

Representing and Comparing Fractions in Elementary Mathematics Teaching **Facilitator Resource**

Professional readings

Session 1

Ball, D. L., Hill, H.C, & Bass, H. (2005). Knowing mathematics for teaching: Who knows mathematics well enough to teach third grade, and how can we decide? *American Educator*, *29*(1), pp. 14-17, 20-22, 43-46. Retrieved from https://deepblue.lib.umich.edu/handle/2027.42/65072

Session 2

Watanabe, T. (2002). Representations in Teaching and Learning Fractions. *Teaching Children Mathematics* (pp. 457-463).

Session 3

Bass, H., & Ball, D. L. (2009). Definitions and defining in mathematics and mathematics teaching. In *mod4: Using Definitions in Learning and Teaching Mathematics* (Session 2). Ann Arbor, MI: University of Michigan.

Session 4

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, DC: The National Academy Press. Available: https://www.nap.edu/download/9822

Session 6

Yoshida, M. (2005). Using lesson study to develop effective blackboard practices. In W. Iverson & M. Yoshida (Eds.), *Building our understanding of lesson study* (pp. 93-100). Philadelphia, PA: Research for Better Schools.

Session 7

Hiebert, J., Carpenter, T. P., Fennema, E., Fuson, K. C., Wearne, D., Murray, H., Olivier, A., & Human, P. (1997). The nature of classroom tasks. *Making sense: Teaching and learning mathematics with understanding* (pp. 17-27). Portsmouth, NH: Heinemann.

NCTM (1991). Standard 1: Worthwhile mathematical tasks. *Professional Standards for Teaching Mathematics*. (pp. 24-32). Reston, VA: NCTM.

Session 8

Chapin, S. H., & Johnson, A. (2006). Fractions. In T. Gordon (Ed.), *Math matters: Understanding the math you teach grades K-8* (2nd ed.) (pp.114-117). Sausalito, CA: Math Solutions Publications.



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Session 9

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. (pp. 124-129) Washington, DC: The National Academy Press. Available: https://www.nap.edu/download/9822