**Growing Plants**

**Pre-Kindergarten – S. Simmons**

**Flower: Amaryllis**

**Overview**

Students learn about seeds and how they grow.

**Objective**

**Students will:**

1. Identify what a seed does
2. List reasons why people plant seeds
3. Plant seeds
4. Graph the growth of their seeds over several days
5. Write about an experience planting seeds

**Materials**

* Large chart or butcher paper for brainstorming words
* Markers
* Observation notebooks
* Seeds (Use any available kind. I usually use a fast growing flower seed if I do this lesson before Mother's Day.)
* Soil
* Styrofoam cups, one per student
* Watering can full of water
* Wooden tongue depressors or other flat wooden sticks, one per student
* Newspaper (for catching the mess)
* Spoons (for scooping soil)
* [***The Tiny Seed***](http://www.scholastic.com/teachers/book/tiny-seed) by Eric Carle
* [***The Carrot Seed***](http://www.scholastic.com/teachers/book/carrot-seed) by Ruth Krauss and Crockett Johnson
* [***From Seed to Dandelion***](http://www.scholastic.com/teachers/book/seed-dandelion), [***From Seed to Pumpkin***](http://www.scholastic.com/teachers/book/seed-pumpkin), and [***From Acorn to Oak Tree***](http://www.scholastic.com/teachers/book/acorn-oak-tree) by Jan Kottke
* [***From Seed to Plant***](http://www.scholastic.com/teachers/book/seed-plant-0) and [***It Could Still Be a Flower***](http://www.scholastic.com/teachers/book/it-could-still-be-flower) by Allan Fowler
* **Optional:** *KidspirationT* software
* **Optional:** *KidPixT* software
* **Optional:** Computer
* **Optional:** Large screen TV or projector

 **Set Up and Prepare**

1. You may want to call a parent volunteer to help with planting the seeds.
2. Before planting the seeds, spread newspaper on the desk or table where students will be planting.
3. Set up class time for one small group at a time to plant their seeds (other small groups will rotate through other activities).
4. Cut out a large paper leaf from the chart or butcher paper. Hang the leaf so it attaches to the flower paper from the previous lesson.

 **Directions**

**Day 1**

**Step 1:** Read [***The Tiny Seed***](http://www.scholastic.com/teachers/book/tiny-seed) and [***The Carrot Seed***](http://www.scholastic.com/teachers/book/carrot-seed).

**Step 2:** Lead the class in comparing and contrasting the two books and in discussing what a seed does. If you use [Kidspiration](http://www.inspiration.com/Kidspiration%22%20%5Ct%20%221), record your discussion using diagrams (connect your computer to a projector for students to view). Otherwise, use chart paper.

**Step 3:** Throughout the discussion, have your parent volunteer add vocabulary words to the leaf-shaped paper.

**Step 4:** As a class, plan how [***The Carrot Seed***](http://www.scholastic.com/teachers/book/carrot-seed) could be dramatized.

**Step 5:** Divide the class into small groups.

**Group 1:** Goes with the parent volunteer to plant their seeds at the station.

1. Each student will need a styrofoam cup, a wooden tongue depressor, a marker, a spoon, and a few seeds.
2. Use a spoon to fill the styrofoam cup about halfway with soil.
3. Place the seeds in the center of the cup. **Note:** Read directions on the seed packets for best practices for planting, watering, and caring for the type of plant you are using.
4. Cover the seeds with more soil. Leave about a half inch of space between the soil and the top of the cup.
5. Pour a small amount of water from the watering can into the cup.
6. Write each students' name on a wooden tongue depressor. Stick the tongue depressor into the student's cup for identification.

**Group 2:** Acts out the story of [***The Carrot Seed***](http://www.scholastic.com/teachers/book/carrot-seed).

**Group 3:** Will be the audience for the dramatization.

**Group 4 (if needed):** Reads other books about plant growth, such as [***From Seed to Dandelion***](http://www.scholastic.com/teachers/book/seed-dandelion), [***From Seed to Pumpkin***](http://www.scholastic.com/teachers/book/seed-pumpkin), and [***From Acorn to Oak Tree***](http://www.scholastic.com/teachers/book/acorn-oak-tree) by Jan Kottke, or [***From Seed to Plant***](http://www.scholastic.com/teachers/book/seed-plant-0) and [***It Could Still Be a Flower***](http://www.scholastic.com/teachers/book/it-could-still-be-flower) by Allan Fowler.

**Group 5 (if needed):** Illustrates the story with paper and crayons, colored pencils, or markers.

**Step 6:** Rotate the groups so every child has a chance to plant their seeds.

**Step 7:** Have students place their labeled seed cups in a sunny area of the classroom.

**Day 2 and more**

**Step 1:** Over the next week or so, have the children water the seeds, watch, and write their observations in their notebooks.

**Step 2:** Have students write about their experiences with planting seeds. **Optional:** The students could illustrate and write about plants using a computer software program, like *[KidPix](http://www.mackiev.com/kidpix/index.html%22%20%5Ct%20%221)*. Print the final product (or a screen capture).

**Step 3:** Bind the students' stories to create a class book about plants.

 **Lesson Extensions**

Learn more about plants and play plant games with [Michigan 4-H Children's Garden](http://4hgarden.cowplex.com/).

 **Assignments**

1. Have students tell three facts about growing plants.
2. Write a story about plants.

**Assess Students**

**Teacher Observations**

1. Were students able to compare and contrast the stories?
2. Can students describe the life cycle of a plant?

Copies of the students' experience writing should be saved for their assessment portfolios.

**Evaluation**

1. Was there enough time?
2. Did the planting of the seeds go smoothly?
3. Did students have enough content information to write about plants?
4. If you used it, how effective was the use of the software?