Foreword

It's in the news daily! America is in an obesity epidemic, and it presents a great danger to our youth. Children spend a great deal of time sitting. They belong to the new sedentary society of *sitness*, not fitness! But neuroscience is telling a different story. Exercise boosts brain function (Medina, 2008). Students who are more physically fit perform better academically (Texas Education Agency, 2009). Exercise grows brain cells (Ratey, 2008). Movement facilitates cognition (Sylwester, 1995). This seems contradictory. If exercise helps the brain to learn, then why aren't we adding movement, physical activity, and exercise to the school day to put brains and bodies back into balance? How can the neuroscience that supports the link of movement to learning translate into classroom practice? Can we give every child every advantage to learn? How can we create healthy, active learners who are ready and eager to learn and do it without sacrificing time and standards?

We can find the answers to these questions in this book by Traci Lengel and Mike Kuczala, who collaborated to bring educators a very useful tool for teaching. Traci and Mike combine their expertise to provide interesting insight into how the brain learns, and then they translate that information into classroom practice. The concepts presented are brain based and brain compatible and apply to learners of all ages. The research presented is understandable and applicable to all students. The activities are purposeful, easy to interpret, and fun for the teachers and the students. Each chapter concludes with an outline of key points discussed in the chapter, a wonderful reference tool for busy educators.

Compelling research supports the link of movement to improved cognition. Dr. John Ratey's (2008) research findings show how exercise improves learning and why teachers should use movement in the classroom to enhance learning and memory. But some teachers are still skeptical or uneasy about how movement can help their students or improve test scores. They ask several questions, including the following:

Will I lose control of student behavior?

What if I am not a good "mover" myself?

How can this meet the standards I am supposed to teach?

The authors address these concerns and many more to alleviate any misgivings about movement strategies. Their concepts show how movement in the classroom *adds to* the learning process rather than *distracts from* it and can prepare the brain for better retention and retrieval.

The central theme of the book is *controlled movement with purpose*. The authors outline many purposes for movement including the following:

- Preparing the brain with specific movements may improve communication from one part of the brain to another
- Providing brain breaks can give the brain the opportunity it needs to process and consolidate information
- Supporting exercise and fitness encourages healthy living
- Developing class cohesion through movement activities can prepare the brain for learning new information
- Reviewing content through movement during the lesson may be an ideal way to use repetition to improve retention
- Teaching new content through movement will help many students of all ages and cultures to understand and retain information

Some of the most helpful ideas presented are in the classroom management section. This is an area where all teachers benefit, especially when accommodating movement in a classroom setting. Another favorite section of mine provides activities, each one demonstrating movement with purpose. There is a variety of activities using many subject areas for all grade levels. In my experience of teaching academics kinesthetically, I have seen students who previously struggled in the traditional classroom "click on" when they were allowed to express themselves through activities like these. It is indeed a joy to behold!

I have been in education for more than 30 years, both in the class-room and as a physical educator. My belief is that every child *can* learn. I also believe that every child's level of health and wellness *can* be improved. My experience has shown that when we use movement to anchor learning, the child's understanding of the concept becomes stronger by far.

I truly appreciate the inclusion of the success story of our Action Based Learning Lab in Traci and Mike's book. The action-based learning lab shows how controlled movement with purpose can help fill in developmental gaps to prepare the brain for learning. The data we have collected are amazing and show the power that movement, physical activity, and exercise can have on the developing brain. I also see how teaching academic concepts kinesthetically in the classroom and using exercise and physical activity to teach academics in the gymnasium builds a bridge of cohesiveness for the student.

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And for me, that's the purpose of teaching: the increased health and the learning of each student.

Educational research tells us that a majority of school-age students are predominately kinesthetic processors. They crave movement to understand concepts. That's why this book is an important addition to any personal or professional teacher library. It is a comprehensive reference to how students learn and how to accommodate their learning through movement. I know you will find *The Kinesthetic Classroom: Teaching and Learning Through Movement* useful and informative and a valuable resource to help your students work at their best!

In JOY! Jean Blaydes Madigan NeuroKIDnesiologist Action Based Learning