



2015 Focus Issue

# Mathematical Modeling

The focus on college and career readiness and the adoption of the Common Core State Standards for Mathematics have made paramount the ability for students to construct, interpret, and use mathematical models. Students can use mathematical models to analyze, predict, and resolve issues “arising in everyday life, society, and the workplace” (CCSSI 2010, p. 7). Modeling applications span various middle-grades subjects. In science, students might use graphs and tables to model water quality over time; in social studies, students might address social justice issues by analyzing map projections for distortions of national boundaries.

Mathematical modeling can engage students in writing, using multiple representations, making conjectures, applying mathematics to real-world contexts, and assessing error. The Editorial Panel of *MTMS* invites authors to share ideas and classroom experiences with mathematical modeling in grades 5–9. *MTMS* is especially interested in manuscripts that include classroom-tested activities supported by examples of student work. Manuscripts that address one or more of the following questions are encouraged:

- What strategies support students’ development of mathematical modeling in the curriculum?

- How can professional development opportunities support inclusion of mathematical modeling in the math curriculum?
- What activities, lessons, or modules exemplify mathematical modeling as well as other mathematical practices? How do you find and choose quality tasks or lessons that involve mathematical modeling?
- How might a focus on mathematical modeling be reflected in assessment and classroom discourse?
- In what ways does mathematical modeling offer opportunities for interdisciplinary learning, possibly through teacher collaboration?
- In what ways can technology be used effectively to enhance student learning in the context of mathematical modeling?
- How can the use of mathematical modeling help develop students’ habits of mind as they work toward mathematical sophistication?

The manuscript should be no more than 2500 words, not counting references and figures. To submit manuscripts, access [mtms.msubmit.net](http://mtms.msubmit.net). On the tab titled “Keywords, Categories, Special Sections,” select the 2015 call from “Departments/Calls.” The due date is **January 6, 2014**.



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