ITQ ARTS AND SCIENCE INTEGRATION GRADE 3 DANCE AND LIFE SCIENCE

The Crayfish Conga Lesson #1

FOSS California, Grade 3, Structures of Life, Investigation 3, Part 1

CONTENT STANDARDS

Dance Grade 3

- **2.8** Create, memorize, and perform original movement sequences with a partner or small group.
- **5.1** Explain relationships between dance elements and other subjects (e.g., spatial pathways maps and grids, geometric shapes body shapes).

Science Grade 3

LS3a Students know plants and animals have structures that serve different functions in growth, survival, and reproduction.

ESSENTIAL QUESTIONS (Questions students might ask about the topic)

- What are the parts of the crayfish and what is their function?
- How can I create a crayfish dance in a small group?
- How does the crayfish conga help me to understand how the different parts of a crayfish move?

OBJECTIVES & STUDENT OUTCOMES (Students will be able to.....)

 memorize and perform dance sequences in a group depicting the structures, behaviors and habitat of the crayfish.

ASSESSMENT (Various strategies to evaluate effectiveness of instruction and student learning)

Feedback for Teacher

- Student performance
- Student response to inquiry
- Science notebook entries

• Feedback for Student

- Teacher Feedback
- o Peer feedback
- Videotape

WORDS TO KNOW

Dance

- **Axial Movement**: Movement that does not travel but uses the available space in any direction around the axis of the body (e.g. bend, twist, reach, stretch, curl, etc.)
- **Dance Sequence**: The order in which a series of connecting movements and shapes occur.
- **Dance Study**: A short work of dance that investigates a specific idea or concept and shows a selection of movement ideas.
- Locomotor Movement: Movement that moves the body through space (travels) from point A to point B (e.g., walk, skip, hop, etc.)

Science

• **Antenna (pl. antennae)**: The thin feelers on the head of an animal such as a crayfish, isopod, or insect. Antennae are used to sense the environment.

- **Crustacean**: A class of mostly aquatic animals with hard, flexible shells, jointed legs, and two pairs of antennae.
- Function: A kind of action, such as the function of a body part.
- **Pincer**: A claw on an animal, such as a crayfish.
- Structure: Any identifiable part of an organism.

MATERIALS

- Computer with access to youtube
- CD Player and music
- Science notebooks (1/student)

RESOURCES

- FOSS California, Grade 3, Structures of Life, Investigation 3
- "Why do Crayfish Dance?" http://www.dearbluelobster.com/2005/07/why-do-crayfish-dance.html
- #1 Dancing blue crayfish http://www.youtube.com/watch?v=GzqVzPwKoJk (pop dance mix 2000)
- #2 Dancing crayfish in pet store http://www.youtube.com/watch?v=i3cFKrlg3XU (retro music)
- #3 Dancing crayfish in aquarium http://www.youtube.com/watch?v=ICgp6JFIFgk (techno music)
- #4 Dancing crayfish http://www.youtube.com/watch?v=ThW8KbKJ-H4&feature=fvsr
- Video: How to Behave on a Conga Line | eHow.com http://www.ehow.com/video_4871845_behaveconga-line.html#ixzz1ncaSoRVB
- Music: "Dance of the Woodland Pixies" by Ray Davies, "Benny Hill" by Retro Tv Theme, Blue (Da Ba Dee) by Eiffel, "Dreamshore 2010 (Cosmic Mix)" by Tiestuno and Cosmico; "Conga" by Gloria Estefan, "Oye Como Va" by Tito Puente or Santana, "Ahora Vengo Yo" by Richie Ray & Bobby Cruz, "Hoy Tenemos" by Sidestepper, "Jump in Line (Shake Shake Senora)" by Harry Belafonte or Kids' Dance Party
- How to Make a Crawfish Costume: http://www.ehow.com/how_12052611_make-crawfishcostume.html

PREPARATION

- Teach FOSS California, Grade 3, Structures of Life, Investigation 3, Part 1
- Review and discuss the **structures** of the crayfish and their function (pg. 119, section 6 in the FOSS Teacher's Handbook).
- One copy per student of notebook sheet no. 7, Crayfish Structures. Have students fill it out.
- Optional reading (can do as a part of literacy): "Why Do Crayfish Dance" (edited version included at the end of this lesson).
- Show the video clips (#1-4) of dancing crayfish. Ask students to closely observe how the parts of the crayfish move and the direction that it moves. Chart observations. This will be used to create original crayfish movement.

WARM UP (Engage students, access prior learning, review, hook or activity to focus the student for learning)

(5 minutes)

Ask:
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- What is a crayfish? How do crayfish move? [Accept student responses.]
 - Say: A crayfish is a crustacean. It is an aquatic animal that has a hard shell, jointed legs, and two pairs of antennae.
 - Say: We are going to create a dance that helps us to understand how the different parts of a crayfish move.
- *Have you ever seen a conga line? What does a conga line look like?* [Accept student answers. Students may say people dance in a long line.]
 - Say: The conga dance was originally a street dance in Cuba and became popular in the United States in the 1930s and 1950s. The dancers form a long, processional line. It has three shuffle steps on the beat, followed by a kick or toe point on the fourth beat.
 - Today we will begin to create our own Crayfish Conga dance. But first we have to learn how to do a basic conga line dance.

MODELING (*Presentation of new material, demonstration of the process, direct instruction*) (15 minutes)

- Demonstrate the **locomotor** steps (without touching):
 - Walk forward stepping three steps: right, left, right, then point the left foot to the side (beats 1-4). Repeat on the left. Walk left, right, left, point the right foot (beats 5-8).
- Do The steps in place:
 - Without being connected, have students perform the steps in personal space (do not travel around the room) as in marching (march, march, march, point).
- Do the steps across the room:
 - Arrange students at one end of the space and have them follow you through general space (walking the steps forward).
- Discuss with students the etiquette of conga dancing. Typically the hands are placed on the waist of the person in front. The goal of the dance is to not pull or tug on the person in front of you but to try to follow the rhythm of the conga line as much as possible.
- Do the steps in conga line formation (no touching)
 - Arrange students into one or two conga lines, each with a responsible leader and do the conga steps in a progressive line around the room. Take about 30 seconds to practice.
- Do the steps in conga line formation (touching)
 - Connect students in the conga line by placing hands on either waist (traditional) or shoulders. The classroom teacher should decide which of the two connections would work best for their class. This will be the connection students will use for their Crayfish Conga Dance.
 - Practice the conga dance steps in connected groups for 30 seconds. Observe the groups closely looking for problems with staying in rhythm.
 - Discuss problems students may have had with staying with the group and make corrections as needed.
 - Rehearse the conga line one more time for 30 seconds.
- Demonstrate and teach the **axial movement**. After the 16-beat traveling conga step, teach 16 beats of leg lifts
 - Step left (beat one) lift right knee to the right side (beat two)
 - Step right (beat three) lift the left knee to the left side (beat four)
 - Repeat the steps for a total of 16 beats
- Repeat the two movements (locomotor and axial) together alone and in a Conga Line

GUIDED PRACTICE (Application of knowledge, problem solving, corrective feedback)

- (20 minutes)
- Review and discuss the parts of the crayfish and its function (refer to pg. 119 in the FOSS Teacher's Handbook. Note: This should be introduced prior to this lesson.
 - Antennae (Located on the head used for smelling and feeling its way around its environment.)
 - Bristles (Located on abdomen and antennae, used for sensing its environment and protection.)
 - **Pincers** (Looks like the arms of the crayfish. They are for catching, holding and tearing food, and defending itself.)
 - Tail joints (Bending, thrusting, and protecting undertail)
 - Tail flaps (Moving backward, protecting undertail). The whole tail of the crayfish is used for swimming.
 - Walking legs (Mobility, grooming, feeding, holding)
 - Leg joints (Walking, feeding, reaching in all directions, bending)
- Discuss the dancing crayfish video clips. Show one or two of them again if necessary.
- Setting up the Crayfish Conga Dance:
 - Arrange students in groups of four. Say:
 - > If you are in the front of the line you will use your arms as the **pincers**.
 - > If you are in the middle, wiggle your **bristles**.
 - If you are at the back of the line, you will use your backside and hips as the tail, tail flaps, and joints. It will be you who determine which direction the group will move, either forward, backward, or sideways, turning left or right. The turns can happen while moving backward or forward.

- In groups of four, have students practice the conga dance for 60 seconds or 10 groups of eight beats if counting. Prompt students to move forward, backward, sideways, and turning left and right, etc.
 - Say: Move forward. Move forward and turn left. Move backward and turn right, move sideways to the right, etc.
 - Ask: How could you show your crayfish swimming? Remember the tail is the structure that makes the crayfish swim.
- Say: The person who is the tail will tell his group what direction to move by saying "forward", "backward", "turn left", or "turn right".
- Allow the groups to practice independently for five minutes.
- Play one of the conga musical pieces and have groups move to a conga beat.

DEBRIEF & REFLECT (Identify problems encountered, ask and answer questions, discuss solutions and learning that took place. Did students meet outcomes?)

(5 minutes)

- Complete notebook sheet no. 7, *Crayfish Structures* and place in science notebook.
- Optional: Pass out the Crayfish Choreography handout. Allow students time during the week to discuss with their group how they will choreograph their conga dance. Follow the instructions on the handout.
- Answer the following questions in science notebooks:
 - How did the crayfish conga help me to understand how the different parts of a crayfish move differently?

EXTENSION (Expectations created by the teacher that encourage students to participate in further research, make connections, and apply understanding and skills previously learned to personal experiences.)

- Option: Allow students to get with their group and discuss how they will choreograph their conga dance. The next lesson will continue with crayfish habitat, fighting, feeding and survival. It is important that the steps are selected and rehearsed before starting lesson #2.
- Prompts for assisting students with choreography (refer to "Crayfish Choreography" handout #2):
 - 1. Dance sequence #1 Legs and joints 16 beats
 - Say: How can you as a group bend, kick, reach, walk, leap, run using your legs?
 - 2. Dance sequence #2 Tail (flaps and joints) 16 beats
 - Say: How can you, as the tail, wiggle, sway, tuck under and push back your tail? How will you make your direction commands clear to your group? Remember you will also be responsible for changing your group's direction.
 - 3. Dance sequence #3 Pincers 16 beats
 - Say: How can you, as the pincers, reach, grasp, hold, tear your food, and defend yourself?
 - 4. Dance sequence #4 Directions (three different also done by the person representing the tail) 8 beats for each direction.
 - Say: How can you, as the tail, get your group to move in three different directions?

Handout #1 Why Do Crayfish Dance?

Why do fish swim? Why do bees buzz? Why do woodpeckers repeatedly bash their heads into solid wood? Quite simply, it's what these animals were born to do. And in the crayfish's case, it was born to dance.

Since the cray's evolution over 500 million years ago its overall structure has remained the same, and similarly so has its culture. Dancing began as a form of ten-legged ritualistic expression but slowly evolved into a dynamic leisure activity over the eons. Today crays gather in dance clubs to dance their souls free in a strange and wondrous display of their many legs.

Crays dance to many different kinds of music. One would almost be accurate in describing the number of crayfish dances to be as numerous as the number of crayfish species. Some crays, like the Yabbies of New Zealand and Australia, like to dance to traditional folk music while crayfish living in the Deep South of the United States enjoy crunk. Crunk is a style of southern hip hop music.

Since the early Nineties, however, a new force in dance music has emerged that has reshaped crayfish dancing activities forever: Techno.

As you can see, crays are always looking for new ways to express themselves physically. It's part of who and what they are. They have to dance! Because of this inherent need to dance, amateur crustaceanists (that's YOU) should take special care to keep your crayfish happy and well-exerted.



Handout #2 CRAYFISH CHOREOGRAPHY

Sequence #	Structure	No. of Beats	Type of Movement	Optional Student Choreography: What does your group choose to do?
1	Legs and Joints	16 beats	Bending knees, kicking, reaching, walking,	
2	Tail (flaps and joints)	16 beats	wiggling, swaying, tucked under, pushed back	
3	Pincers	16 beats	reaching, grasping, holding, tearing, holding, defending	
4	Direction (the student representing the tail calls out direction)	24 beats – 8 beats each direction	Locomotor: Choose three directions	

Each 16-beat sequence is repeated over and over again. Directions can be done at any time as the sequences are repeated.