

ARTS IMPACT LESSON PLAN

Visual Arts and Math Infused Lesson

Line Compositions and Comparisons

Authors: Becca Willard and Brandi Stratton with Natalie Ramsey Grade Level: Pre-kindergarten

Enduring Understanding

Comparisons can be expressed through and identified in works of art.

Lesson Description (Use for family communication and displaying student art)

Students create a line composition and make comparisons between different qualities of lines in compositions while learning vocabulary related to visual arts and math.

Learning Targets and Assessment Criteria

Target: Thinks critically to recognize and compare lines in works of art and uses math vocabulary to describe the lines.

Criteria: Identifies and names longer, shorter, thick, and thin lines. Compares lines used in different artworks.

Target: Makes make a variety of qualities of lines.

Criteria: Uses controlled continuous movements to paint long, short, thin, and thick lines.

Target: Uses a third object to compare the length and width of lines.

Criteria: Accurately identifies a long or short line using their hands and a thick or thin line using the width of their fingers to measure.

Vocabulary

Arts Infused:
Compare
Long/Longer
Measure
Short/Shorter

Arts:
Curvy
Straight
Thick
Thin

Materials

Museum Artworks or Performance

Seattle, WA

Seattle Art Museum

Tacoma, WA

Tacoma Art Museum

Materials

18x24 inch paper; Tempera paint; Flat paintbrushes and round brushes; Scratch paper; Class Assessment Worksheet

Seattle Art Museum images:
White Night, 1942, Mark Tobey, 62.78



continued

Learning Standards

WA Arts State Grade Level Expectations

For the full description of each WA State Arts Grade Level Expectation, see:

<http://www.k12.wa.us/Arts/Standards>

- 1.1.1 Elements: Line
- 2.1.1 Creative Process
- 2.2.1 Presenting Process
- 2.3.1 Responding Process
- 4.2.1 Connection between Visual Arts and Math

Early Learning Guidelines

For a full description of Washington State Early Learning and Child Development Guidelines see:

<http://www.del.wa.gov/development/guidelines/>

- (Age 3 to 4) 6. Learning about my world: Math: Compare size by sight, feel, and comparing to hands, feet, etc. (Visual and tactile math); use gestures or words to make comparisons (larger, smaller, shorter, taller)
- (Age 4 to 5) 6. Learning about my world: Arts: show an increasing ability to use art materials safely and with purpose; take pride in showing others own creations.

continued

Anooralya (Wild Yam Dreaming), 1995,
Emily Kame Kngwarreye, 2000.157



Tacoma Art Museum images:
Grasses, 1997-2001, Merrill Wagner



Omphalos, 2002, Marie Watt, 2004.28



Common Core State Standards (CCSS) in Math

<http://www.k12.wa.us/CoreStandards/Mathematics/default.aspx>

In preparation for common core kindergarten expectations: measurement and data, geometry.
K.MD.1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
1.MD.1: Order three objects by length; compare the length of two objects indirectly using a third object.

CCSS Mathematical Practices

4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.

ICON KEY:

 = Indicates note or reminder for teacher

 = Embedded assessment points in the lesson

Pre-Teach

Introduce using art materials safely.

Lesson Steps Outline

Day One

1. Introduce math and art vocabulary and find examples from around the room of long, short, thick, and thin lines.

2. Ask students to use the 21st Century Skill of Critical Thinking to analyze lines in works of art. Ask the children to show the lines they can see in the works of art. Encourage children to identify the differences in the lines used in each, such as thick and thin.

 Criteria-based teacher checklist: Identifies and names longer, shorter, thick, and thin lines. Compares lines used in different artworks.

3. Demonstrate the use of paintbrushes and guide practice using the paintbrushes effectively on scratch paper.

 Criteria-based process assessment: Makes a thick line, a thin line, a long line, and a short line.

Day Two

1. Review vocabulary and techniques from Day One.

Criteria-based process assessment: Reviews art and math vocabulary and effective paintbrush technique.

2. Talk about and demonstrate filling the paper with lines and determining the length of lines using hands as well as the width of lines using fingers to measure.

3. Guide students in using hand over hand technique to measure length and width of lines.

Criteria-based teacher checklist: Accurately identifies a long or short line using their hands and a thick or thin line using the width of their fingers to measure.

4. Guide children to create a composition with lines that are longer, shorter, thick, and thin.

Criteria-based teacher checklist: Uses controlled continuous movements to paint long, short, thin, and thick lines.

5. Lead a gallery walk reflection.

Criteria-based reflection: Describes lines seen in student artwork using art and math vocabulary.

LESSON STEPS

Day One

1. Introduce math and art vocabulary and find examples from around the room of long, short, thick, and thin lines.

- *We will be using art and math words today to talk about lines. The lines will be long or short and thick or thin.*
- *Show me where you see long lines in the room.*

☐ Continue finding short, thick, and thin lines.

2. Ask students to use the 21st Century Skill of Critical Thinking to analyze lines in works of art. Ask the children to show the lines they can see in the works of art. Encourage children to identify the differences in the lines used in each, such as thick and thin.

☐ Introduce *Omphalos* and *Wild Yam Dreaming*, and then *Grasses* and *White Night*.

- *We are going to use Critical Thinking! Will you repeat those words with me? CRI-TI-CAL THINK-ING. Let's tap the words into our shoulders while we say them again. CRI-TI-CAL THINK-ING. Now let's tap while crisscrossing. Tap your right ear with your left hand and tap your left ear with your right hand. CRI-TI-CAL THINK-ING.*
- *We'll use Critical Thinking to identify and name the lines we see and to compare the lines in different artworks.*
- *When we look at two or more different things like books or paintings and notice the things that are the same and different, we call it comparing. We can compare these two paintings: *Omphalos* and *Wild Yam Dreaming*.*
- *Identify the lines in the paintings. Are they short or long, thick or thin? What lines are longer? What lines are shorter?*
- *Let's compare the lines in the two paintings. How are they different? How are they the same?*
- *Let's look at two more artworks: *Grasses* and *White Night*. What do you notice is the same? Different? We can use the words we just learned to describe the lines in each of them.*

☑ Criteria-based teacher checklist: Identifies and names longer, shorter, thick, and thin lines. Compares lines used in different artworks.

3. Demonstrate the use of paintbrushes and guide practice using the paintbrushes effectively on scratch paper.

- *Notice I am using one color of paint at a time. I am making a continuous line that has paint from top to bottom. I am holding my brush effectively and using only the tip of the bristles to paint.*
- *Practice making a thick line.*
- *Make a thin line.*
- *Make a long line.*
- *Make a short line.*

☑ Criteria-based process assessment: Makes a thick line, a thin line, a long line, and a short line.

Day Two

1. Review vocabulary and techniques from Day One.

- *What are the art and math words we use to describe types of lines?*
- *What did we learn about how to use our paintbrushes effectively?*

Criteria-based process assessment: Reviews art and math vocabulary and effective paintbrush technique.

2. Talk about and demonstrate filling the paper with lines and determining the length of lines using hands as well as the width of lines using fingers to measure.

- *Watch how I fill my paper with lines.*
 - *We can use a third object to help us compare our lines. Can someone volunteer to lend me your hand?*
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3. Guide students in using hand over hand technique to measure length and width of lines.

- *We can also use our hands and fingers to help us compare the length and the thickness or width of our lines.*
- *A line might be as thick as my thumb or as thin as my pinkie finger.*
- *Use hands or fingers to measure and identify your lines as shorter, longer, thicker, thinner.*

Criteria-based teacher checklist: Accurately identifies a long or short line using their hands and a thick or thin line using the width of their fingers to measure.

4. Guide children to create a composition with lines that are longer, shorter, thick, and thin.

- *Create a composition with lines. Use long and short, thick and thin lines.*
- *You will use paint and paintbrushes. So remember to use one color of paint at a time.*
- *Make a continuous line that has paint from top to bottom.*
- *Hold your brush effectively and use only the tip of the bristles to paint.*

Criteria-based teacher checklist: Uses controlled continuous movements to paint long, short, thin, and thick lines.

5. Lead a gallery walk reflection.

- *Take a gallery walk around and look at the other artists' paintings.*
- *What lines do you see? What art and math words can you use to describe the lines you see?*

Criteria-based reflection: Describes lines seen in student artwork using art and math vocabulary.

ARTS IMPACT LESSON PLAN Visual Arts and Math Infused Lesson

Pre-kindergarten: *Line Compositions and Comparisons*

CLASS ASSESSMENT WORKSHEET

| Disciplines | VISUAL ARTS/MATH | | VISUAL ARTS | MATH | Total 4 |
|--------------|--|--|---|--|------------|
| Concept | Line | | Line | Measurement | |
| Criteria | Identifies and names longer, shorter, thick, and thin lines. | Compares lines used in different artworks. | Uses controlled continuous movements to paint long, short, thin, thick, or lines. | Accurately identifies a long or short line using their hands and a thick or thin line using the width of their fingers to measure. | |
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| Total | | | | | |
| Percentage | | | | | |

What was effective in the lesson? Why?

What do I want to consider for the next time I teach this lesson?

What were the strongest connections between visual arts and math?

Teacher: _____

Date: _____

ARTS AND MATH INFUSED LESSON: *Line Compositions and Comparisons*

Dear Family:

Today your child participated in an **Arts and Math** lesson.

- We compared the length and width of lines by measuring them with our hands or fingers.
- We learned math words such as longer, shorter, thick, and thin.
- We created a work of art using different qualities of lines.

At home, you could discuss the different types of lines you see around your home such as straight lines around a door, or curvy lines around a light fixture. You can compare length of lines with hands and widths of lines with fingers.

Enduring Understanding

Comparisons can be expressed through and identified in works of art.