

Thinking Tools for Innovators: Part 7— Physical Movement and Understanding

Recent research has shown that we can build innovative thinkers by reinforcing a set of thinking tools, including such skills as observing, abstracting, pattern recognition, modeling, and transforming (among others). As these skills can all be taught, it makes sense that we can help students become the creative thinkers that we will need in the twenty-first century. This lesson plan is the seventh in a series that is focused on using art to enrich instruction in these critical skills. The research on which this information is based can be found in many sources, perhaps best summarized in the book *Sparks of Genius: The Thirteen Thinking Tools of the World's Most Creative People* by Robert and Michele Root-Bernstein.

Curricular Areas

English Language Arts, Visual Arts – Aesthetic Response

Grade Level

For grades 7–9, adaptable for both younger and older classes

Common Core Academic Standards

- [CCSS.ELA-Literacy.RI.7.1](#)
- [CCSS.ELA-Literacy.W.7.3](#)
- [CCSS.ELA-Literacy.RI.6.7](#)
- [CCSS.ELA-Speaking and Listening.CCRA.SL.4](#)

Art Images Required

Click on the titles below to view high-resolution photographs on the Philadelphia Museum of Art website. Images that are also available in the Artstor Digital Library are indicated by an ID number or search phrase.

- [Breaking Home Ties](#), 1890, by Thomas Hovenden
Artstor search: 1942-60-1
- [The Pair-Oared Shell](#), 1872, by Thomas Eakins
Artstor search: 1929-184-35
- [At the Moulin Rouge: The Dance](#), 1890, by Henri de Toulouse-Lautrec
Artstor search: 1986-26-32
- [Shipwreck](#), 1858, by Edward Moran
Artstor search: 1894-276



Shipwreck

Edward Moran, American (born England)

1858

Oil on canvas

Gift of E. H. Butler, 1894

1894-276

- *Tapestry showing the Triumph of Constantine over Maxentius at the Battle of the Milvian Bridge*, 1623–25, designed by Peter Paul Rubens and woven at the Comans-La Planche tapestry factory, Paris
Artstor search: 1959-78-3
- *Spring Sea*, 1978, by Edna Andrade
Artstor search: not available; search among abstract art pieces—go to the advanced search, type “abstract art” in the top line, and enter “from 1950 to 2000” in the date range function

Background

The relation between physical movement and understanding is not new. As part of his 1959 research into the nature of creativity, Eliot Dole Hutchinson emphasized the connection between creative thinking and body movement—paving the way for a contemporary understanding of kinesthetic thinking (thinking in terms of movement). He noted that, “[b]y no means all insights express themselves in verbal form. To the pianist and sculptor, the instrumentalist, dancer, surgeon, and manual artisan, they [ideas] burst upon awareness in a kinesthetic form.” In other words, to think is to feel and move, and to feel and move is to think. (It is not uncommon to see students in a science classroom line up in “molecular formations” to see how sound waves are affected by density.) In this lesson, students will respond to works of art with physical movement.

Lesson Process

1. Project or otherwise offer for observation the painting *Breaking Home Ties*. Although the figures in this painting seem “frozen,” both physically and emotionally, there is much that is implied. After observing and noting the details of the painting break the class into small groups (3 or 4 students) and have them discuss what they think might be happening in the scene. After the small groups have come to some resolution, discuss these ideas as a class. How are the different story ideas supported by details from the painting?
2. Ask for several volunteers from the class come to the front and assume the positions of the characters in Hovenden’s painting. Have them hold their poses quietly for perhaps 30 seconds as they attempt to place themselves in the role of their character. Then, have each briefly tell his or her perception of what is happening and how he/she feels at that moment. Have students speak in the first person. After the activity, discuss how the physical pose altered or heightened the student’s (or the class’s) perception of the painting.
3. Take a moment to observe the painting, *The Pair-Oared Shell*. Arrange two chairs in the front of the class and select two students to pose, as in the first exercise. Once in position, have them move as they think their character should be moving. Is the rowing fast or slow? Is it rhythmical or erratic? Do they row together or independently? Discuss what details in the painting helped them decide how to row. Note for the class the critical thinking skills involved: Seeking details, forming a hypothesis from those details, and acting on the hypothesis to see if it seems “correct.”
4. Once the class has the idea of movement in works that specifically show people in positions of actual or implied action, the next step is to analyze and verbalize the movements observed. Take a minute to look at the painting *At the Moulin Rouge: The Dance*. Break the class into small groups of 2 or 3 students, and assign the following task:
 - o Each student in the small group should select one of the people in the painting, then study that person’s position and imitate the pose. (Comment within the group to refine the poses of the others.)

- o Discuss within the group what the position of the selected person might reveal about his or her mood, personality, social status, etc.
 - o One by one, have each student hold his/her pose. The other student(s) write a few sentences to describe the pose in detail (include hand and feet positions, tilt of head, etc.) Then have the student who is posing describe him/herself briefly. Add this response to the descriptive sentences. Have each member of the group do this.
 - o As a class, ask for a few volunteers to read their responses. Follow with a general discussion of how posing helped reveal the person and to understand or interpret the painting.
5. At this point, the class should be ready to move according to non-human aspects of a painting. Take a minute to observe *Shipwreck*. Note the details in the painting, and discuss how those details add to the over-all sense (intellectual, physical or emotional) of the painting. From their seats, have students use their hands to imitate the movements of the boat or the water in the painting. Select a few students to show how their hand movements connected to a detailed area of the painting. How does this activity enhance their understanding of the painting?

Assessment

1. Project or otherwise display *Tapestry showing the Triumph of Constantine over Maxentius at the Battle of the Milvian Bridge*. Have students write a few paragraphs giving an overview of the many movements in the tapestry. Then, focus on one area and describe how the artist uses that movement to add to the intensity or interpretation of the whole work.
2. Select one of the paintings discussed in the lesson and describe how the movements indicated would be different if the painting described a scene from one hour earlier or one hour later, and how the change in time would alter the interpretation of the painting.

Enrichment

1. Project the artwork *Spring Sea*. Have students use their arms and hands to show the movements depicted on this screen. Discuss: How does understanding and imitating movement change how you understand this particular work and abstract art in general?