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The richness of children's fraction strategies.

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Summary: In this article, the authors discuss a special type of multiplication-and-division-of-fractions problem that elementary school teachers can use to promote children's understanding of fractional quantities and their relationships. These problems are accessible to students working at different levels of fraction understanding, and they can be solved without the use of standard algorithms for multiplying and dividing fractions. Encouraging children to model the quantities and relationships in the problem situation helps them build a strong foundation for understanding fractions. This special type of problem includes equal-groups situations with a whole number of groups and a fractional amount in each group. The authors call these "multiple groups problems." In the article, they discuss how multiple groups problems can be used to promote the development of children's understanding of fractional quantities and their relationships before the introduction of generalized procedures for multiplying and dividing fractions. This type of story problem is appropriate for students of any grade level who are able to model fractional quantities and link these models to a problem situation. (ERIC)

Classification: F43

Keywords: fractions; division of fractions; visualization; understanding; quantities

<http://www.nctm.org/Publications/Teaching-Children-Mathematics/2015/Vol22/Issue2/The-Richness-of-Children.s-Fraction-Strategies/>