NPR - Creative Play Makes for Kids In Control

Morning Edition, February 28, 2008 · It's playtime at the Geraldyn O. Foster Early Childhood Center in Bridgeton, N.J., and in one corner of a busy classroom, 4-year-olds Zee Logan and Emmy Hernandez want to play bookstore.

In a normal preschool, playing bookstore would be a pretty casual affair. They would just pick up some books, set the shiny toy cash register on the table by the blackboard, and get down to business.

But this isn't a normal school. It's based on the Tools of the Mind program. In other words, it's a school where almost every moment of the day is devoted in some way to teaching the kids — mostly low-income children who live in the poor surrounding community — how to regulate their behavior and emotions.

So before Emmy and Zee even think about picking up a toy, they sit down with their teacher at a small classroom table and fill out some paperwork.

That's right. Paperwork.

On a small blank form, they spell out their intentions. "I want to play bookstore," each girl writes with assistance from her teacher.

Then she draws a picture of herself playing bookstore.

Then, together with her teacher, she reads back her intention so that everyone is clear about what is going to happen.

Finally, each girl grabs an armful of props and makes her way to the corner, where (as in most preschool classrooms) strong disagreements about the appropriate way to play bookstore ensue.

Transformation in Play

Now, the reason that the Tools of the Mind curriculum asks kids like Zee and Emmy to fill out paperwork before they pick up the Play-Doh lies in the fact that today's play is very different from the play of past eras.

For most of human history, children played by roaming near or far in packs large and small. Younger children were supervised by older children and engaged in freewheeling imaginative play. They were pirates and princesses, aristocrats and heroes.

But, while all that play might have looked a lot like time spent doing nothing much at all, it actually helped build a critical cognitive skill called executive function. Executive function has a number of elements, such as working memory and cognitive flexibility. But perhaps the most important is self-regulation — the ability for kids to control their emotions and behavior, resist impulses, and exert self-control and discipline. Executive function — and its self-regulation element — is important. Poor executive function is associated with high dropout rates, drug use and crime. In fact, good executive function is a better predictor of success in school than a child's IQ.

Losing Skills

Unfortunately, play has changed dramatically during the past half-century, and according to many psychological researchers, the play that kids engage in today does not help them build executive function skills. Kids spend more time in front of televisions and video games. When they aren't in front of a screen, they often spend their time in leagues and lessons — activities parents invest in because they believe that they will help their children to excel and achieve.

And while it's true that leagues and lessons are helpful to children in many ways, researcher Deborah Leong says they have one unfortunate drawback. Leong is professor emerita of psychology and director of the Tools of the Mind Project at Metropolitan State College of Denver. She says when kids are in leagues and lessons, they are usually being regulated by adults. That means they are not able to practice regulating themselves.

"As a result," Leong says, "kids aren't developing the self-regulation skills that they used to."

That is why, in a Tools of the Mind program like the one at Geraldyn O. Foster Early Childhood Center, almost every minute of the day is spent building executive functions.

The Freeze Connection

Children walk in the door and are asked the question of the week: a practice intended to work on deliberate memory. This work is followed by a highly modified version of a musical game that might otherwise be familiar to parents of preschool children: Freeze.

In a normal game of Freeze, music plays and children dance and jiggle until the music abruptly cuts off and the children freeze in place. But in the Tools version,

as the music plays, the teacher holds a picture of a stick figure in a certain pose above her head. The children are supposed to observe the position of the figure without doing it, and when the music ceases, they assume that position and that position only.

Celeste Merriweather, an early childhood supervisor at the school, explains that the important part of the Freeze game is the practice of controlling impulses by observing the stick figure without immediately doing as the stick figure does. This helps then when they're older, she says. Later in life, if they get angry, instead of punching or yelling, they're able to stop themselves.

The Freeze dance, while fun, also builds self-regulation, she says.

Merriweather ticks off a long list of other activities that teach such skills. After Freeze, there is Buddy Reading — another impulse-control practice.

As she explains it, not even recess is innocent fun: "It's not just 'run out in the yard.' No. We want them to make a plan: What do you want to do, and how do you want to do it?"

Thinking Ahead

According to executive function researcher Adele Diamond, all of these little exercises genuinely do improve the ability of children to control themselves. Diamond, professor of developmental cognitive neuroscience at the University of British Columbia, recalls the very first time she ever set foot in a Tools of the Mind classroom.

"I was totally blown away. The kids were sitting together working quietly. It was like a second-grade classroom instead of a preschool classroom. I couldn't believe it," Diamond says.

Diamond has no financial or professional connection to the Tools of the Mind program. She's just a researcher who decided to test the program. She followed 147 preschoolers. Half the kids were given Tools training; half followed the regular school curriculum. After two years, the children all took a series of tests that measure executive function. The Tools kids did better.

"Children who were in the [school] district curriculum performed roughly at chance. And the kids in the Tools program were about 85 percent correct," Diamond says. "So those are big differences."

Diamond says there are potential benefits to this training that go beyond improved executive-function scores. She and several other researchers argue that children's reduced self-regulation skills may be showing up in the numbers of kids diagnosed with Attention Deficit Hyperactivity Disorder.

"I think a lot of kids get diagnosed with ADHD now, not all but many just because they never learned how to exercise self-control, self-regulation, the executive functions early," she says.

NPR http://www.npr.org/templates/story/story.php?storyId=76838288
javascript:NPR.Player.openPlayer(76838288, 86956288, null, NPR.Player.Action.PLAY_NOW, NPR.Player.Type.STORY, '0')
Podcast Above link.