

# Thinking on Your Feet

## New evidence that physical activity improves academic ability supports the argument for dance education in K-12 schools.

The growth of the field of neuroscience and the development of brain-imaging and testing techniques have resulted in a large body of research that has sparked the trend in brain-based teaching and learning. The discoveries contain a wealth of information that can improve your teaching, as well as provide strong justification for dance education in K-12 programs.

According to Dr. John J. Ratey, the author of *A User's Guide to the Brain* (2001, Patheon Books) and a clinical psychiatry professor from Harvard University, "Evidence is mounting that each person's capacity to master new and remember old information is improved by biological changes in the brain brought on only by physical activity. Our physical movements call upon many of the same neurons used for reading, writing and math. Physically active people reported an increase in academic abilities, memory retrieval and cognitive abilities. What makes us move is also what makes us think. Certain kinds of exercise can produce chemical alterations that give us stronger, healthier and happier brains. A better brain is better equipped to think, remember and learn."

This reference is one of many that can be used to support dance as an essential component to all children's education. Author Eric Jenson is another leader in the movement. His *Teaching with the Brain in Mind* (1998, Association for Supervision and Curriculum Development) is a primer for brain-based learning and provides a balance of research and theory, along with practical teaching suggestions. Jenson discusses movement, learning and the mind-body link, and he advocates movement as a fundamental of education. He cites a study by P. Kearney describing a South Carolina elementary school that had test scores among the lowest 25 percent of its district. The school implemented a strong performing arts curriculum and within six years was able to raise scores to the five percent. Jenson also offers ideas for implementing some easy-to-use strategies to enrich the learning environment in the classroom.

Jenson's *Learning with the Body in Mind* (2000, The Brain Store Inc.) places movement at the center of all educational activity, citing more than 250 research studies and documents that support the importance of movement and learning. In *Brain Compatible Strategies* (1997, Turning Point Publishing) Jenson uses principles derived from observations of how the brain functions and how individuals learn to create a series of activities that have "research-proven links." References and specific research studies, which can be cited in advocacy documents, are also listed.

Brain research is in its infancy. As future studies are conducted, however, the value of dance education likely will become more evident. After all, dance involves creativity and movement--a winning combination for brain development. DT

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**by Susan McGreevy-Nichols  
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