



Rae Pica

In Defense of Active Learning

Four-year-old Tara and her mom are searching for the perfect preschool. Mom proudly tells the center director that Tara can recognize letters and geometric shapes, say her ABCs, and count to 50 (in two languages). Mom explains that she's been using flashcards, DVDs, and computer software to help Tara "learn," and she hopes Tara's preschool experience will offer more of the same.

"I've looked at other preschools," Tara's mom says, "and in some of them, all they seem to do is *play!*"

EFFECTIVE EARLY CHILDHOOD TEACHERS use what they know about and have observed in young children to design programs to meet children's developmental needs. Play and active learning are key tools to address those needs and facilitate children's early education. Typical activities include

- sorting and stacking blocks and other manipulatives (mathematical knowledge);
- growing plants from seeds, exploring the outdoors, and investigating at sand and water tables (science);
- trying on various roles and interacting with one another at housekeeping and other dramatic play centers (social studies); and
- singing and dancing, or acting out a story (emergent literacy).

Today, these types of early years activities are disappearing from some programs. This is due partly to Western society's entrenched belief that the role of the mind is more significant than the role of the body. Society has labored for years under a misguided notion that mind and body are separate entities, resulting in the determination that learning should occur via the eyes and ears only.

Today, children are spending time passively interacting with "educational" products instead of engaging in active, sensory experiences. And because some parents

are excited by the "evidence" that their children are "learning"—via flashcards, DVDs, and computer programs—they're asking for more of the same in their children's early schooling.

But feats like Tara's represent *rote* learning—the result of memorization. *Authentic* learning involves comprehension. And until a child is developmentally ready to understand what the numbers, letters, and words he's reciting represent—until the information has some relevance to his life—there will be no comprehension.

Some rote learning has its place, of course; it's how most of us learned the multiplication tables and the state capitals. However, unless a child is going to grow up to become a TV game show contestant, memorizing facts will have little use in life once she's passed all the required tests.

Active, authentic learning, on the other hand—the process of exploration and discovery, of acquiring knowledge, of knowing *how* to acquire it (no one can memorize *all* the facts!)—will serve a child endlessly. Moreover, active, authentic learning is far more likely than rote learning to foster a lifelong love of the learning process (Jensen 2008).

Recent brain research is confirming what many educators have believed all along: the mind and body are *not* separate entities. Jensen (2008) confirms that not only do children learn by *doing*—and that movement is the child's preferred mode of learning—but also that physical activity activates the brain much more so than doing seatwork. While sitting increases fatigue and reduces concentration, movement feeds oxygen, water, and glucose to the brain, optimizing its performance. Furthermore, learning by doing creates more neural networks in the brain and throughout the body, making the entire body a tool for learning (Hannaford 2005). Active learning is also more fun for young children, which means it matters more to them!

To Do More

What if movement, play, and music have cognitive benefits? What if they can be used to help children meet learning standards and pass standardized tests? They can!

When a child bangs on pots and pans, she learns about cause and effect. She's also experimenting with sound and the strength of her muscles. A child learns more from manipulating blocks and puzzle pieces than from manipulating images on a screen; he can't *feel* the images on the

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screen. Cutting, pasting, and scribbling provide more fine motor coordination, which a child will need later for writing and keyboarding, than does clicking on a computer mouse. Helping to set a table or pouring water or sand from one container to another—both teach more mathematics concepts in a meaningful way. The sights, sounds, textures, and smells of the outdoors engage children in relevant lessons on scientific principles.

When you give children the opportunity to physically move over, under, around, through, beside, and near objects and classmates, they better comprehend prepositions—those little words so essential to language and life. When a child performs a “slow walk” or skips “lightly,” adjectives and adverbs become real to her and much more than abstract concepts.

When children can physically demonstrate action words like *stomp*, *pounce*, *stalk*, or *slither* or descriptive words like *smooth*, *strong*, *gentle*, or *enormous*, word comprehension is immediate and long lasting. The children learn these words in context; they are no longer a mere collection of letters. This approach promotes emergent literacy and a love of language.

Similarly, if children take on high, low, wide, and narrow body shapes, they’ll have opportunities to understand these quantitative concepts (and opposites). When they act out the lyrics to “Roll Over” (“There were five in the bed, and the little one said, ‘roll over’ . . .”), they can *see* that five minus one leaves four. The concept of magnetism will

be much more fascinating to children if they play with magnets and then pretend to be them. The same fascination and understanding result when children engage in hands-on activities with such scientific concepts as gravity, flotation, evaporation, balance and stability, or action and reaction.

When teachers use activities like these in the classroom, they are teaching to the whole child, using the physical and social-emotional as well as the cognitive. This results in enduring and meaningful lessons and children who will move in leaps and bounds toward becoming lifelong learners.

TO LEARN MORE

Try these two resources, in addition to the two highly recommended books in the reference list:

- Pica, R. 2007. *Jump into literacy: Active learning for pre-school children*. Beltsville, MD: Gryphon House.
- Pica, R. 2008. *Jump into math: Active learning for pre-school children*. Beltsville, MD: Gryphon House.

References

- Hannaford, C. 2005. *Smart moves: Why learning is not all in your head*. Salt Lake City: Great River Books.
- Jensen, E. 2008. *Brain-based learning: The new paradigm of teaching*. Thousand Oaks, CA: Corwin Press.

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