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## Introduction to This Special Issue on Mathematics and Learning Disabilities

I am pleased to introduce this special issue of **Learning Disabilities: A Multidisciplinary Journal**. As you will see below, this issue focuses on the area of mathematics and learning disabilities. Guest editors for the issue were Paula Maccini of the University of Maryland, and Joseph C. Gagnon of the University of Florida. Both Drs. Maccini and Gagnon are frequent presenters at the annual LDA International Conference, and have contributed to this Journal in the past. In addition, Dr. Maccini currently serves on the LDA Professional Advisory Board.

### Articles in This Issue

This special issue of **Learning Disabilities: A Multidisciplinary Journal** addresses issues in the field of mathematics and learning disabilities. The issue includes four articles that address a number of critical issues in the field, including the characteristics of students at risk for having a mathematics difficulty, recommendations for teaching problem solving skills, and interventions for helping students access the general education mathematics curriculum. Experts in the field of special education and mathematics contributed to this special issue and provide important considerations and practical ideas for special and general educators, parents, administrators, and advocates to support students with learning difficulties in mathematics.

*Characteristics of Students at Risk for Mathematics Difficulties Predicting Arithmetic Word Problem Solving Performance: The Role of Attention, Behavior, and Reading* by A. K. Jitrenda, K. C. Corroy, and D. N. Dupuis, University of Minnesota, reports on the difference in student word problem performance across third-grade students considered low and high risk for mathematics difficulties, and the relation of certain variables (behavior, attention, reading achievement, and socio-economic status), on the mathematics problem solving performance involving addition and subtraction skills for third grade students at risk of having a mathematics difficulty. The authors discuss use of teacher rating scales based on student's strengths related to behavior and attention, data from a district measure of general reading and mathematics performance, and a word problem solving measure involving addition and subtraction. The authors discuss important implications for practice for identification and early intervention.

*Exploration of Quadratic Expressions through Multiple Representations for Students with Mathematics Difficulties* by T. K. Strickland, Hood College, and P. Maccini, University of Maryland, reports on a study that used a multiple probe design across two groups with five participants, to examine the effects of an intervention on the algebra performance involving quadratic expressions within area problems with secondary students with mathematics difficulties. The first author developed and examined the effects of a modified graduated instructional sequence, the concrete-representation-abstract integration (CRA-I) strategy that involved the integration of the three instructional phases (concrete, semi-concrete, and abstract representations), use of a graphic organizer, and many of the Common Core State Standards for Mathematical Practice. The authors discuss the promising results and implications for practice and future research for teaching algebra to secondary students with mathematics difficulties.

*Effects of Enhanced Anchored Instruction on Skills Aligned to Common Core Math Standards* by B. A. Bottge, University of Kentucky, and S.-J. Cho, Vanderbilt University, examines the differences to responses and the nature of student errors on problem based assessment items for students with difficulties in mathematics who were randomly assigned to either the Enhanced Anchor Instruction or the Business as Usual condition. The authors explain the types of student errors on the problem solving measures and discuss the findings relative to the Common Core State Standards Initiative.

*One More Time: The Need for More Mathematical Problem Solving and What Research Says About It* by J. Woodward, focuses on mathematical problem solving and recommendations for practice for educators and researchers. The concluding article for this special issue draws on recommendations from two recent syntheses of the literature and findings from other studies on students with learning disabilities and the Common Core State Standards Initiative. The author discusses several areas of concern with implementing certain teaching practices and offers specific recommendations for addressing the concerns with examples for support and clarification.

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