Students create a Modern Pig Barn in the Classroom

Objective: To have students explore how to best care for animals, then create a modern pig barn where the animals' needs are met in a safe and comfortable environment.

Curriculum Standard: Grade 2: Life Sciences: Interactions within Habitats

This topic focuses on how ecosystems work by observations of simple interactions between the biotic/living and abiotic/nonliving parts of an ecosystem. Just as living things impact the environment in which they live, the environment impacts living things.

Materials:
- Student Worksheet
- 4 business size envelopes
- 1 paper towel
- 2 toilet paper rolls
- 2 straws, cut in 8 equal pieces
- 1 plain piece of paper, cut in 1/2
- Scissors
- Scotch Tape
- Markers for decorating (optional)
- Extra paper for making fencing, pipes, feed troughs (optional)
- Video: “A video from Ohio Bacon Farmers”
- Student Worksheet Answers

Lesson

1. Ask students to imagine that they are farmers who raise pigs. Open up a classroom discussion about how the students would care of their pigs. You could prompt them by asking:
   a. How will you keep the animals warm?
   b. How will you keep them cool on hot days?
   c. What and how will you feed the animals?
   d. What will you do to keep your pigs healthy?
   e. Who will keep the pigs safe from predators?
   f. Who will take care of your pigs every day?
   g. How do the pigs change the land or air in which they live? (soil, odor?)
   h. Can the environment (weather) hurt pigs?
   i. What other needs do the pigs have? How will you take care of these needs?

   Note the student answers on the white board / Smartboard / post-it paper.

2. Hand out the Student Worksheet and ask students to fill out the “Before” section of the worksheet. Then set it aside for completion at the end of the activity.

3. Explain and prompt students in making their own pig barn. This video called Ohio Pork Ed Resources – Building a Pig Barn will get you started:
   http://www.youtube.com/watch?v=O_BlwEAg05o&feature=youtu.be
a. **Barn:** Cut an oval hole in one envelope making a large side window for the barn. (ventilation)  
b. Take ½ of paper towel and tape it on top of the window for the curtain.  
c. Cut another envelope in half for ends of the barn.  
d. Tape ends of the barn to the “sides of the barn” envelopes, one of which has the hole for the window with the paper towel curtain, so that you have four sides, or a rectangle.  
e. Use the final envelope as the roof by creasing it lengthwise in ½ and attaching it with tape to the top of the rectangle.  

f. **Food Storage:** Tape four straws, or legs, to each toilet paper roll so that the structure will stand on the legs.  
g. Use a ½ of a piece of paper, and make a cone shape by twisting and taping the ends. Tape the cone shape on the end of the toilet paper roll without the straw legs.  
h. Use the other ½ piece of paper to make another, smaller cone shape and tape it between the straw legs on the other end of the toilet paper roll.  
i. Allow students time to be creative and make fencing inside the barn, pipes to carry feed, feeders, or water troughs.  
j. Students can decorate their creation as they wish or add their own innovations to the structure.  

4. Encourage students to share their creation with the rest of the class.  
   a. Have students explain the following aspects of their structures  
      i. Ventilation  
      ii. Water  
      iii. Feed  
      iv. Protection from predators  

5. Display the student creations in your classroom  

6. Together with your students, watch the short, animated video “A video from Ohio Bacon Farmers.”  

7. Ask your students to complete the student worksheet and review the answers (provided for you) as a conclusion to your exploration of taking care of pigs!