





On the day we introduce clay, we set out several small bowls of water. Then we bring out the large block of clay. Interested, the children (ages 2–5) are drawn to the table. Soon there is clump banging, hammering, and rolling, and back-and-forth banter and giggles—even a made-up song.

We teachers listen more closely.

David: Look! I'm smoothing out the bumps.

Two younger children join him to watch the technique.

Ariel: How do you get it flat?

Esther: What if you push it with your belly? Teacher: It might get on your clothes.

Esther: Not if you put your shirt up!

Both girls simultaneously lift their shirts and squish the new material to their tummies.

Later, David paints his hands and arms with the slip that naturally forms from "smoothing out the bumps" with water. As the clay dries on his skin, a crackled pattern emerges, inspiring an interesting hypothesis and capturing the attention of the group.

David: I have snake scales. [long pause] I think that is how snakes get their scales.

A contagious investigation of snake-scaling draws two younger onlookers to the table. The experimentation continues until each player is elbow high in, and satisfied with, a silken coat of clay.

On a stool next to the table, we place a bin of warm soapy water with a towel, inviting cleanup. The children, immediately enticed by the bubbles, partner in washing up while we model for David, Esther, and Ariel how to roll the remaining clay into balls for another day's work.



Over the years at Stepping Stones Children Center, a play-based emergent early childhood program in Burlington, Vermont, we have offered clay as an occasional activity, but only recently has it become a staple material in our multiage environment. Perhaps one reason it took so long for us to figure out a way to have clay available every day is that we teachers did not feel technically experienced with the medium and therefore were reluctant to bring clay to the table. Another problem was that we didn't know how to store clay and clean up the materials without much fuss.

Still, our curiosity about clay persisted, and eventually, through teacher conversations, we decided to team up to learn more about clay's potential as a material for young

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Photos © Liz Rogers.



children to explore. We realized that we didn't need to be experts and that it was OK to play, experiment, question, and learn firsthand through our observations.

Next, we brainstormed ideas for storage and cleanup methods. We came up with a simple solution: store the clay in a plastic tablecloth and tie it up with a rope. The clay stays moist and ready to use in an instant.

Now, when children want to play with clay, a child or a teacher carries the bundle to the table, opens it, and invites everyone to explore. It's that easy. When the children are done, they roll their clay into balls or pound it into one big lump. Sometimes we even pull the tablecloth to the floor, take off our footwear, and jump the clay back into shape. Then we cover the pile with a damp cloth, sponge off the tablecloth and our feet, and tie up the bundle.

While everyone tries his or her hand at working the thick rope, it is the 3-, 4- and 5-year-olds who most enjoy the challenge of tying and untying the knots. All the children share their muscle power when carrying the heavy load back and forth to its storage place, with older peers supporting the younger in this task. As teachers, we find that our dialogue about the potential of clay as a learning medium raises many questions: What makes clay so enticing? Why are we noticing different play and conversation around the clay table as compared to the talk that occurs during playdough groups? What makes clay an important tool for children's learning? How does clay help teachers understand what children are thinking about?

Taking a Break with Clay

by David's Mom

When I work in the neighborhood, sometimes I spend my lunch break at the Stepping Stones center. Often my break time and the children's nap time coincide, but once in a while I come in and get a big hug and a smile. Then, David and I settle in with a storybook, and a friend or two always join us.

One day I came in and noticed the new giant, slippery mound of clay. It seemed so inviting. Maybe that was because it smelled so good, as though fresh from a riverbed, not salty and starchy like playdough. David and I decided to dig in together. With no concern for clothes or fingernails, we squished and rolled and flattened the clay.

First we made snakes, because snakes are cool. Then I started remembering working with clay 30 years ago, when I was in first grade. Mrs. Mead taught us how to make pots out of coils, the way some Native Americans do. I told David about it, and he decided a coil pot was a good project for us.

So we rolled and rolled and smeared and smushed until our little pot was done. David made a sturdy base, and we declared it a candleholder.

Break time was over, and I had to get back to work, but David and I were pleased with our creation and had an easy good-bye.

As I went through the rest of the day, I kept thinking about how nice it had been to share a little time making something so tactile, earthy, and simple. The experience was more satisfying than if I had actually eaten lunch.



Liz's reflections

Growing up in the Bronx, New York, in the 1960s, I had little opportunity to explore the characteristics of clay, either in its natural setting or at school. My own children, growing up in Vermont, were the first in my family to lay their hands on clay. My girls made pinch pots, coils, and little palmsize ornaments in elementary school.

As much as I cherish their creations, I doubt if their brief experiences with clay fostered exploration or resulted in any meaning making. For this they would have needed time to ask questions—What am I curious to discover? What do I imagine? What personal story or original idea will I express?—as they experimented with clay's natural properties.

Children must have extended opportunities to develop and understand their relationship with clay. We

now give the children in our center this needed time. We are discovering that clay, unlike playdough, offers time to touch nature in an intimate and empowering way. Its cool, malleable texture warms to the temperature of our hands. Its silken flexibility gives way to our unique imaginations, enabling us to shape things larger than life, over and over again—like 3½-year-old Mika's superheroes, 2-year-old Asa's dragons, and 5-year-old Kevin's volcanoes.

Yet clay is earthy and grounded enough to allow us to tap into our personal experiences, making visible the details of such events as 5-year-old Natalie's lemonade stand, 3-yearold Ina's absurd sighting of a "woman in a floaty tube," and the story in 2% -year-old Keenan's fishing hook. Each narrative gesture in clay speaks of children's everyday and potential worlds. As a teacher I enjoy witnessing each child's awakening to the idea that "I am holding the Earth in my hands, and I have the potential to change the world into something that I name and call my own."

Working with clay reminds me that I am not only a teacher of children but also a learning teacher among children. Dana's reflections offer us a window into what that means.

A Lemonade Stand: Good Things Come from a Mistake

Five-year-old Natalie joins the clay table with a plan—to make a lemonade stand just like the one she set up at her

house over the weekend. She had lots of business from the thirsty T-ball players at the nearby park.

Natalie squeezes and rolls four stubby table legs and presses a flat oval shape on top, encasing the tabletop in a series of coils. "There," she says. "Now I need a chair, some Goldfish, and a sign."

While Natalie easily creates shapes to represent the Goldfish crackers that she served with the lemonade, she has difficulty with the sign. Liz suggests flattening out a clay rect-

angle and prompts Natalie to write the word *Lemon* on it with a paperclip. Natalie says, "Lemon," then sounds out the letters one by one: "L-E-M-O-N." Together, Natalie and Liz make the sign stand up on wood sticks, and then Natalie gets busy making figures representing herself and a customer.

When the sculpture is complete, many children and parents admire Natalie's efforts, which encourages her to retell her personal story: "Lemonade! Get your lemonade here! Five cents, please. Would you like some Goldfish? Oh, thank you! Don't forget your change!" She relives her experience over and over again.

Later, while Natalie visits the library area, 4-year-old Obi plays carefully with the fragile sculpture but accidentally breaks off a figure's leg. Dana, noticing Obi's slowly tear-

ing face and predicament, comforts him. "Oh, Obi, it looks like it broke," she says as she lifts him to her lap. Liz joins

the conversation, assuring Obi that "Natalie will understand."

Natalie, noticing the situation, comes over. "It's OK that his leg is broken," she says simply, and she starts to walk away. Obi begins to cry a little more.

"Natalie," Liz says, "I think that Obi feels really sad about what happened. Maybe you could let him know that you really mean that everything is OK."

Natalie turns and puts her arm around Obi. Her sweet assuring gesture prompts Liz to recommend

taping the leg so it will look like a cast for a broken bone. Natalie loves the idea, and as Liz tapes, Natalie notices that the effect looks like a pant leg. "Maybe you could make the tape look like pants?" Natalie suggests. This revelation leads to a request for a tape T-shirt and then for an outfit for the other figure too. Natalie is pleased.

"Isn't it funny how good things can come from mistakes?" Liz says to her.

Natalie replies, "This is going to sound really funny, but I'm glad that Obi broke the leg."

"Maybe you could tell him that?"

"Hey, Obi," Natalie calls. "Thank you for breaking the leg on my person, 'cause now they have clothes and I like that even better!"



Dana's reflections

I have always been intrigued by this interesting substance that comes from the earth. I have wanted to explore clay and encourage children to explore it.

I once viewed clay as a structured classroom activity, with a time and place. It was more about traditional clay-working technique, with many specific rules and the pressure to replicate a certain product, such as a pinch pot or a handprint, rather than creating something inspired from my own heart. Now I see clay as a material that can be brought out at a moment's notice. It is a medium and a process for engaging children's various energy levels and learning styles.

I am teaching myself to focus more on how the children react to the clay and grow with it. I watch and listen and play. I notice the children's interactions with the clay and with one another. I witness solitary as well as group play, and I marvel at the socializing, creativity, and ingenuity that come with child-directed clay play.

In our months of clay exploration, some children have been drawn to representational clay art—to making figures and objects. The children come to these ideas on their own and often revisit favorite subjects.

Clay lets children tell their own stories. A story can be about a favorite animal or a new family member, or it can be about a birthday cake for a friend or finding a treasure.

One child became fascinated with making clay pairs of pants. She made many pairs over time, but eventually the pants were forgotten. Months later, after a break from clay modeling, she and I sat down at the table and opened up the clay block. The first thing she said was, "Now, how did I make those pants again?"

Conclusion

Giving our teacher-selves permission to join children as coexplorers of this natural material has been a powerful journey in shared meaning making and surprise—a journey that we plan to continue in our classroom for a very long time. We hope our story inspires others to embark on new adventures with clay.