Enhancing pre-service teachers’ fraction knowledge through open approach instruction.

Summary: This study explores whether using the open approach instruction in teaching mathematics has a positive effect for enhancing pre-service teachers’ fraction knowledge. The test consisted of 32 items that were designed to examine pre-service teachers’ procedural and conceptual knowledge of fractions before and after receiving open approach instruction. The study was undertaken among students in four mathematics content and methods courses for the elementary school education program in a mid-western public university. The findings show that most of the teachers achieved improved learning outcomes through the open approach instruction.

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