

References

- Basile, C. (1999). Collecting data outdoors: Making connections to the real world. *Teaching Children Mathematics*, 6 (1), 8–12.
- Black, P. and Wiliam, D. (October, 1998). Inside the black box: Raising standards through classroom assessments. *Phi Delta Kappan*, 139–148.
- Bransford, J.D., Brown, A.L., and Cocking, R.R. (Eds.) (1999). *How people learn: Brain, mind, experience, and school*. Washington, D.C.: National Academy Press.
- Bransford, J.D., Brown, A.L., and Cocking, R.R. (Eds.) (1999). *How people learn: Educating our preschoolers*. Washington, D.C.: National Academy Press.
- Carpenter, T. P., Fennema, E., Peterson, P.L., Chiang, C. P., and Loef, M. (1989). Using knowledge of children's mathematics thinking in classroom teaching: An experimental study. *American Educational Research Journal*, 26, 449–531.
- Carpenter, T.P. and Moser, J.M. (1983). The acquisition of addition and subtraction concepts. In R. A. Lesh and M. Landau (Eds.). *Acquisition of mathematics concepts and processes* (pp. 7–44). Orlando, FL: Academic Press.
- Cathcart, W. G., Pothier, Y. M., Vance, J. H., and Bezuk, N. S. (2003). *Learning mathematics in elementary and middle schools*. Upper Saddle River, NJ: Merrill Prentice Hall.
- Clements, D. H. and Battista, M. T. (1992). Geometry and spatial reasoning. In D. A. Grouws (Ed.), *Handbook of research on mathematics teaching and learning* (pp. 420–464). New York; Macmillan.
- Cobb, P., Wood, T., and Yackel, E. (1994) Discourse, mathematical thinking, and classroom practice. In *Contexts for Learning: Sociocultural Dynamics in Children's Development*. New York: Oxford University Press.
- Cobb, P., Wood, T., Yackel, E., Nicholls, J., Wheatley, G., Trigatti, B., and Perlwitz, M. (1991). Assessment of a problem-centered second grade mathematics project. *Journal for Research in Mathematics Education*, 22, 3–29.
- Fennell, F. (1990). Implementing the standards: Probability. *Arithmetic Teacher*, 38 (4), 18–22.
- Fennema, E., Carpenter, T. P., Franke, M. L., Levi, L., Jacobs, V.R., and Empson, S. B. (1996). A longitudinal study of learning to use children's thinking in mathematics instruction. *Journal of Research in Mathematics Education*, 27, 403–434.
- Fennema, E., Carpenter, T. P., Levi, L., Franke, M. L., and Empson, S. (1997). *Cognitively guided instruction. Professional development in primary mathematics*. Madison: Wisconsin Center for Education Research.
- Friel, S. N., Curcio, F. R., and Bright, G. W. (2001). Making sense of graphs: Critical factors influencing comprehension and instructional implications. *Journal for Research in Mathematics Education*, 32, 124–158.
- Garofalo, J., Lester, F. K. (1985). Metacognition, cognitive monitoring, and mathematical performance. *Journal for Research in Mathematics Education*, 16, 163–176.

- Greer, B. (1992). Multiplication and division as models of situations. In D. A. Grouws (Ed.), *Handbook of research on mathematics teaching and learning* (pp. 276–295). Old Tappan, NJ: Macmillan.
- Gutstein, E, and Romberg, T.A. (1995). Teaching children to add and subtract. *Journal of Mathematical Behavior*, 14, 283–324.
- Hatano, G., and Inagaki, K. (1991). Sharing cognition through collective comprehension activity. In L.B. Resnick, J. M. Levine, and S.D. Teasley (Eds.), *Perspectives on Socially Shared Cognition* (pp. 331–348). Washington, D.C.: American Psychological Association.
- Hiebert, J. and Carpenter, T.P. (1992). Learning and teaching with understanding. *Handbook on Research of Mathematics Teaching and Learning*, 65–97.
- Hiebert, J. (1990). The role of routine procedures in the development of mathematical competence. In T.J. Cooney and C.R. Hirsch (Eds.), *Teaching and learning mathematics in the 1990s* (1990 Yearbook of the National Council of Teachers of Mathematics, pp. 31–40). Reston, VA: NCTM.
- Hiebert, J., and Wearne, D. (1993) Instructional tasks, classroom discourse, and student learning in second grade. *American Educational Research Journal*, 30, 395–425.
- Knuth, J. (1987). Representation systems and mathematics. In C. Janvier (Ed.), *Problems of representation in the teaching and learning of mathematics* (pp. 19–26). Hillsdale, NJ: Erlbaum.
- Konold, C. (1991). Understanding students' beliefs about probability. In E. von Glasersfeld (Ed.), *Radical constructivism in mathematics education* (pp. 139–156). Holland: Kluwer.
- Lampert, M. (Spring, 1990). When the problem is not the question and the solution is not the answer: Mathematical knowing and teaching. *American Educational Research Journal*, 27 (1), 29–63.
- Ma, L. (1999). *Knowing and teaching elementary mathematics*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Miller, K. F. and Parades, D. R. (1996). On the shoulders of giants: Cultural tools and mathematical development. In R. J. Sternberg and T. Ben-Zeev (Eds.), *The nature of mathematical thinking*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Miura et al. (1994). Comparisons of children's cognitive representation of number: China, France, Japan, Korea, Sweden, and the United States. *International Journal of Behavioral Development*, 17, 401–411.
- Monroe, E. E., and Nelson, M. N. (2000). Say “yes” to metric measure. *Science and Children*, 38, 20–23.
- National Assessment of Educational Progress. (2001). *The nation's report card: Mathematics 2000*. National Center for Education Statistics.
- National Assessment Governing Board. (2000). *Mathematics framework for the 1996 and 2000 National assessment of educational progress*. Washington, D.C.: U.S. Department of Education.

- National Council Teachers of Mathematics. (2000). *Principles and standards for school mathematics*. Reston, VA: NCTM.
- National Research Council. (2001). *Adding it up: Helping children learn mathematics*. J. Kilpatrick, J. Swafford, and B. Findell (Eds.). Mathematics Learning Study Committee, Center for Education, Division of Behavioral and Social Sciences and Education, Washington, D.C.: National Academy Press.
- Polya, G. (1957). *How to solve it*. Garden City, NY: Doubleday and Co., Inc.
- Reys, R. E., Suydam, M. N., Lindquist, M. M., and Smith, N. L. (1999). *Helping children learn mathematics*. New York: John Wiley & Sons, Inc.
- Richardson, K. (1997). Too easy for kindergarten and just right for first grade. *Teaching Children Mathematics*, 3.
- Russell, S. J. and Friel, S. N. (1989). Collecting and analyzing real data in the elementary school classroom. In P. R. Trafton (Ed.), *New directions for elementary school mathematics: 1989 yearbook* (pp. 134-148). Reston, VA: National Council of Teachers of Mathematics.
- Schoenfeld, A. H. (1985). *Mathematical problem solving*. Orlando, FL.: Academic Press.
- Siegler, R. S. (in press) Implications for cognitive science research for mathematics education. In J. Kilpatrick, W. G. Martin, and D. E. Schifter (Eds.), *A research companion to principles and standards for school mathematics*. Reston, VA: National Council of Teachers of Mathematics.
- Smith, E. (2003) Patterns, functions, and algebra. In J. Kilpatrick, W. G. Martin, and D. Schifter (Eds.), *A Research Companion to NCTM's Standards*. Reston, VA.: NCTM.
- Steen. L. (1990). Pattern. In L. Steen (Ed.), *On the shoulders of giants: New approaches to accuracy*. Washington, D.C.: National Academy Press.
- Van de Walle, J. A. (2001). *Elementary and middle school mathematics: Teaching developmentally*. New York, NY: Addison Wesley Longman, Inc.
- Van Hiele, P. M. (1959/1985). The child's thought and geometry. In D. Fuys, D. Geddes, and R. Tischler (Eds.), *English translation of selected writings of Dina Van Hiele-Geidof and Pierre M. Van Hiele* (pp. 243-252). Brooklyn, NY: Brooklyn College, School of Education. (Eric Document Reproduction Service No. 289697).
- Webb, N. (1992) Assessment of students' knowledge of mathematics steps toward a theory. *Handbook on Research of Mathematics Teaching and Learning*, 661-683.
- Zawojewski, J. S. and Heckman, D. S. (1997). What do students know about data analysis, statistics, and probability? In P. A. Kenney and E. A. Silver (Eds.), *Results from the Sixth Mathematics Assessment of the National Assessment of Educational Progress* (pp. 195-223). Reston: VA: National Council of Teachers of Mathematics.