

RECOGNIZING AND EVALUATING A SOCIAL CONSTRUCTIVIST LESSON

Materials Needed:

- Something to write with

A. Read the following classroom descriptions.

1. Marquette, a kindergarten teacher, asks her students to tell her what they want to know about pets. Three students want to know more about dinosaurs, two students want to know how they can get pet rabbits, one inquires about a lizard, and two want to learn more about kittens. As students suggest these animals, she writes the words *dinosaur*, *rabbit*, *lizard*, and *kitten* on the board. Marquette does not tell the three students that dinosaurs are not pets; instead, she asks the students what they think about the pets suggested. Quickly a number of students point out that dinosaurs are not pets. Marquette asks the students to elaborate on their reasons for this belief, and then she asks the students who originally suggested dinosaurs what they think. Two agree that they are not pets, but one, Tyrone, says that he has a whole collection of them. Marquette asks this student to explain what he thinks it means to have a pet; he says that a pet is an animal you collect. She asks him if he has ever been to a pet store. He has. She asks whether he has ever seen dinosaurs for sale at the pet store. He agrees that he hasn't. Another student quickly quips that the pets must be alive, and you need to feed and care for them. Tyrone agrees and says that he would like to learn more about lizards that look like the dinosaurs in his collection.

Marquette leads the class in a discussion about what students would like to know about each animal, and she asks them to suggest how they might learn these things. From this discussion comes the idea that veterinarians and pet store owners would be able to answer a number of their questions. Carlos, a boy in the class, says that his mother is a veterinarian and that he will ask her to come to school to talk. Marquette agrees, and she calls the mother to make arrangements. Mrs. Hernandez comes to school the next week and teaches the students about the nutrition necessary for various

types of pets—particularly the lizard, rabbit, and kitten suggested by the students. She also discusses dogs, guinea pigs, hamsters, and gerbils, as instructed by Marquette. The next day, Marquette passes out a worksheet with pictures of animals and the foods they eat. The children are evaluated on their ability to match the proper food with the animal that eats it.

2. Ron, a third-grade teacher, is very interested in space flight and astronomy. He has shared with the students in his class many artifacts, including photographs taken on vacations and trips to the Kennedy Space Center at Cape Canaveral in Florida and the Neil Armstrong Center in Wapakoneta, Ohio. He has shown many movies and videos on space travel, and he has even brought his telescope to school for the students to look through. His students have become quite interested in astronomy and space travel. During science class, a student in the class shares with the others that his parents took him to a planetarium at a nearby university over the weekend. Ron decides this would be a great trip for his class and schedules it. On the trip, students learn about the constellations and apparent movement of stars in the sky throughout the year. Ron finds an activity in a teacher book with a star locating device in it. He has his students make the star finder and asks the students to look for certain constellations in the sky over the next month. Daily, he has students share information they have discovered about the stars and various constellations. At the end of the month, he gives the students a quiz in which they match the constellations with their names. He also quizzes students on the definitions of *star*, *constellation*, *sun*, *orbit*, *revolution*, *rotation*, and other important words that are in the textbook.

B. Using the following chart, evaluate the two lessons in terms of how well they meet the criteria for social constructivist lessons. Record the results in your portfolio. Then meet with teammates to discuss your evaluations. Come to a consensus.

- C. Neither of these two lessons has all the features of a social constructivist classroom. How could they be revised to contain more of the features?
- D. Meet with your classmates to come to a consensus on improving the lessons.
- E. Record the results of your meetings and thoughts in your portfolio.

Scale for Evaluating Degree of Constructivist Learning

Active Engagement with Phenomena

- Students ask and refine questions related to phenomena.
often _____ seldom _____
- Students predict and explain phenomena.
often _____ seldom _____
- Students mindfully interact with concrete materials.
often _____ seldom _____

Use and Application of Knowledge

- Teachers and students use prior knowledge.
often _____ seldom _____
- Students identify and use multiple resources.
often _____ seldom _____
- Students plan and carry out investigations.
often _____ seldom _____
- Students apply concepts and skills to new situations.
often _____ seldom _____
- Students are given time for reflection.
often _____ seldom _____
- Students take action to improve their own world.
often _____ seldom _____

Multiple Representations

- Students use varied evaluation techniques.
often _____ seldom _____
- Students create products or artifacts to represent understanding.
often _____ seldom _____
- Students revise products and artifacts.
often _____ seldom _____

Use of Learning Communities

- Students use language as a tool to express knowledge.
often _____ seldom _____
- Students express, debate, and come to a resolution regarding ideas, concepts, and theories.
often _____ seldom _____
- Students debate the viability of evidence.
often _____ seldom _____
- Learning is situated in a social context.
often _____ seldom _____

Knowledgeable others help students learn new ideas and skills that they couldn't learn on their own.
often _____ seldom _____

Role of Authentic Tasks

- Driving questions focus and sustain activities.
often _____ seldom _____
- The topic or question is relevant to the student.
often _____ seldom _____
- Learning is connected to students' lives outside school.
often _____ seldom _____
- Science concepts and principles emerge as needed to answer a driving question.
often _____ seldom _____