The Gross Clinic*, painted in 1875, have a cloth held over his face?
 - Why doesn't today's patient have a cloth over his face?
 - What is the source of light for the operation portrayed in *The Gross Clinic*? Compare the lighting in *The Gross Clinic* with the lighting of the modern-day scene of surgery—why is it so different?

Assessment

1. What are the differences between operations performed in 1875 and those performed today? (Oral or written)
2. Student reports (Part 2 above)

Enrichment

1. Thomas Eakins submitted this painting for display in the Centennial Exhibition, held in Philadelphia in 1876. It was rejected by the committee of selection for the Centennial's art exhibition and was eventually shown at the United States Army Post Hospital, a model hospital that was part of the U.S. Government's display at the fair. Keeping this history of the painting in mind, break up students into two groups. Ask one group to argue for including the painting as part of an art exhibition and ask the other group to argue for its inclusion as part of a model hospital.
2. Ask students to look at a photograph of modern-day surgery through Thomas Eakins's eyes. If he were to create a painting based on the modern image, would he change anything about it? What part of the scene do you think he might find particularly fascinating? What medical advances do you think he would be most interested in highlighting?

ADDITIONAL RESOURCES

- Adams, Thomas. *Eakins Revealed: The Secret Life of an American Artist*. New York: Oxford University Press, 2005.

For more information, please contact Division of Education and Public Programs: School and Teacher Programs by phone at 215-684-7580, by fax at 215-236-4063, or by e-mail at educate@philamuseum.org.

PHILADELPHIA MUSEUM OF ART

- Carter, Alice A. *Essential Thomas Eakins*. New York: Harry N Abrams, Inc., 2001.
- Johns, Elizabeth. *Thomas Eakins: The Heroism of Modern Life*. Princeton: Princeton University Press, 1983.
- *Thomas Eakins: Scenes from Modern Life*. DVD, 2002. 60 minutes.
- <http://www.pbs.org/eakins>—companion website to *Thomas Eakins: Scenes from Modern Life*.