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The effect of online tasks for algebra on student achievement in grade 8.

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Summary: Online resources are widely used for educational purposes, such as the training of skills. For algebra education in particular, online resources are expected to contribute to skill mastery in an efficient and effective way. However, studies that underpin these claims through a randomized experiment are scarce. To experimentally investigate the effect of online tasks for algebra, sixteen teachers each taught two grade 8 algebra classes, one randomly assigned traditional teaching and the other using an online algebra environment. In total, 842 students took part in a pretest, two posttests, and a retention test. Results show that the experimental group scored slightly below the control group on these tests. The main factors involved are students' pretest scores and the schools' experience with ICT. Possible explanations include a spill-over effect and a more superficial type of learning than expected in the experimental condition. These results do not confirm the hypotheses on the effectiveness of using online resources for algebra.

Classification: H33 U73 U53
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