Encouraging sixth-grade students’ problem-solving performance by teaching through problem solving.


Summary: This teaching experiment provided students with continuous engagement in a problem-solving based instructional approach during one mathematics unit. Three sections of sixth-grade mathematics were sampled from a school in Florida, U.S.A. and one section was randomly assigned to experience teaching through problem solving. Students’ problem-solving performance and performance on a unit test were analyzed. The intervention had a positive effect on students’ problem-solving performance whereas the comparison group experienced no changes. ANCOVA analyses suggest that intervention students solved more problems on the posttest than their peers, but the comparison group outperformed the intervention group on the unit test. (ERIC)

Classification: D53

Keywords: problem solving; students’ performance

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