Foreword

The press for teachers to help all of today's diverse learners attain high standards has never been higher, but today's legislation may also produce a citizenry more adept at rote learning than the true conceptual understanding required to deal with complex issues. Such side effects of educational policies were not intended but may already be counterproductive for students seeking to further their academic careers or to enter the work world where higher order thinking is required.

The highly important life work of Bernice McCarthy, which continues in this new book, represents one of the very few well thought out and researched-based approaches to teaching and learning. Teachers can rely upon the strategies in this book to ensure that the diverse students they face each day will be provided with a challenging set of learning experiences that will serve them well in the future.

We have long known that good teaching begins when we present students with a problem, issue, or phenomenon as we try to raise their interest in the topic at hand. This is critical in the discovery method in science and was a first stage of Madeline Hunter's now famous formulations about teaching. This posing of an issue to be questioned and understood begins McCarthy's 4MAT cycle, and teachers are given plenty of assistance here in helping students see what the issue is and why it should be understood.

Brain-based research also has shown us that students must be given an opportunity to think about such issues or problems as they attempt to formulate a tentative hypothesis for or explanation of the phenomenon in question. This is the next important phase of 4MAT, and it energizes the thinking processes that are underemphasized in the "drill and kill" exercises common in too many classrooms where the pressure is on to improve test scores rather than to teach.

Students will welcome the planned activities as the next feature of well designed lessons, and teachers are offered substantial suggestions for incorporating these activities into daily classroom events designed to help students prove their hunches or begin to seek alternative explanations. This phase is as important today as when John Dewey emphasized "learning by doing" a century ago when schools sought to be more instrumental in preparing students for a fuller civic life.

The remaining phase of the 4MAT cycle helps teachers see how to lead students into making application of their new knowledge and skills—in other words, to see how to make use of what they have learned.

Teachers using the McCarthy approach can be helped to far better lesson-planning skills than many now have, and when this becomes automatically a part of their daily instructional life their students will surely benefit. *Teaching Around the 4MAT Cycle* represents a well conceived developmental use of the extensive research on brain-based teaching methods.

viii TEACHING AROUND THE 4MAT® CYCLE

Teachers and administrators need to ensure that the pressure for teaching to standards does not have the regression effect of moving backward in what we know about addressing the needs of diverse learners. The approach advanced in this important book helps make sure that when it comes to education, the teaching profession is heard as well as the politicians.

—Gordon Cawelti Educational Research Service, Arlington, VA