

Bibliography of studies about and related to DMI

References about DMI

Various studies and reports have addressed different issues related to DMI.

What is the impact of DMI on teacher learning?

Bell, C., Wilson, S.M., Higgins, T., & McCoach, D.B. (2008). Measuring the effects of professional development: The case of Developing Mathematical Ideas.
http://www.mathleadership.org/upload/docs/13_0.pdf

Cohen, S. (2004). *Teachers' Professional Development and the Elementary Mathematics Classroom: Bringing Understandings to Light*. Hillsdale, N.J.: Lawrence Erlbaum Associates.

Davenport, L. (2000). Elementary mathematics curricula as a tool for mathematics education reform: Challenges of implementation and implications for professional development. *Center for the Development of Teaching Paper Series*. Newton, MA: Education Development Center.

What are the principles that guided the development of the DMI materials?

Goldsmith, L., and Schifter, D. (1997). Understanding teachers in transition: Characteristics of a model for the development of mathematics teaching. In E. Fennema and B.S. Nelson (Eds.) *Mathematics Teachers in Transition*. Hillsdale, N.J.: Lawrence Erlbaum Associates.

Russell, S.J., Schifter, D., Bastable, V., Yaffee, L., Lester, J., & Cohen, S. (December, 1995). Learning mathematics while teaching. In B. Nelson, (Ed.) *Inquiry and the Development of Teaching: Issues in the Transformation of Mathematics Teaching*, (pp. 9-16). Newton, MA: Center for the Development of Teaching Paper Series, Education Development Center.

Schifter, D. (1998). Learning mathematics for teaching: From the teachers' seminar to the classroom. *Journal for Mathematics Teacher Education*, 1(1), 55-87.

Schifter, D. (2001). Learning to see the invisible: What skills and knowledge are needed to engage with students' mathematical ideas? In T. Wood, B.S. Nelson, J. Warfield (Eds.). *Beyond Classical Pedagogy: Teaching Elementary School Mathematics*, (pp. 109-134). Mahwah, NJ: Lawrence Erlbaum Associates.

Schifter, D. (December, 1995). Teachers' changing conceptions of the nature of mathematics: Enactment in the classroom. In B. Nelson, (Ed.) *Inquiry and the Development of Teaching: Issues in the Transformation of Mathematics Teaching*, 17-26. Newton, MA: Center for the Development of Teaching Paper Series, Education Development Center.

Schifter, D. & Bastable, V. (2008). *Developing Mathematical Ideas: A Program for Teacher Learning*. In M.S. Smith & S.N. Friel (Eds.), *Cases in Mathematics Teacher Education: Tools for Developing Knowledge Needed for Teaching*, pp. 35-46. San Diego, CA: Association of Mathematics Teacher Educators.

Schifter, D. & Fosnot, C.T. (1993). *Reconstructing Mathematics Education: Stories of Teachers Meeting the Challenge of Reform*. New York: Teachers College Press.

Schifter, D., Russell, S.J., & Bastable, V. (1999). Teaching to the Big Ideas. In M.Z. Solomon (Ed.). *The Diagnostic Teacher: Constructing New Approaches to Professional Development*, (pp. 22-47). New York: Teachers College Press.

How do we understand the role of facilitator?

Remillard, J.T. & Geist, P.K. (2002). Supporting teachers' professional learning by navigating openings in the curriculum. *Journal of Mathematics Teacher Education*, 5(1), pp. 7-34.

Russell, S.J. (1998). A case of classroom teachers becoming teacher educators: The challenge of teaching peers. http://www.mathleadership.org/upload/docs/14_0.pdf

Schifter, D. & Lester, J.B. (2005). Active Facilitation: What Do Facilitators Need to Know and How Might They Learn It?, *The Journal of Mathematics and Science: Collaborative Explorations*, Volume 8, 97-118.

What are parents' concerns and questions about mathematics education and can a DMI seminar address them?

Morse, A. & Wagner, P. (1998) Learning to listen: Lessons from a mathematics seminar for parents. *Teaching Children Mathematics*, 46), 360-364, 375.

DMI cases are frequently used to illustrate conceptual issues in papers about K-6 mathematics teaching and learning.

Bastable, V. & Schifter, D. (2007). Classroom stories: Examples of elementary students engaged in early algebra. In J. Kaput, D. Carraher, & M. Blanton (Eds.). *Algebra in the early grades*. Mahwah, NJ: Lawrence Erlbaum Associates.

Monk, S. (2003). Representation in school mathematics: Learning to graph and graphing to learn. In J. Kilpatrick, W. G. Martin, & D. Schifter (Eds.), *A Research Companion to Principles and Standards for School Mathematics* (pp. 250-262). Reston, VA: National Council of Teachers of Mathematics.

Russell, S.J., Schifter, D., & Bastable, V. (January/February, 2006). Is it 2 more or 2 less? Algebra in the elementary classroom. *Connect*, Volume 19, Issue 3, 1-3.

Schifter, D. (1999). Learning Geometry: Some Insights Drawn from Teacher Writing. *Teaching Children Mathematics*, 5(6), 360-365.

Schifter, D. (1999). Reasoning about Operations: Early Algebraic Thinking, Grades K

- through 6. In L. Stiff and F. Curio, (Eds.) *Mathematical Reasoning, K-12: 1999 NCTM Yearbook*. (pp. 62-81). Reston, VA: National Council of Teachers of Mathematics.
- Schifter, D. (2007). What's right about looking at what's wrong? *Educational Leadership*. Vol. 65, No. 3, 22-27.
- Schifter, D. (2009). Representation-based proof in the elementary grades. In D.A. Stylianou, M. Blanton, & E. Knuth (Eds), *Teaching and learning proof across the grades*. Oxford: Routledge – Taylor Francis and National Council of Teachers of Mathematics.
- Schifter, D. & Riddle, M. (2004) Teachers become investigators of students' ideas about math. *Journal of Staff Development*, 25(4), pp. 28-32.
- Schifter, D. & Szymaszek, J. (2003). Structuring a Rectangle: Teachers Write to Learn about Their Students' Thinking. In D. Clements and G. Bright (Eds.) *Learning and Teaching Measurement: 2003 NCTM Yearbook* (pp. 143-156). Reston, VA: National Council of Teachers of Mathematics.
- Schifter, D., & O'Brien, D. (1997). Interpreting the Standards: Translating principles into practice. *Teaching Children Mathematics*, 4(4), pp.202-205.
- Schifter, D., Bastable, V., Russell, S.J., Riddle, M. & Seyferth, L. (2008). Algebra in the K-5 Classroom: Learning Opportunities for Students and Teachers. In Carol Greenes (Ed.), *Algebra and Algebraic Thinking in School Mathematics, 2008 NCTM Yearbook*, pp. 263-277. Reston, VA: NCTM.
- Schifter, D., Monk, G.S., Russell, S.J., & Bastable, V. (2007). Early Algebra: What Does Understanding the Laws of Arithmetic Mean in the Elementary Grades? In J. Kaput, D. Carraher, & M. Blanton (Eds.) *Algebra in the early grades*. Mahwah, NJ: Lawrence Erlbaum Associates.