

What Makes Ideas Stick?

Teachers design lessons to engage students with big ideas of mathematics. Does engagement necessarily imply that students will retain what we hope they will retain? How do students in your classes develop an appreciation for mathematical big ideas and the relationships among them? What lesson characteristics seem to promote the permanence of concepts in the minds of your students?

What works? Write about your big ideas—*big* big ideas or *small* big ideas—that help make mathematics stick. Following are a few suggestive, but not prescriptive, prompts:

- Great lessons stay in the minds of students. What lessons do you have that engage your students in exciting and meaningful mathematical experiences?
- Some ideas reside with students because of the instruction that introduces them more than the inherent mathematics. Do you start with an intriguing idea and then develop it throughout class, or do the big ideas build in the background?
- Students often surprise us with their own “aha!” moments, usually as they experience the epiphany of an unexpected connection. What are these moments, and how do we foster these connections and epiphanies?
- How do reasoning and sense making evolve to foster mathematical memory? What are high-leverage practices that help ideas stick?
- What kinds of challenges do big mathematical ideas face in the current political climate?
- How can technology impact the “stickiness” of ideas?
- How do we ensure that students internalize the mathematics that they need to be successful in subsequent courses? How do they develop the mathematical sophistication to adapt to an ever-changing world?

Contribute to this special *MT* issue by highlighting mathematical and pedagogical big ideas from your own teaching. Show us what helps students retain ideas and what leads them to an appreciation of broad concepts.

The *MT* Editorial Panel invites submissions for the 2014 Focus Issue. Please submit manuscripts at **mt.msubmit.net** by **May 1, 2013**. Be sure to check the box indicating that this manuscript is for the 2014 Focus Issue entitled What Makes Ideas Stick? Guidelines for the preparation of manuscripts can be found at www.nctm.org/publications/content.aspx?id=22602. 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.

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