

## Counting or Playing?

By Matt Bronsil

One day in December, I was fixing the computer at work when the phone rang. I answered it, and was greeted by the parent of a child in my class. We talked about Christmas coming, how annoying it is to go Christmas shopping these days, and laughed at how the weather forecasters can never seem to predict snow accurately.

After the small talk, the parent told me the reason for calling.

"I'm concerned that Cindy (names have been changed) is not doing very much work at school." Cindy, a four-year-old, is a very hard worker, who really enjoys learning. "All I hear about when Cindy gets home is how she played with Susan all day. She said they got the beads out today and sat at a rug and played." Cindy's mother explained how, at home, Cindy is able to add two-, three-, and four-digit numbers. We already knew about Cindy's fantastic reading skills. Her mother's main question was whether there was something more challenging for her daughter to do than playing with beads.

This is a common Montessori parent question and a classic example of the important role perception plays in how we understand things. Imagine the following scene:

***Cindy, looking around for some work to choose, walks over to the math shelf and sees the materials there. Deciding on a work that is a little more difficult, she invites Susan, who just walked by, and they work together. They roll out their rugs, lay out the materials, and begin. During this time, they learned that 5,491 is not simply five thousand four hundred and ninety-one but actually 5 thousands, 4 hundreds, 9 tens, and 1 unit. They begin to understand that, as you get 10 units, you can exchange the units for another 10, and as you get 10 tens you can exchange them for 1 hundred. After 20 minutes, the girls put the work away. Eventually, it is time to go home, and when her mother asks, "What did you do in school today?" Cindy's simple answer is "Susan and I played with beads all day on a rug."***

Notice what has happened. The child does not perceive this work in terms of its academic intent, the understanding of important math concepts. Cindy is not going to say to her mother, "I began to understand the decimal system in very concrete ways, using materials that were designed with a high degree of control of error." Cindy's perception was that this was a time for her to play with beads with her friend. That perception, passed on to her mother, prompted the call to me.

### What's a teacher to do?

The first thing I did was to listen, and, while listening, I tried to discern the answers to these questions:

1. What activity is this mother describing to me? The last thing I wasn't to do is explain the idea of a work the parent is not describing.
2. What are the parent's perceptions of the work? Cindy gave her mother her conception of the work, which was not exactly what the work is designed to do – nonetheless, her mother's perception is important if I am to explain how the work actually does function.

3. Is there anything specific the parent is interested in having the child learn? If so, is the child ready to do that? Cindy's mother, for example, is interested in addition work.

Keeping these three things in mind made it a lot easier to discuss the subject further with Cindy's mother. After listening to her, I began to identify the bead work she'd referred to. I explained the work and its purpose in some detail, speaking about what a child needs to know before she can really understand the work ( thus showing how much she has already learned), and how the activity will progress as she keeps working with it.

After my explanation, Cindy's mother laughed at how something so complex can be understood by the child as simply "playing on a rug with beads."

I explained that the process of addition is also complex work. If Cindy is adding  $358 + 421$  and coming up with 779, she might be developing a misleading understanding. She might look at the 3 and the 4 and putting a 7 in the correct column as the answer. It is more important that she understands that in this case 3 is not number 3, but rather the number 300. A child needs to have a solid understanding of what a 10, 100, or 1000 is in comparison to a single unit before she can really begin to understand how the mathematics of addition works.

My listening for and touching on those three questions turned a worried parent into an enthusiastic supporter of her daughter's activities. I still get questions about what Cindy is doing at school, but her mother is not more interested in learning about how the materials work rather than asking why her daughter is "playing" with beads.