

CASE STUDY: Quatama mini-residency with Nancy Judd

Overview

During my two sessions with the three 3rd grade classes we linked the students most recent studies of the life-cycle of Salmon with their current study of mathematics and fractions by creating a collage of Salmon using discarded plastic that the students, teachers and I collected.

Big Idea: Relationships

- **Life Cycle relationships of Salmon** to different water ways (fresh water rivers, estuaries, oceans)
- **Relationship between personal actions and the environment**- when we litter plastic it blows into water ways, migrates to the oceans, breaks down into micro pieces that are impossible to clean up and ingested by all marine life including Salmon.
- **Mathematical relationships in the physical dimensions** of a Salmon: age determines width/height; fractions of the fish indicate placement of body parts (head and first fin in the first 3rd, top and second fin in the 2nd; 2 small fins and tail fin in the 3rd)

Skill/Content

- Enhance understanding of the life-cycle of a salmon
- Connect the concept of personal care for the environment with how it can help the Salmon
- Teach mathematics in the process of creating a fish with measuring and fractions
- Demonstrate the creative process: cutting, choosing colors and shapes, observing placement of body parts based on fractions, observe, editing, adhering
- Use the Design Process: Ask, Imagine, Plan, Create, Improve

Right Brain Strategy: Tableau of the life cycle of a salmon (spawning of eggs, baby fish swimming to estuary, big fish in ocean, returning to river to lay eggs)

Curriculum connections:

- Science: Life cycle of the Salmon
- Math: fractions, measurements
- Language Arts: writing

Vocabulary: Eggs, Alevin, Fry, Parr, Smolt, Fingerling, Adult, Spawn, Estuary, Fresh Water, Fertilize, Ocean

Lesson Plan

Session 1.

- Introduce my work
- Discuss how long each sculpture takes me to make and why I use recycled materials.
- Make the connection between the relationship of our actions such as littering vs. recycling and the environment. Use the example of the Jellyfish Dress, made of plastic bags.
- Discuss what happens when we recycle, discuss the benefits of reuse, including using waste materials as art supplies.
- Have the students review their knowledge of the life-cycle of a Salmon using Tableau. Link this to the art project and show my sample.

Session 2

- Students choose the plastic that they want to use.
- Based upon the age of the Salmon the students chose, they refer to the poster with the dimensions of different aged fish, they measure the length and width of the plastic.
- They draw the outline of the fish on the plastic and cut it into a simple long almond shape that the fins will be added to.
- They mark the fish in 3rds and then place the eye and fins in the corresponding sections and attach with low-heat glue guns.
- Students glue the fish to a large piece of paper and write a sentence using the vocabulary words. For example: "This is a smolt that is swimming through an estuary." or "This is an adult swimming in the ocean."
- At the end of the class we hang up everyone's Salmon
- Evaluation - ask questions of the students about the process of making the fish such as:
 - What part of this process did you enjoy the most?
 - What was the most difficult?
 - Did making the fish help you understand more about Salmon?

Supplies:

- Plastic waste – teachers
- Large pieces of construction paper - Teachers
- Pens to mark the plastic - teachers
- Glue and low-heat glue guns – Nancy
- Scissors – Nancy
- Tin snips to cut through the lip of the plastic containers - Nancy

