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Abstract

In this study, we investigated how 2,544 Norwegian students in the fifth, sixth, eighth and ninth grades of different schools answered a missing addend task that required a relational understanding of the equal sign. Only 50% of the students correctly solved the task (30% in grade 5 and 80% in grade 9). We then selected the students who managed to correctly solve two tasks that did not have an explicit equal sign but required an assessment of equality. The percentage of correct answers in the missing addend task increased to 71%, but even among those students who successfully handled the concept of equality, a substantial portion did not solve the equal sign task correctly. Our results indicate that equality and the equal sign cannot be treated as equivalent concepts.

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