Fostering Flexible Mathematical Thinking

Flexible mathematical thinking—the ability to generate and connect various representations of concepts—is useful in understanding mathematical structure and variation in problem solving. Of the many important reasoning habits listed in NCTM's Focus in High School Mathematics: Reasoning and Sense Making (2009, pp. 9–10), four habits complement flexible mathematical thinking:

- Applying previously learned concepts to new problem situations, adapting and extending as necessary
- Seeking and using connections across different mathematical domains, different contexts, and different representations
- Reconciling different approaches to solving the problem, including those proposed by others
- Generalizing a solution to a broader class of problems and looking for connections with other problems

The *Mathematics Teacher* Editorial Panel seeks manuscripts that depict flexible mathematical thinking in any of the following areas:

- Classroom discourse
- Curriculum design
- Assessment
- Teacher preparation
- Empowerment of *all* students, especially linguistically and culturally diverse students
- Engagement of parents, policymakers, curriculum developers, and administrators to encourage and support classroom cultures that promote flexible mathematical thinking

mathematical thinking

Manuscripts including work samples are strongly encouraged, as are manuscripts grounded in relevant research.

The MT Editorial Panel invites those interested in promoting flexible mathematical thinking to submit manuscripts for the 2012 Focus Issue. Please submit manuscripts at **mt.msubmit.net** by **May 1, 2011**. Be sure to check the box indicating that the manuscript is being submitted for the 2012 Focus Issue on Fostering Flexible Mathematical Thinking. Guidelines for the preparation of manuscripts can be obtained at www.nctm.org/mt. No author identification should appear in the manuscript's article file. If you have ideas related to this topic and would like to discuss them before sending a manuscript, please contact Albert Goetz, agoetz@nctm.org.





