

Lesson Adaptation Activity: Obtaining, Evaluating, and Communicating Information

Related MA STE Framework Standard:

1-LS1-2. Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive. [Clarification Statement: Examples of patterns of behaviors could include the signals that offspring make (such as crying, cheeping, and other vocalizations) and the responses of the parents (such as feeding, comforting, and protecting the offspring).]

Lesson Description and Introduction

Ms. Shepherd's first grade class is in the middle of the last unit of the year. Students are studying the survival needs of animals. In this lesson, students will learn about the interactions between various animals and their offspring. Students will use various texts to determine parent-offspring behavioral patterns.

Ms. Shepherd: Good morning students. We have been learning about the basic needs of animals. Who can remind us what some needs are? Let's use the example of a bluebird. What does a bluebird need to live? Manny?

Manny: It needs a nest, food, and water.

Ms. Shepherd: Great, Manny. Who can remind us about the science word for the place that an animal lives? Gloria?

Gloria: Shelter.

Ms. Shepherd: Wonderful, Gloria. So a bluebird needs shelter, it's nest, and food and water. How does a bluebird get food? Jamal?

Jamal: It flies to get worms and bugs and seeds.

Ms. Shepherd: Excellent. What about baby bluebirds, how do they get food? Alex?

Alex: The mom brings them food.

Ms. Shepherd: That's right! The mama bird has to take care of the baby birds and bring them food. Many other animal parents, like the bluebird, take care of their young because they want them to stay alive. That brings us to our lesson today. We will be learning about parent animals and their babies.

Lesson Adaptation A **Level 4**

Ms. Shepherd: I am going to put you in groups of four. Each person in your group will be reading a different book on sea animals.

After students have finished reading their books, Ms. Shepherd instructs them to share their information together as a group and talk about what the information has in common in order to draw conclusions. Ms. Shepherd provides students with a paper with four conclusions. Students are instructed to circle the conclusion(s) that they agree with after discussing information with their group members. After Ms. Shepherd goes over directions, the following dialogue occurs in one group:

Alex: Baby Orcas don't sleep when they are first born. So the mothers don't sleep so they can take care of them.

Jamal: The mother walrus will hold her baby with her flippers if it's in danger.

Gloria: A mother dolphin makes sounds to her newborn baby so the baby will know what sound she makes.

Valerie: So let's circle "Moms take care of their babies" on the paper.

Jamal: But I read that seahorse dads take care of the eggs. The dad keeps the eggs in his pouch to protect them and the mom is never there.

Alex: I remember I read that sea turtles don't take care of their babies. The moms bury the eggs in the sand. When the eggs hatch, the baby sea turtles swim into the water. The mom or dad doesn't take care of them.

Valerie: So what conclusion should we circle?

Alex: Let's circle "Sometimes the mom or dad takes care of the babies" and "Sometimes no parent takes care of the babies."

Jamal: I remember I learned that penguin moms and dads take turns taking care of their baby.

Valerie: Okay, so let's also circle "Sometimes both parents take care of the babies."

Gloria: That sounds good.

Ms. Shepherd: Wonderful job, class. Tomorrow you are going to make a mini-poster about what you learned today.

Lesson Adaptation B **Level 1**

Ms. Shepherd: We are going to read a story about a baby dolphin and its family. I will pause during the story so you all can ask questions. Let's begin.

Ms. Shepherd reads the following text to students and shows them pictures from the following website <http://www.howstuffworks.com/baby-dolphin-story.htm>

In the warm waters near the shore, a small herd of bottlenose dolphins plays among the waves. Two leap together high into the air, then they arc and dive in. Two other dolphins ride the surf on an incoming wave. *Ms. Shepherd pauses to ask a question.* Who can tell us how dolphins breathe? Gloria?



Gloria: Dolphins come up to the top of the water to breathe air.

Ms. Shepherd: Exactly, they do not have gills to breathe underwater like fish do. Now, I'll continue with the story... Dolphins may look like fish, too, but they are really warm-blooded mammals. They breathe air from the surface, give birth to live young, and nurse their young with milk. Soon Mother Dolphin will be ready to give birth to her baby. She has help from two dolphin "aunties," who stay next to her.



As soon as Baby Dolphin is born, the two helpers guide her to the surface of the water for her very first breath. After she breathes, Baby Dolphin can float.

Mother Dolphin nurses her hungry Baby Dolphin near the surface of the calm ocean water. Mother Dolphin floats on her side and feeds extra-rich milk to her baby. Baby Dolphin floats near the surface so she can breathe while she is fed. The "aunties" stay nearby. Mother Dolphin will nurse Baby Dolphin for a long time. As Baby Dolphin gets older, she will eat fish, shrimp, and squid. *Ms. Shepherd pauses.*

Who can tell us about how the mama dolphin is helping her baby dolphin? Manny?

Manny: The mama dolphin is feeding her baby milk.

Ms. Shepherd: Great, Manny. So the mother dolphin is feeding the baby dolphin milk. Who else is helping the mother and baby dolphin? Jamal?

Jamal: The auntie dolphins are staying with them.

Ms. Shepherd: Wonderful, Jamal. They are staying to protect the mother and baby dolphin. Next, you are going to create your own stories about parent animals taking care of their baby animals.

Lesson Adaptation C Level 3

Ms. Shepherd: You will be reading a book on animals that live in the ocean. After you finish reading the book we will write down ideas about the animal parents and their babies on the board as a class. *Ms. Shepherd gives students time to read the book independently. After students have finished reading, the following dialogue occurs:*

Ms. Shepherd: Let's share out some information of how parent animals take care of their babies. I'll write down your ideas on the board. Alex?

Alex: Baby Orcas don't sleep when they are first born. So the mothers don't sleep so they can take care of them.

Ms. Shepherd: Great, what's another example? Jamal?

Jamal: The mother walrus will hold her baby with her flippers if it's in danger.

Gloria: A mother dolphin makes sounds to her newborn baby so the baby will know what sound she makes.

Ms. Shepherd: Excellent examples. What do your examples have in common? Related to how parents take care of their babies?

Valerie: Mothers always take care of their babies.

Alex: But I learned that penguin moms and dads take turns taking care of their babies.

Ms. Shepherd: Good point. So what conclusion should we make? Valerie?

Valerie: Sometimes the mom takes care of the babies. And sometimes both parents take care of the babies.

Ms. Shepherd: Wonderful. I'll write that on the board. Any other conclusions?

Jamal: Parents protect their babies and give them food.

Ms. Shepherd: Good. Can you give an example?

Gloria: The mother walrus protects its baby from danger by holding it close to her.

Ms. Shepherd: Thank you, Gloria. Wonderful job, class. Tomorrow, you are going to make a mini-poster about what you learned today.

Lesson Adaptation D Level 2

Ms. Shepherd: You will be reading a book on animals that live in the ocean. After you finish reading the book we will write down ideas about the animal parents and their babies on the board as a class. *Ms. Shepherd gives students time to read the book independently. After students have finished reading, the following dialogue occurs:*

Ms. Shepherd: Let's share out some information of how parent animals take care of their babies. I'll write down your ideas on the board. Alex?

Alex: Baby Orcas don't sleep when they are first born. So the mothers don't sleep so they can take care of them.

Ms. Shepherd: Great, let's add this to the board. What's another example? Jamal?

Jamal: The mother walrus will hold her baby with her flippers if it's in danger.

Ms. Shepherd: Great, I'll write that on the board. Aiden?

Aiden: The mother seahorse doesn't take care of the eggs. The father seahorse keeps the eggs in his pouch and protects them until they are born.

Ms. Shepherd: That's another good example. Gloria?

Gloria: A mother dolphin makes sounds to her newborn baby so the baby will know what sound she makes.

Ms. Shepherd: Thank you, Gloria. Jose?

Jose: Penguin moms and dads take turns taking care of their baby.

Ms. Shepherd: Excellent examples. Wonderful job, class. Tomorrow, you are going to make a mini-poster about what you learned today.

Ordering of Adaptations

Directions: Order the four adaptations (A-D) along the Science Practice Continuum (Levels 1-4) for the Obtaining, Evaluating, and Communicating Information practice.

| | Level 1 | Level 2 | Level 3 | Level 4 |
|-------------|---------|---------|---------|---------|
| Adaptations | B | D | C | A |