Exploring Plants in Pre-Kindergarten

Submitted by Jill Gendall

This past spring, I observed that my students were very interested in the dandelions that grew outside our classroom window. Each morning they proudly came in with a big bouquet of dandelions for me to ooh and aah over. I used their interest in these weeds as a springboard for learning about and exploring different kinds of flowers, plants and seeds.

We used some of the dandelions to paint. We looked at them outside and noticed that they looked like lots of yellow dots among all the green grass. So we used them to paint yellow dot shapes on green paper.



We made dandelion curls. If you pop the head off and strip the stem in half, then put them in a tub of water, the stems curl up. It was so neat for the students to discover!

We tried planting bean seeds in a Ziploc bag in a variety of different environments: in the dark, on the window, with moisture, with no water, with the bag opened, or no air. It was very interesting to take them all out and discover how the sprout and roots grew out of the seed!

We painted small Terra Cotta pots and planted a bean seed in each one. We then glued the following verse to a popsicle stick and stuck it in the soil: This is a seed/ I planted for you/ With all of my love/ For all that you do. The students watched them grow for a couple of weeks and they took them home for Mother's Day.

We looked at a variety of seeds that I bought (carrot, cucumber, pumpkin, bean, pea, tomato) and the students tried to guess what each seed would become. We compared sizes of the seed to the size of the vegetable. There was lots of interesting discussion and discoveries! Each student then chose which vegetable they would like to plant, and

we planted a mini-garden in a long, clear Rubbermaid tub and kept it in our boot room. We discussed daily which vegetables were growing, how they were similar/ different, and how big they were going to get. There was lots of excitement as they observed their garden growing! I also left the remaining seeds out as an invitation with soil, water, gloves and gardening tools to allow for exploration and sensory play.

We had a seed tasting: pumpkin seeds, sunflower seeds, sesame seeds and cornnuts. We each voted on what was our favourite and graphed our preference. We also opened up a coconut and tasted what was inside.

We went for a walk around the neighbourhood to discover flowers growing in our community. I took the camera and each student took a picture of a flower that they found. We printed them out as part of a documentation panel and I also posted them on our class facebook page.





I went to the local flower shop and explained that we were investigating flowers and seeds and asked if they had any flowers that were dying or that they were unable to sell anymore. They gave me a huge bouquet of flowers (a wonderful variety that still looked quite nice to me) as well as 2 grocery bags full of rose petals! I was thrilled! I set them out with magnifying glasses as an invitation the next day. The students touched, smelled and explored the flowers. The following day we painted with them, and some students chose to glue the petals to paper. The following day, we used contact paper to make lovely pressed flower pictures. They looked beautiful... however, the following week they were all moldy, so it's a temporary project!





We painted flowers using different media, including flyswatter painting (the flyswatters were flower shaped) and using shower puffs to paint a bouquet.

We looked at how flowers absorb water with the experiment where you stick a white flower (or celery with leaves) in a glass of coloured water.



After learning the parts of a flower, we did an easel starter with seeds. I got this idea from this fantastic website:

http://www.teachpreschool.org/2012/03/springtimeeasel-starters/ I glued three bean seeds to the bottom on an 11X17 piece of paper, and each student painted/ drew the details to add to the picture. It was amazing the details that they included when they had something to start with.

We took a class trip to the greenhouse, where they showed us some fabulously interesting plants and they helped us transplant a flower to take home. The greenhouse employees were wonderful and really encouraged exploration and interaction with the plants, so we searched for plants that had leaves that were pokey/ purple/ tiny/ long, etc. We compared many different plants and flowers, and smelled them all!