

# CALL FOR MANUSCRIPTS FOR THE 2011 FOCUS ISSUE the value of “Why?”

Young children incessantly ask, “Why?” They learn to make sense of their world through exploration, experimentation, questioning, and reasoning.

School learning environments, however, have been criticized for inhibiting children’s sense making. In mathematics, this is apparent in expressions such as, “Ours is not to reason why—just invert and multiply.”

Slowly, children’s inquisitiveness can be lost, and “Why?” questions all but disappear. How can we continue to nurture children’s natural curiosity about mathematics throughout their childhood years and foster the habits of mind that value “Why?” questions?

The *Teaching Children Mathematics* Editorial Panel is seeking articles for a special Focus issue on children’s mathematical reasoning. We encourage articles that provide classroom-tested ideas, insight into children’s reasoning in action, challenging issues that are wrestled with in practice, or findings from research. The following topics and questions are intended to guide—not limit—authors in addressing one or more aspects of children’s mathematical reasoning.

## WHY FOCUS ON “WHY?”

- What is the role and value of promoting reasoning and proof in elementary school mathematics classrooms, and how does current research support these ideas?
- What is the nature of children’s mathematical reasoning? What forms of reasoning are relevant for children?
- How do physical, visual, and conceptual tools and representations facilitate reasoning?
- Which claims, conjectures, justifications, and generalizations are important across the content areas?
- How do we ensure that all children are held to the same high expectations for mathematical reasoning and sense making?

## WHAT DOES REASONING LOOK LIKE IN ACTION?

- How can teachers capitalize on those teachable moments when children ask, “Why?”
- Which tasks prompt reasoning about patterns, structures, and regularities?
- Which activities, games, and technology promote different forms of mathematical reasoning?
- Which questions, lesson structures, and classroom norms encourage children to develop, investigate, and evaluate predictions, conjectures, and arguments?
- What characterizes mathematics classroom environments that are conducive to developing reasoning, sense making, and risk taking?
- What role do teachers take in prompting, supporting,

and sustaining a culture of reasoning and equity through whole-class, small-group, and individual activities?

- How are errors, mistakes, and flawed reasoning best addressed?
- Which aspects of teacher knowledge are necessary for engaging with and supporting students’ mathematical reasoning?
- How can preservice and in-service teachers be supported to engage more fully with students’ mathematical reasoning?

## HOW CAN ASSESSMENT SUPPORT REASONING?

- What are the challenges in assessing students’ mathematical reasoning?
- How can students be encouraged to communicate their mathematical reasoning in a variety of forms and learn to leave clear trails of their mathematical work?
- How can school districts’ assessment policies be negotiated in order to offer students sufficient opportunities to reason with mathematics?

Limit your manuscript to 2500 words excluding references and figures; include figures and photographs at the end.

On the cover page, state clearly that the manuscript is being submitted for the October 2011 *TCM* Focus issue on “the value of ‘Why?’” Author identification should appear on the cover page only.

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