The Great Egg Drop

Activities for Collaborative Thinking

OBJECTIVES

- To work as a team
- To design a solution working within certain constraints
- To test one's ideas

MATERIALS

For this activity, each group will need a paper bag with the following:

- One sheet of newspaper
- Two pieces of paper
- Two paper plates
- Six drinking straws
- Tape (two feet or less)
- Glue (only for gluing things)
- One plastic or Styrofoam cup (Thirty-two oz. or smaller)
- Ten toothpicks
- Five Popsicle sticks
- One balloon
- One plastic spoon and fork
- One empty water bottle that is twenty-four oz. or less
- One small Ziploc bag
- You will also need one unbroken raw egg in its shell for each group.

SETUP

- Prepare the materials in bags. You will need enough bags for groups of three participants each.
- Place each egg in separate Ziploc bags for easy clean up.

INSTRUCTIONS

1. Ask participants to get into **groups of three** *(perhaps by pulling names from a hat).*
2. Explain that they will now **imagine they are structural engineers** and their challenge is to **build a contraption that can safely hold an egg**.
3. To test each structure, the groups will **drop the structure (with a raw egg in it) from a second-floor classroom window**.

CONTINUED

The Great Egg Drop continued

4. Explain that the group whose **egg is still intact** after the fall will win **Engineer of the Year**.
5. **Give** each group a paper bag with all their materials and one raw egg.
6. Explain the rules: **they may only use the materials in the paper bag, and the final product must be small enough to fit through a classroom window**.
7. The groups will have **thirty minutes** to complete the task.
8. **Call, "Time,"** after thirty minutes, and **gather** the groups to witness each other's egg drop.
9. **Celebrate** the winning team and the efforts and creativity of the whole group.

DEBRIEF

- **What was hard about this activity?**
- **What were some "scientific approaches" your group took?**
- **What did you like about the other groups' prototypes?**