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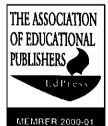
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## **GUEST EDITORIAL**

# Can Education Help Build a Better Brain?

### **LINDA BRYANT CAVINESS**

n her book, *Thank You, Mr. Falker*, Patricia Polacco, writer and illustrator of children's books, tells of her own personal struggle to learn to read. Patricia underwent years of struggling and humiliation until a teacher, Mr. Faulkner, in collaboration with a reading specialist, zeroed in on her need when she was 10 years old and helped remedy the problem.

In her early years of school, though she could not read, Patricia's strengths and intelligence were apparent in other ways, especially her artistic abilities. While the brains of other children were developing "normally" in reading and writing skills, Patricia's exceptional capacities were also growing—but not in reading. Unfortunately, her brain's unique developmental schedule was not honored or supported as were other brains in her classroom.

By understanding more about the brain, educators can help students like Patricia to achieve their potential. A child's brain is always gathering information, but what it learns and how much it remembers depends to a great extent on the abilities of the facilitator to unleash human potential. Since parents and educators possess such powerful influence to mold the future, they need to understand the kind of environment in which creativity and learning will flourish.

Neuroscience daily reveals new findings about the brain. With this increase in information comes the challenge of determining the relevance of the data to educational practice. Within the past 10 or 15 years, much work has been done to translate the scientific studies into practical classroom application.

What has this research revealed? Just to cite one example: a better understanding of reading readiness. Studies of the brain reveal that some youngsters are not "ready" to learn to read until considerably later than the majority of children. Forcing an unready child to learn to read may interfere with neural development and patterning in other brain areas as his or her brain progresses through its own unique developmental stages.

Will brain science provide the ultimate answers to the problems that bedevil education? Probably not. However, the new research should help educators create brain-compatible learning environments that honor both the attributes shared by all human brains as well as those that are unique in each child. They will also better understand a variety of issues such as the importance of low student-to-teacher ratios and parental involvement for optimal learning.

Quality education depends on the quality and kinds of input at all levels—prenatal through university; home, school, and community; and the appropriate combination of mental, social, and spiritual emphases. All contribute to structuring the human brain, and all must function in accord to nurture each child into the one-of-a-kind individual God created him or her with the potential to become.

Mind, body, and spirit are equally critical elements in human growth, function, and development. The brain is central for all three of these functions. As such, curriculum developers and educators need to stay up to date on new research about the workings of the brain—and put this information to work in their daily planning.

This issue of the JOURNAL OF ADVENTIST EDUCATION represents a collaborative effort to help teachers and educational administrators better understand the new research on the brain and to apply it in their daily activities. The articles include information about how the brain stores and retrieves information, the effect of emotional and physical states on attention and retention, and the importance of wholistic education, combined with practical suggestions from classroom teachers who have applied these principles in their classrooms.

**Linda Bryant Caviness** is Director of the student-teacher program and teaches in the School of Education at La Sierra University in Riverside, California.