

ARTS IMPACT LESSON PLAN

Dance and Science Infused Lesson

Dancing Water: Light and Strong

Author: Gary Reed

Grade: Pre-kindergarten

Enduring Understanding

By moving ones body with varying amounts of effort, one can show how water can flow with strong and light energy.

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

In this science and dance lesson, students explore dance concepts of light and strong energy in self-space with free flow and the science concept that that water can change the shape of the land. They will explore how to move their bodies with free flow and how to use different amounts of energy to simulate water flowing with different amounts of energy. They will develop a vocabulary of movement that they will share with another student by mirroring.

Learning Targets and Assessment Criteria

Target: Uses free flow movement to show water movement.

Criteria: Moves body smoothly and fluidly, flowing like water.

Target: Uses light and strong energy to show water movement.

Criteria: Moves body with very little energy and a lot of energy, moving like water.

Target: Leads and follows fellow student in water movement mirroring activity.

Criteria: Initiates and copies movements that show water flow.

Target: Demonstrates creative thinking based on observation.

Criteria: Makes artistic choices to show ideas.

Vocabulary

Arts Infused:

Energy
Flow
Movement

Science/Engineering:

Water

Arts:

Free Flow
Light & Strong Energy
Self-space

Materials

Museum Artworks or Performance

Seattle, WA

Pacific Northwest Ballet
UW World Series of Dance

Tacoma, WA

Broadway Center for the Performing Arts

Materials

Music player; Computer with internet connection and projector; Class Assessment Worksheet

Music

Music for Creative Dance, Volumes II and III by Eric Chappelle (available at CD Baby, or iTunes)

Video

Lil' Buck dancing "The Swan" at Vail
<https://www.youtube.com/watch?v=JZumqHLSW10>

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>

WA Arts State Grade Level Expectations:

- 1.1.1 Elements: Space
- 1.1.3 Elements: Energy, Flow
- 1.2.1 Skills and Techniques: Non-locomotor Movements
- 1.4.1 Audience Skills
- 2.1.1 Creative Process
- 2.2.1 Performance Process
- 2.3.1 Responding Process
- 4.2.1 Connection between Dance and Science

National Core Arts Standards

<http://nationalartsstandards.org>

- 1. Generate and conceptualize artistic ideas and work.
- 2. Organize and develop artistic ideas and work.
- 3. Refine and complete artistic work.

continued

4. Select, analyze, and interpret artistic work or presentation.
5. Develop and refine artistic techniques and work for presentation.
6. Convey meaning through the presentation of artistic work.
7. Perceive and analyze artistic work.
8. Interpret intent and meaning in artistic work.
9. Apply criteria to evaluate artistic work.
10. Synthesize and relate knowledge and personal experiences to make art.

Early Learning Guidelines (Pre-K – Grade 3)

For a full description of Washington State Early Learning and Child Development Guidelines see: <http://www.del.wa.gov/development/guidelines/> (Age 4-5) 6. Learning about my world: Science: Ask questions and identify ways to find answers; try out these activities and think about what to do next to learn more. Seek to understand cause and effect. Investigate the properties of things. Arts: Show creativity and imagination. Express self through art and music. Watch other children dance; try to mimic the movements.

Next Generation Science Standards

<http://www.nextgenscience.org/next-generation-science-standards>

Topic:

Earth Materials and System

Disciplinary Core Ideas:

ESS2.A: Earth's Systems: Processes that Shape the Earth (Wind and water change the shape of the land.)

Science Kit Addressed:

PreK: Exploring Water

Performance Expectations:

2-ESS2-1. Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.

4-ESS2-1. Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.

Crosscutting Concepts:

Scale, Proportion, and Quantity
Cause and Effect

Science and Engineering Practices:

1. Asking Questions and Defining Problems.
6. Constructing Explanations and Defining Solutions

ICON KEY:

 = Indicates note or reminder for teacher

 = Embedded assessment points in the lesson

Pre-Teach

Introduce movement safety and how to move in self-space. Do the BrainDance. Discuss different ways that water can move.

Lesson Steps Outline

Day One

1. Introduce the dance concepts of flow and energy and the science concept of water changing land.

2. Prepare students for dancing by creating agreements for appropriate dance behavior. Chart student responses.

3. Lead students in *Energy BrainDance* warm-up.

Music: "Potpourri #3" from *Music for Creative Dance, Volume III* by Eric Chappelle

 Criteria-based process assessment: Performs the BrainDance while using different energy.

4. Lead exploration of the dance concepts of self-space, free flow, and light and strong energy.

 Criteria-based process assessment: Moves in self-space with free flow using light and strong energy.

5. Analyze video of dancer using flow.

 Criteria-based process assessment: Identifies and demonstrates flow.

6. Guide exploration of free flow while thinking of water and using light energy and strong energy.

Music: "Whales" from *Music for Creative Dance, Volume II* by Eric Chappelle or other music of your choice with a smooth, flowing sound.

 Criteria-based teacher checklist: Moves body smoothly and fluidly, flowing like water. Moves body with very little energy and a lot of energy, moving like water. Makes artistic choices to show ideas.

7. Guide group performance and response. Review performer and audience expectations.

Criteria-based teacher checklist, peer assessment: Moves body smoothly and fluidly, flowing like water. Moves body with very little energy and a lot of energy, moving like water. Makes artistic choices to show ideas.

Day 2

1. Review concepts of free flow, light and strong energy, and self-space. Discuss different ways water can move or flow. Review safe dance behavior.

Criteria-based process assessment: Moves in self-space and uses flow with light and strong movements to show water.

2. Lead students in *Energy BrainDance* warm-up.

Music: "Potpourri #3" from *Music for Creative Dance, Volume III* by Eric Chappelle

Criteria-based process assessment: Performs the BrainDance while using different energy.

3. Lead students in review of movement exploration using free flow and light and strong energy.

Music: "Whales" from *Music for Creative Dance, Volume II* by Eric Chappelle or other music of your choice with a smooth flowing sound.

Criteria-based teacher checklist: Moves body smoothly and fluidly, flowing like water. Moves body with very little energy and a lot of energy, moving like water.

4. Model Mirroring with teacher as leader and whole class following.

Criteria-based process assessment: Moves body smoothly and fluidly, flowing like water. Moves body with very little energy and a lot of energy, moving like water. Copies movements of teacher.

5. Model mirroring with a partner.

6. Assign partners and guide mirroring with a partner.

(Optional, depending on age and abilities of dancers): Guide group performance and response. Review performer and audience expectations.

Music: "Whales" from *Music for Creative Dance, Volume II* by Eric Chappelle or other music of your choice with a smooth flowing sound.

Criteria-based teacher checklist, peer assessment: Moves body smoothly and fluidly, flowing like water. Moves body with very little energy and a lot of energy, moving like water. Initiates and copies movements that show water flow. Makes artistic choices to show ideas.

7. Guide partner pair share reflection.

Criteria-based reflection: Discusses using strong and light energy to show water movement.

LESSON STEPS

Day One

1. Introduce the dance concept of Flow and Energy and the science concept of water changing land.

- *Dancers, we are going to dance water using the concept of flow with light and strong energy.*
 - *What do you know about water and how it moves? Turn and talk about your ideas, and we will share them. What words do you know that describe how water can move? Drip, drop, dribble, trickle, shower, downpour, flood, rushing river, rolling waves, bubbling brook. Others?*
 - *Water can move dirt and rocks. If water has very little energy, can it move very much dirt or rocks? If water has a lot of strong energy, can it move very much dirt or rocks?*
 - *Today we will explore how we can show with our bodies some of the different ways water can move. Sometimes water can move gently with very little energy and sometimes it can move strongly with lots of energy. Can you think of examples of both?*
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2. Prepare students for dancing by creating agreements for appropriate dance behavior. Chart student responses.

▣ Make a chart that can be easily referenced for future dancing lessons.

- *How can you be creative and safe at the same time?*
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3. Lead students in **Energy BrainDance warm-up.** (BrainDance originally developed by Anne Green Gilbert, www.creativedance.org, reference: *Brain-Compatible Dance Education*, video: *BrainDance, Variations for Infants through Seniors.*)

Music: "Potpourri #3" from *Music for Creative Dance, Volume III* by Eric Chappelle

- *Let's warm-up our brains and bodies with the BrainDance! Notice how we move with very little energy and a lot of energy in this BrainDance.*

Breath (Do this before starting the music.)

- *Dancers, breathe deeply with slow even breaths, in through the nose and out through the mouth. Repeat several times. Dancers need lots of oxygen for our muscles to move and for our brains to think.*

Tactile

- *Tap gently with your fingertips on the top of your head like little raindrops falling. How softly can you tap on your face, lips, and eyelids? Continue lightly tapping all down your body from head to feet.*
- *Brush the surface of your body from your head to your toes with stronger energy as if brushing water off your body.*

Core-Distal

- *Grow into a big shape with gentle, soft, light energy. Shrink into a small shape with the same gentle, soft, light energy. Repeat.*
- *Grow into a big shape with lots of strong energy. Shrink into a small shape with lots of effort and strong energy. Repeat.*

Head-Tail

- *Curl your spine forwards and backwards and from side to side using smooth, continuous, flowing movements. Feel like seaweed moving in the ocean current without stopping. Repeat.*

Upper Half

- *While the lower half of your body is frozen, dance your upper body smoothly with soft and gentle, light energy. Try to move without any bumps or stop/starts.*

Lower Half

- *While the upper half of your body is frozen, dance your lower body smoothly with lots of heavy, strong energy. Again, try to move without any bumps or stop/starts.*

Body-Half

- *With one side of your body frozen, dance the other side smoothly with soft, gentle, light energy. Try to move without any bumps or stop/starts. Think of being continuous.*
- *With the other side of your body frozen, dance smoothly with lots of heavy, strong energy. Again, try to move without any bumps or stop/starts.*

Cross-Lateral

- *Make an "X" with your arms and put your hands on your opposite knees. Pull the hand underneath out and put it back on the opposite knee over the top of the other arm. Repeat with the other hand. Pull it out from underneath and put it back on the opposite knee. Continue crossing over for several repetitions. Then repeat crossing over with hands on opposite hips, opposite shoulders, and opposite elbows.*

Eye-Tracking:

- *Focus on your right thumb. Watch it as you move it gently from side to side and up and down.*
- *Repeat with your left thumb. Watch it as you move it gently from side to side and up and down.*

Vestibular

- *Turn, and then freeze in a shape using light energy to hold still. Turn the other way, then freeze in a shape using strong energy to hold still.*
- *Repeat turns, and freeze in a shape using light energy to hold still. Turn the other way, freeze in a shape using strong energy to hold still.*

Breath:

- *Dancers, stand tall and relaxed. Breath quietly and calmly, inhaling and exhaling several times.*

Criteria-based process assessment: Performs the BrainDance while using different energy.

4. Lead exploration of the dance concepts of self-space, free flow, and light and strong energy.

- *Before we begin to create our dances, let's look at the dance concepts that we will use in our dances.*
- *When you dance and stay in one spot, dancers call that self-space. Keep your personal space bubble all around yourself as you try moving in one place.*

- *Try moving your arms with smooth continuous motions. This is called flow when the stream of movement does not stop. Can you keep your arms and hands moving continuously without any bumps or stop/starts? Remember to stay in your self-space.*
- *Try moving your hands and arms very softly with very little effort. Dancers call this light energy.*
- *Now put more effort and power into your muscles as you move. Dancers call this strong energy.*

Criteria-based process assessment: Moves in self-space with free flow using light and strong energy.

5. Analyze video of dancers using flow.

Show the video of Lil' Buck doing "The Swan" at Vail
<https://www.youtube.com/watch?v=JZumgHLSW10>

You could also choose to find your own videos that represent a variety of styles and cultures. Look for video that shows free flow.

- *Notice how the dancer moves smoothly and continuously, like water. This is free flow.*
- *Notice how sometimes he uses only one body part and sometimes he uses his whole body.*
- *Notice how the dancer sometimes danced in just one place using his self-space.*
- *Can you move your hand and arm smoothly and continuously?*

Criteria-based process assessment: Identifies and demonstrates flow.

6. Guide exploration of free flow while thinking of water and using light energy and strong energy.

Music: "Whales" from *Music for Creative Dance, Volume II* by Eric Chappelle or other music of your choice with a smooth, flowing sound.

- *First, find your own self-space. Try moving your arms and your whole body smoothly and continuously as you listen to the music. You are using free flow.*
- *Imagine very small amounts of water moving in a trickle or small stream, like drops running down a window or windshield. Use very little energy to show this. Think about how you could move small bits of dirt or sand with these movements.*
- *Now imagine large amounts of water moving like heavy currents under the ocean or deep rivers. Use more effort in your muscles to show strong energy. Think about how you could move larger amounts dirt or even rocks with these movements.*
- *What other ways can water flow and how can you show it with your body?*
- *You are using a 21st Century Skill! You are using creative thinking when you make artistic choices about how you will use your movement to show water flow.*

Criteria-based teacher checklist: Moves body smoothly and fluidly, flowing like water. Moves body with very little energy and a lot of energy, moving like water. Makes artistic choices to show ideas.

7. Guide group performance and response. Review performer and audience expectations.

- *Let's make a dance with our water ideas. We will begin in a frozen shape, then we will begin dancing with light energy to show water flowing in a small stream. We will then use more energy with our smooth movements to show water moving in a deep river. We will return to using light energy and free flow to show water in a small stream and end in another frozen shape.*
- *Now lets share our ideas with each other, with half the class showing their ideas while the other half of the class is an audience.*
- *What do the performers want from their audience? What does the audience want from the performers?*

▣ You may want to chart these responses for use in future dance lessons.

- *Divide the class in half with one half seated to watch and half ready to dance. Dancers will start in a frozen shape to show you are ready to begin, and finish with a frozen shape to show the end of your dance. I will tell you when to start, when to change energies and when to freeze.*
- *Audience, I'll ask you to describe a movement that you observed that showed free flow movement. You may tell me about it or you may stand and show me when I call on you.*
- *Did you see the dancers use light energy and strong energy? How did you know they were using different energies?*
- *How did their movements show you what they knew about water?*
- *If the students were really water would they be able to move very much dirt or rocks with their movements?*

Criteria-based teacher checklist, peer assessment: Moves body smoothly and fluidly, flowing like water. Moves body with very little energy and a lot of energy, moving like water. Makes artistic choices to show ideas.

Day Two

1. Review concepts of free flow, light and strong energy, and self-space. Discuss different ways water can move or flow. Review safe dance behavior.

- *Lets move our arms and hands with smooth continuous motions to show free flow without any bumps or stop/starts. Try it with very little light energy and also with lots of strong energy.*
- *Who can tell me how we dance with self-space?*
- *Do you remember how we talked about the different ways that water can move? What ways do you remember? Did light movements have the ability to move very much dirt or rocks? Did strong movements have the ability to move very much dirt or rocks?*

Criteria-based process assessment: Moves in self-space and uses flow with light and strong movements. Discusses water movement and how it can change land.

2. Lead students in **Energy BrainDance warm-up.** (BrainDance originally developed by Anne Green Gilbert, www.creativedance.org, reference: *Brain-Compatible Dance Education*, video: *BrainDance, Variations for Infants through Seniors.*)

Music: "Potpourri #3" from *Music for Creative Dance, Volume III* by Eric Chappelle

Criteria-based process assessment: Performs the BrainDance while using different energy.

3. Lead students in review of movement exploration using free flow and light and strong energy.

Music: "Whales" from *Music for Creative Dance, Volume II* by Eric Chappelle or other music of your choice with a smooth flowing sound.

- *Find your own self-space and remember how to move your arms and your whole body smoothly and continuously as you listen to the music.*
- *Imagine very small amounts of water moving with very little energy, and large amounts of water moving with strong energy.*

Criteria-based teacher checklist: Moves body smoothly and fluidly, flowing like water. Moves body with very little energy and a lot of energy, moving like water.

4. Model mirroring with teacher as leader and whole class following.

- *Stay in your own self-space and follow my movements as I move with free flow. Try to copy me at the same time and try to use the same kind of energy that I use in my muscles.*
- *I will move smoothly and continuously like water with light energy. Notice how gentle I am, as you do the same movements I am doing at the same time as me.*
- *I will now move smooth and continuously like water with strong energy. Notice how I am using more effort to move, as you do the same movements I am doing at the same time as me.*

Criteria-based process assessment: Moves body smoothly and fluidly, flowing like water. Moves body with very little energy and a lot of energy, moving like water. Copies movements of teacher.

5. Model mirroring with a partner.

- *I will now ask a student to come to the front and help me show how to mirror with a partner.*

▣ This may be done sitting criss-cross facing each other to help younger dancers stay focused on each other and the concepts of the lesson.

- *We will face each other and I will be the first leader. My partner will copy my movements with the same energy as I lead and he/she follows. We will try to move together as I share my ideas about how water can move with light energy and strong energy. Notice how we share with our bodies and not our voices.*
 - *We will then freeze our bodies in the same shape to end.*
 - *Now we will switch roles and I will follow as my partner leads and shares ideas about how water can move with light and strong energy.*
 - *We will then freeze our bodies in the same shape to end.*
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6. Assign partners and guide mirroring with a partner.

Music: "Whales" from *Music for Creative Dance, Volume II* by Eric Chappelle or other music of your choice with a smooth flowing sound.

- *Now I will pair you with a classmate so you can share your movement ideas about moving like water with light and strong energy. Sit or stand facing your partner so you can see each other clearly. One of you will be the leader and the other will follow, and then you will switch roles.*
- *I will put on the music and the first leader will move with free flow using light energy. Think about how water moves. Now try sharing your ideas about how water moves with strong energy. Freeze your body in a shape your partner can copy to end.*
- *Switch roles and the first leader is now the follower and the first follower is the leader. Again, move your body smoothly and continuously with light energy to show water moving, and then use more effort to show water moving with strong energy. Freeze your body in a shape your partner can copy to end.*
- *Remember you are using the 21st Century Skill of creative thinking. You are making artistic choices about the light and strong movements you choose as the leader to show the water moving.*

(Optional, depending on age and abilities of dancers): Guide group performance and response. Review performer and audience expectations.

- *Let's share our Mirror Water Dance Ideas.*
- *What do the performers want from their audience? What does the audience want from the performers?*
- *Half of the class will perform its dance with their partners, while the other half is the audience. Dancers will start in a frozen shape to show you are ready to begin, and finish with a frozen shape to show the end of your dance.*

- *Audience, I'll ask you to describe a pair of dancers that you observed that showed free flow movement. Did you see the dancers use light energy and strong energy? How did you know they were using different energies? Were they able to stay together and copy each other?*

Criteria-based teacher checklist, peer assessment: Moves body smoothly and fluidly, flowing like water. Moves body with very little energy and a lot of energy, moving like water. Initiates and copies movements that show water flow. Makes artistic choices to show ideas.

7. Guide partner pair share reflection.

- *Sit with your partner and discuss what was hard or challenging about this activity?*
- *Did you prefer to move with light energy or strong energy?*
- *Did your movements feel like water moving? Why?*
- *Do you think you could move dirt or rocks with your movements? Why?*

Criteria-based reflection: Discusses using strong and light energy to show water movement.

ARTS IMPACT LESSON PLAN Arts Infusion

Dancing Water, Light and Strong

CLASS ASSESSMENT WORKSHEET

Disciplines	DANCE/ SCIENCE	DANCE/ SCIENCE	DANCE/ SCIENCE	21ST CENTURY SKILLS	Total 4
Concept	Flow	Energy	Mirroring	Creative Thinking	
Criteria	Moves body smoothly and fluidly, flowing like water.	Moves body with very little energy and a lot of energy, moving like water.	Initiates and copies movements that show water flow.	Makes artistic choices to show ideas.	
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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 dance and science?

Teacher: _____ Date: _____

DANCE AND SCIENCE LESSON: *Dancing Water: Light and Strong*

Dear Family:

Today your child participated in an **Arts and Science** lesson. We talked about how water can move with very little energy and with a lot of energy.

- We learned the dance concepts of self-space, flow, and light and strong energy.
- We discovered how water can flow with different energies.
- We explored ways to use our bodies to show how water flows.
- We used creative thinking by making creative choices based on our observations to show our ideas.
- We danced our ideas with a partner sharing with a Mirroring activity.

At home, you could ask your child to show you how to move with free flow using light and strong energy. You could also try mirroring with your child. Have a discussion of how water flows in and around your house.

Enduring Understanding

Moving ones body with varying amounts of effort,
one can show how water can flow with strong and light energy.