Tools that empower
by Emily Viehauser and Megan Arnim

As Harper was playing with some glass stones, it became obvious that she was collecting all the red ones. She gathered them all in her hand and said, “These are all me . . . because they’re the same color as my dress.” She walked around with the stones in her hand, spinning and looking around at things, and eventually ended up back at the table with the glass stones. She put down the red ones and pushed them all towards one another, keeping them all in a close pile. Then she began collecting some blue stones. After she had picked out roughly the same amount of blue as she had red, she carefully gathered each pile and moved them to an empty table, keeping the piles separate. “That’s me,” she said, pointing to the red pile, “and that’s Bella,” pointing to the blue pile. After counting how many of each color she had, she flipped some of them over so their flat sides were down and their round sides were facing up. Then Harper pushed the two piles together saying, “I mixed all them together so me and Bella are all together.”

While Harper used these stones to represent her strong emotional attachment to a very good friend, some children used them to create images of dinosaurs and flowers, while others used them for sorting, to make patterns with, as berries while pretending to cook, and as water running through pipes. The open-endedness of the glass stones gave children the opportunity to create their own play themes and experience them in multiple ways that were meaningful to them. This type of unrestricted material allows children to create many types of experiences rather than surrender to one pre-determined ending.

In the center where we work, we believe that a powerful way for children to learn is through relationships. One of the practices that supports this idea is offering tools and materials that may not ordinarily be found in a classroom environment. The tools might not always be heavy or sharp — they may not even be easily classified as tools, but rather props or even ideas. When we place these tools in the classroom or directly into a child’s hands, we are communicating our trust and our belief that we know them to be competent, creative, and strong.

The tools we use

There are many types of tools that communicate capability and allow children to make new discoveries, create connections, and express ideas:

- **Open-ended materials:** cardboard boxes, collections of cones and tubes, ropes and cables, yarn and string, blocks, fabrics, tiles, carpet squares, glass stones (and anything else that creates multiple opportunities for exploration)

- **Natural materials:** real containers and utensils made of glass, ceramic, wood, fabric, and metal (brass, aluminum, steel, copper, tin, iron), flower petals, leaves, water, wood pieces, sand and rocks, dirt and worms

- **Fine art tools:** art pens, acrylic paints, water color paints and paper, quality paint brushes, real images and photographs, poseable art mannequins, clay, clay modeling tools, oil and chalk pastels

- **Adult tools:** hammers and screwdrivers, nails and screws, sewing needles, wire cutters, pliers, wire, wood glue, paper cutters.

Intentional efforts

While planning for and selecting tools and materials for children, there are a few things to take into consideration:
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Who, precisely, are the children that you’ll be offering these materials to? What do you know about them and how do you think they might react to this new experience?

What themes have the children been exploring? What are the underlying ideas beneath this play?

What materials or props can you offer children that might extend their play and support the underlying ideas at the same time?

Is there a developmental process you’d like to continue supporting?

How do you think children will interact with a particular set of materials?

Is there something a child’s family has been noticing about their child’s play or interests?

While our relationships with the children and families will inform our decisions about what materials we make available, we also use our relationships with children to help us think about how we’ll introduce these things into the classroom.

What do you want these materials to communicate to the children?

Based on what you know about these children and how they interact with the environment, how might you set up the materials in a way that’s inviting to them?

How do you want to organize and display materials to suggest possible ways to use them?

Do you want to offer contrasting materials or things that will complement each other?

How comfortable are you with using these tools with young children? How might you find support in areas where you’re unsettled?

One spring day our class went to a neighborhood park and decided to bring mementos from the park back to the classroom. We laid these treasures out on a table with magnifying glasses, drawing pens, and field journals.

Dante carefully examined each pinecone while looking for the one he had specifically deemed his own. Once he found it, he turned the pinecone over in his hands and held it up close to his eyes, squinting to see its finer details. He grabbed a magnifying glass so that he could examine its detailed patterns even more closely. One of Dante’s teachers noticed his interest, slid a paper and pen in front of him, and invited him to draw his special pinecone. When Dante responded “I can’t,” the teacher told him to keep on looking and thinking to see if that might help. A few minutes later, he sought out his teacher and proudly showed her his drawing: an oval shape that showed the pattern of ‘scales’ ringing around the outside.

When we give children the time and opportunity to form meaningful relationships with the natural world, they are able to build connections with the places where they live and play. When nature is continually brought into the classroom throughout the year, children have another opportunity to experience seasons and notice intricate patterns in their environment.

Over the course of several weeks, a group of children had been hard at work building houses and props scaled to fit their favorite toy kitties. Their next task was to examine their kittens and reinterpret them in clay. After finishing the basic body shape, Jennifer began using the blunt end of a beech wood tool to etch facial features onto her kitty. She made a few attempts to carve in the details; however, the instrument in her hand was clumsy and thick and the kitty face was not turning out the way she envisioned. She tried once more, with her fingernail this time, and continued to become frustrated with the results. Aware of Jennifer’s growing unhappiness, the teacher offered her a needle tool: a long stainless steel point often used by potters and sculptors.
coaching and practicing how to use this tool safely and effectively, Jennifer deftly drew on the missing features of her kitten. With pride in her voice she called out, “Hey David! Look what Megan’s letting us use! Do you want a turn when I’m done? Only you have to be really careful.”

Wire sculptures were created by a small group of kids who were exploring how to do cartwheels. To sculpt these figures, they used wire cutters and pliers for cutting, bending, shaping, and stabilizing their structures as they manipulated the metal. Throughout their work, they made important decisions about what shapes to recreate, the lengths of wire to use, how and where to bend or twist, and what tools to use for which purpose. The sculptures became a way for the children to understand and communicate their intuitive knowledge of the steps of a cartwheel. While it’s one thing for four and five year olds to know how to do a cartwheel, it’s quite another to be able to articulate what’s happening during the act of performing a flip through the air. Shaping the wire challenged them to get really clear about the particulars of form: how exactly does the arm bend or the anchoring foot plant itself on the ground? In this way, the wire work paralleled the physical effort of cartwheels, providing challenge, discipline, practice, and eventual mastery.

Putting it into practice

A few factors we’ve found helpful for success while using fine art and adult tools with children are:

- **Connection**: Connect the materials or experience in a way that builds on the children’s interests and curiosities.
- **Knowledge**: Experiment with the tools you are considering beforehand so that you can see the potential and anticipate possible challenges.
- **Exploration**: Explore the materials along with children and learn about all of its properties before creating any sort of recognizable pieces.
- **Coaching**: Work side by side with children, calling attention to what they’re learning and encouraging them to use the real names of tools.
- **Groundwork**: Ask children to sketch out a plan on paper first to help clarify their vision and give them a blueprint they can refer to later if necessary.
- **Small groups**: Work with only a small number of children at a time to keep the group manageable and to provide opportunities for collaboration.
- **Time**: Allow for sustained, uninterrupted time for each child to have a satisfying experience.
- **Storage**: Ideally, there should be a protected place to store unfinished work so it may be revisited at a later time.
- **Professional collaboration**: Share ideas and ask for other perspectives; co-workers and parents can be some of your best resources!

**With little ones**

It’s a common practice at our school, even with the youngest children, to give them opportunities to use real materials. Still life drawing, for example, is a platform for children to notice subtle details and practice fine motor skills. While drawing a single cherry blossom branch, we practiced first by making straight lines, and round and curvy lines. We also worked on making fast and slow lines, calling attention to the way that leisurely lines can be much more intentional than hurried ones. We gave them permanent pens (we call them ‘serious markers’) and real water color paints and paintbrushes. With proper guidance and support, children can use fine art and adult tools, too!

**Learning through relationship**

Children are inherent creators and communicators. Natural and open-ended materials, fine art and adult tools are important resources to support them in their steadfast ability to make discoveries, learn new skills, and communicate their thoughts and ideas to the world around them. When children have the opportunity to use real tools, they build relationships with these instruments and learn about the abilities, limitations, and distinctions of the physical world, as well as their own. Making these tools available to children broadcasts our respect for them, and encourages them to continue seeing themselves as powerful players in their own learning experiences. We communicate to children that they are competent, creative, and that they are people with important ideas. As Hattie (age 5) reminds us, “You might get a little disappointed at first because when I was practicing I thought I would never make it, but then I figured it out and now I feel proud.”