**Investigating...Pathways**

Niloufar Rezai, Director: The topic of pathways really lent itself well to both toddler-age and preschool-age. They were really able to incorporate a lot of sensory type of items, and then it really expanded to a more cognitive type of investigation where children began mapping to represent pathways on paper. Each classroom has tailored that investigation to their group of children.

**The Blue Room’s Investigation**

Patty Gardner, Preschool Teacher: I really liked pathways as a topic, because children learn best when you take something that they know about and you build upon their knowledge. We went on a walk, and we took note of different things that we saw. We took actual physical pictures of things that they saw as they went along on this pathway. The day after that we went on to Google Earth and we zoomed in to see if we could identify some of the different things that we also noticed on our walk.

- **Patty:** Does anybody recognize anything on this map? Does anything look familiar to you? We’ve looked at this before.
- **Boy:** I see our playground!
- **Patty:** You see our playground?

**Patty:** This gave them a different perspective of what something that they see every day, that they play on every day—what it would look like from up here. And not all of the children, but most of the children were able to identify the components of our playground.

- **Patty:** Troy, what did you just tell me?
- **Troy:** I noticed the road for the bikes.
- **Patty:** Troy noticed the road for the bikes. Brrrrrrrmrrrrmmm. There’s the road for the bikes. Calvin, tell me about what you noticed?
- **Boy:** It’s a pathway that doesn’t…it goes staying around. See that oval right there? That we can’t go on with our bikes.
- **Patty:** Did you hear the word that Calvin used? I heard him say pathway. He was talking about the pathway that we take. But we don’t take this pathway over here; we use this pathway.

**Patty:** One of the things that was suggested to us by a parent um was “Make Way for Ducklings.” We read the story, and then you can go on Google Earth, it’s actually called a lit tour, and they show you where Mr. and Mrs. Mallard went on their tour of Boston.

- **Patty:** Here’s the entrance to the garden.
- **Boy:** And they’ll see Mr. Mallard.
- **Patty:** And they’ll see Mr. Mallard; you remembered that, James. Look, look, look! Look at that. And there is the pond in the public garden where Mr. Mallard was waiting for them. I’m going to find the same page in the book. See? Same page. There’s Mrs. Mallard, there’s Mr. Mallard, and there’s all the babies waiting right on the island.
**Patty:** Some of the classic stories that we read in the classroom on an ongoing basis are “Three Billy Goats Gruff,” “We’re Going on a Bear Hunt,” and “Rosie’s Walk.” And we decided for our key experience that we would break the children up into three groups, and each group would focus on these given pieces of literature to help demonstrate their level of understanding for pathways.

**Patty:** Shaylene’s writing “haystack,” and Izzy wants to make sure that we write down that there’s a mouse.

**Patty:** We went through page by page and said, “Okay, what is something that you noticed?” And we physically wrote the words down so that we would remember next time that we joined for the group. We made a map of the pathways that they noticed in the story, and then they recreated it with using salt dough in a 3-D form.

**Patty:** Tell me about what you’re making there, Shaylene.

**Shaylene:** I’m making the, the fence.

**Patty:** The fence, ok.

**Patty:** James was in my group, and he was excited about the beehives. So he wanted to draw the beehives. So then when we came back the third, fourth, fifth time to do the 3-D portion, that was his job, so he made the beehive out of the salt dough.

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**The Toddler Room’s Investigation**

**Amie Theriault, Toddler Teacher:** Initially, I was a little apprehensive about pathways with toddlers because I thought, “It’s pretty abstract of a concept; it’s not something that they can hold.”

**Amie:** We’re going on a bear hunt; we’re gonna catch a big one. What a beautiful day!

**Amie:** Once I figured out what to do, which was, we based the entire investigation around *We’re Going On A Bear Hunt*, everything just fell into place, because we were able to do so many experiences that were sensory and nature. When we initiated it, we decided to bring them for a walk around campus, so they could really get the experience of looking at the sidewalks versus the roads. Where are there pathways around our school? Okay, now that we’ve seen a pathway, let’s look at where the characters in the story go. And of course, the characters in the story go through all these different areas—the long wavy grass, and the river, and the forest.

**Amie:** Here’s the wind blowing. Look at the snow. Whoooo! Can you make that sound? Can you make that sound like a snowstorm?

**Amie:** We were on our swirling, whirling snow storm, and we were talking about things that were cold.

**Child:** It’s cold.

**Amie:** It’s cold. I think it’s ice.

**Amie:** They were able to see that once they put it on the paper, they could create pathways with it, and so we talked about curvy vs. straight pathways.

**Amie:** I see a straight line on yours.

**Amie:** They noticed that they had to rub it against the paper in order to create a pathway.
Amie: At one point when we were talking about the grass in the story, I had put a bear on one side of their papers and a toy person on the other side, and their goal was to create a pathway from the person to the bear. They used a glue stick, which was the kind that you can see before it dries, so they were able to see the pathway that they made. And then they sprinkled grass on top of it and they were using that in dramatic play as well, walking their character across to the bear.

The Green Room’s Investigation

Cynthia DeJesús, Preschool Teacher: I wanted to start off an investigation with a book. Rosie’s Walk is a character, a hen, who goes on a walk and she doesn’t realize there is a fox behind her and she has to navigate over a hill, under a beehive. After reading the story a few times, I wanted them to retell the story to me to see if they grasped the concept, the prepositional words that were in the story.

Cynthia: And then where did Rosie go?
Child: The haystack.
Cynthia: What on the haystack, Cameron?
Child: She went up the haystack, and then she went down the haystack.
Cynthia: She went OVER the haystack. Can you draw that? She went OVER the haystack.

Cynthia: So I had that big poster board during whole group, and they were able to show me Rosie. First she went over the hill and then through the pond, and they just took turns coming up and creating it.

Cynthia: She went over the haystack, across the windmill, through the fence, under the beehive, back to her home. Do you see that path? She went all around, back to her home.
Child: She was on a path.
Cynthia: She was on a path. What kind of path was she on, Malia?
Child: A path for, she was on a path that leaded to her home.

Cynthia: In the classroom they created their own pathways, using a Rosie figurine. They created in the art area; they used different materials to create Rosie’s walk.

Child 1: We can make a pathway.
Child 2: Oh, this is going to be the beehive.

Cynthia: Our classroom enjoys board games. Every story we read, they want to create a board game with it. That included a lot of math skills, number, numeracy, the one-to-one correspondence. As they move their Rosie along, they could kind of retell the story as well and use those prepositional words from the story.

Child: One.
Cynthia: Now who’s at the house?
Child: I am.
Cynthia: We’re both at the house. We followed the path all the way to the house.
Child: How come we can’t go in these?
Cynthia: What happened if we were to go in there? Do you remember? Did Rosie go through it, over it? What does she do in the haystack?
Child: Over it.
Cynthia: She did go over it. And the fox—what?
Child: Down.
Cynthia: He fell in it.

Cynthia: A few months into it, we created a pathway from home to school. I asked the children, “What do you see on your way to school?” Some take a bus to school; some walk to school. So it was really, really fascinating to hear them speak about what they see on their way and draw it out.

Cynthia: I said, “Let’s make a map of a place in your home.” Some children created a map of their backyard, their living room, of their kitchen. One child drew a picture of his bedroom, and then he drew his bed and that was the pink for the bed. Then he drew his brother’s bed, but every color that he used for his map key corresponded to an item in his room.

Cynthia: Then it led into our dramatic play—huge dramatic play—our zoo. They wanted to create a zoo, so we incorporated what animals do we need in our zoo. And they had to come up with a map of the zoo. They created the items for the zoo. They created signs for the zoo, so there’s literacy and writing, and we researched the animals—not just any animal was in our zoo; they had to figure out what kind of cage it needed. You can tell that they had a really good grasp of pathways because the zookeeper’s job was to show them where to go.

What We Learned

Niloufar: Children still today are talking about pathways in the school. “I’m taking the short path, or I’m going to take the long path.” So even though the investigation is over, I think children have made so many connections with their immediate environment.

Patty: They still talk about pathways; that’s still a word that they use. I think they learned more about what kind of materials are involved in a pathway. Every time you do a new investigation where you have to learn something or you discover something with a child, it’s exciting; it’s very, very exciting.

Amie: I was amazed with the connections that my children made. They were drawing and making lines and saying, “I’m going to make a pathway!” They were just bringing all of the knowledge they had learned into all of the centers of the classroom, and I was very surprised that they were able to do this.

Cynthia: I learned more about maps, let’s just say, than I ever did. In the beginning I was a little leery of pathways, but it lends itself. We talked about GPS technology; we included all of those things. I just learned that there is no limit to how much you can stretch a young child’s mind.