Planting seeds

After the children have had the opportunities to examine seeds, sort seeds, dig in the dirt and plant flowers in the dirt they were then given the chance to choose seeds to plant in a cup of dirt. One objective was to help the children remember a process, by doing the same activity over many days; allowing them to master the process of planting. We also wanted to further their understanding of matching a picture of a vegetable to the seed.

The children gain competence in their abilities when they are allowed to independently choose their seeds, scoop their dirt and plant the seed.

"I'm poking a hole for my seed with my finger." - Luka

The teachers chose to leave some shovels in the room during the activity and to only provide four bags of seeds so the children would experience impulse control while waiting, sharing materials and communicating a need for materials.
Planting the garden

After many planting experiences (and appropriate weather) the children were finally able to plant a garden in the courtyard. They began with green bean seeds and carrot seeds. The teachers chose green beans because they sprout quickly and carrots because of the many books we read about growing carrots.

The children used a great deal of coordination and hand strength to turn the soil and break the dirt clumps. They found many rocks and separated them into a pile.

The children remembered from the book “Carrot Soup” that there was a line in the dirt, so they used their fingers to create a small trench to plant the seeds. They then gently covered the seed with dirt.
"I'm putting this sign here so we know it's beans."
-Luka

James wanted to plant more beans so he began poking holes in the dirt, just as the children did when planting in the cups.

In order to plant the pumpkin seeds a small mound had to be built. The children piled dirt on the little hill.

"I'm digging around the hill with my purple shovel."
-Lucy
Harvesting and revisiting

Lucy is picking a green bean that is ready to be harvested. The children looked for the biggest bean to make sure it was ready. They refined their impulse control skills every day by not picking the beans while checking and watering the garden.

After the children began to harvest the garden the teachers wanted to revisit how the plants began. While many children still pointed out the seeds in different foods, both from the garden and at lunch, they had not seen many seeds since the garden was planted. Here they are remembering what the different seeds look like.

"This is a pumpkin and that’s corn."

-Luka
Planting

The idea for a planting investigation came about while talking about the foods Float eats, mainly carrots. During the previous investigation of rabbits the class read a book called "Carrot Soup" where a rabbit plants carrots seeds. The book went through the process of tilling, planting, weeding, watering and waiting while gardening. The children soon began to discover seeds in different foods and talk about how the seeds will grow. It seemed a logical next step to investigate planting and growing with the children. The teachers intended for the children to grasp a basic understanding for how plants grow, where food comes from and how they themselves are able to grow food.

In addition to "Carrot Soup" the class also read "The Carrot Seed" about a boy who waits a very long time for a carrot to grow. The children were then given carrot seeds to examine. They discovered the seeds were very small compared to carrots. The goal of this activity was to make the children aware of the size of seeds compared to the plant in a context they knew, carrots. Also, to begin talking about the waiting process involved in growing food.

"This is tiny!" - Jairemiah
Digging in the dirt

After digging in the sensory table the children began to explore the roots of the flowers and beans that were beginning to grow. They also began to look for bugs in the dirt. The teachers decided that it was time to do some digging outside.

Digging in the courtyard took a great deal more hand strength and coordination than digging in the sensory table. The children all shared the shovels and concentrated on one area to make a big hole. The teachers wanted them to experience the difference between the dirt from a bag and dirt in the ground.

“This dirt is hard!” - Megan

The children found a worm while digging and took turns gently passing it to one another. They blew gently to see the worm move then put him back in the dirt.

“He’s scared to be out of his home.”
Dirt table

Providing dirt in the sensory table allowed the children to gain a sensory experience from the planting investigation. They were able to feel the coolness of the dirt when it was wet and how hard it became when it was dry. New vocabulary words such as clump, moist and till were introduced. Flowers were soon brought in to enhance the experience. The children planted and dug up many of the flowers in pots and in the table. They realized the flowers needed dirt, water and sunshine to grow as they watched some wither and others blossom. Lastly, seeds were brought into the table for the children experience something growing from seed.

Many of the children watered the plant and exercised their hand strength and coordination while using the spray bottles.

The children digging with shovels were presented with the challenge of controlling their tools as they dug. If they pulled too hard the dirt would go spraying, so they had to learn to scoop gently.

Digging up and replanting the flowers gave the children an opportunity to learn about different parts of the plant, such as the leaves, petals, stem and roots.
Seed art

Seeds not only served a purpose for growing food and learning about the planting process, but also as an art, sensory and dramatic play experience.

The children put seeds into the playdough, changing the texture of the material. Some of the children began to pretend they were planting seeds in the playdough.

"I'm poking my seeds down so they will grow" - Erica

The process of putting glue on paper, choosing a seed to glue down and putting that seed in the glue strengthens children's memory as they repeat the steps over and over during one activity. They are also able to experience cause and effect by making the seeds stick onto the paper.
Seed sorting

After reading "The Carrot Seed" many times and looking at carrot seeds, then exploring different seeds the children found outside the teachers decided to have a seed sorting activity. The children were able to examine many different seeds; feeling their weight and texture. While some children enjoyed filling and dumping with the seeds, other children sorted them by variety. They were also able to talk about what some of the seeds would later become by looking at the packages.

"I dumping the little seeds in."
- Jairemiah

Maddie began sorting the seeds into different compartments. When asked what she was doing she replied, "I'm putting the little black ones in these and the corn in here."

"I think this one is a bean."
- Luka
"I'm trying to find the other white one that is small and a circle"
- Megan

After talking about the seeds turning into food the teachers got out some of Float's peas so the children could find seeds inside the food. James found one of the seeds inside the pea. "Seed!"
- James

Gio takes the small seeds out of the compartment and puts them inside the cup.

Zoe collects some tiny seeds off the table and dumps them in the cup. She then shakes the cup and listens to the sound.