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The role of representations in fraction addition and subtraction.

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From the text: In this article, we reflect on what we believe is involved in developing a deep understanding of fraction addition and subtraction based on our previous work as well as our current teaching experiment. In our current work with two classrooms of sixth graders, students used fraction circles to review ideas involving modeling fractions, comparing fractions, finding equivalent fractions, and acting out fraction addition and subtraction concretely without connecting to symbols. Students then worked through a series of eight additional lessons to develop the meaning of common denominators for adding and subtracting fractions, with the goal of being able to add and subtract fractions symbolically. In the rest of this article, we share our reflections on the role that representations and connections among representations play in helping students understand fraction addition and subtraction procedures.

Classification: F40 C30
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