

Research on Math Their Way

Over the years we receive inquiries as to available research on *Mathematics Their Way*. The Center for Innovation in Education has not conducted any formal research studies on *Mathematics Their Way*. However, you may wish to contact the following people who have completed postgraduate research on the topic. Two of the papers listed below were completed by Center instructors. Jane Douglas is a Math Their Way instructor from Wisconsin whose email address is: jmdouglas@charter.net. Mary Griffith is a Math a Way of Thinking instructor from Washington whose email address is: craiger7@ix.netcom.com. Please note that Karen Hutchinson and Terry Bayard Joyner completed the most recent research on this list.

Douglas, Jane M., (1989). *A Textbook Based Math Curriculum Versus Math Their Way: A Comparison Study*. (Masters Thesis, Center Graduate College, Saratoga, California). (Ms. Douglas' address: 4517 McBride Drive, Milton, WI 53563).

Gimmestad, Beverly J. and Stavros, Shirley R., (1991). *A Comparative Evaluation of Mathematics Their Way Using First Grade Classes*. (Ms. Gimmestad: Department of Mathematics, Michigan Technological University, Houghton, Michigan, 49931. Ms. Stavros: Department of Mathematics and Statistics, St. Cloud State University, St. Cloud, Minnesota, 56301-4498.

Griffith, Mary L. (1988). *Effects of Manipulative Based Mathematics Instruction on the Achievement of Intermediate Elementary Students*. (Masters Thesis, College of Education, Whitworth College). (Ms. Griffith's address: 2014 W. First, Spokane, Washington, 99204)

Hutchinson, Karen. (1998). *Action Research using Math Their Way*. (Action Research Project in the classroom). (Ms. Hutchinson's address is: 1902 Robert E. Lee, Killeen, TX 76543). Email: ehutchison@hotmail.com.

Jarolin, Rebecca. (1987). *A Study of the Effect of Using Mathematics Their Way (A Manipulative Program) on Learning First Grade Math Concepts*. (Masters Thesis, Foster G. McGaw Graduate School of National College of Education, Illinois). (Ms. Jarolin's address: 325 A Georgetown Court, Bloomingdale, Illinois, 60108).

Joyner, Terry Bayard. (1998). *Mathematics Their Way and Teachers' Stages of Concern*. (Doctoral Thesis). (Dr. Joyner's address: Colonial School District 318 E. Basin Road, New Castle, DE, 19720). Work: (302) 323-2753.

Slakey, Margaret. (1984). *Comparison of Mathematical Achievement of Children Using Mathematics Their Way, A Manipulative-based Program with That of Children Using a Traditional Paper-and-Pencil Based Program*. (Masters Thesis, University of California, Berkeley). (Ms. Slakey's address: 38 Blackford Court, Oakland, California, 94611).

Uecker, Milton. (1987). *Traditional vs. Activity-Centered Kindergarten and First Grade Mathematics Instruction: The Effect on Arithmetic and Problem-Solving Abilities of First Graders*. (Doctoral Thesis, Faculty of the Curry School of Education, University of Virginia). (Dr. Uecker's address: Director of Curriculum and Instruction, Norfolk Christian Schools, 255 Thole St., Norfolk, Virginia, 23505).

Teachers who use *Mathematics Their Way* and *Mathematics a Way of Thinking* in their classrooms are able to see growth in understanding take place, which cannot be adequately measured by standardized tests. Teachers see attitudinal changes in students about the subject of math. It is not uncommon for teachers and parents to express their own personal discomfort with mathematics and rely more on procedural memorization. Once teachers have taken our courses, they often come away with a better understanding of mathematics and belief in the Center's philosophy of teaching the way children learn. The Center sees its role as that of supporting and encouraging teachers who are looking for alternatives to traditional teaching methods. We schedule hands-on (30 hour) teacher training workshops in *Mathematics Their Way* for grades K-2, *Mathematics a Way of Thinking* for grades 3-6, *Building Mathematical Understanding* for grades 6-9, and *Making Science a Verb* for grades 1-6. The workshops are held across the U.S., Canada, and selected international locations throughout the year.

On the Center's website, there is a place you may wish to visit called the FORUM. Teachers-at-large and Math Their Way instructors post messages and continue discussions on various topics. You can use the search button and type in key words too see which discussions come up. You can also post your own questions and get responses from other teachers and instructors. The forum can be an excellent resource throughout the year. See <http://www.center.edu>.

The NAEYC (National Association for the Education of Young Children) has a revised edition (1997) of its publication entitled *Developmentally Appropriate Practice in Early Childhood Programs*. It focuses on developmentally appropriate practice in programs serving children from birth through age 8. Of special note are its sections where it outlines appropriate and inappropriate practice. Many of the examples of appropriate practice sound like they were designed with Math Their Way in mind. See <http://www.naeyc.org>.

The Center respects not only the research on brain compatible teaching practice, but also the standards developed by the NCTM (National Council of Teachers of Mathematics) in its publication, *Principles and Standards for School Mathematics* (2000 edition). See <http://www.nctm.org>.