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Cheng-Yao Lin* (cylin@siu.edu), 625 Wham Dr., Carbondale, IL 62901. *Effect of a Web-based Instruction on Preservice Teachers' Knowledge of Fraction*. Preliminary report.

This study determines whether a Web-based instruction (WBI) represents an improved method for helping preservice teachers learn fraction in procedural and conceptual knowledge. The purpose was to compare the effectiveness of Web-based instruction (WBI) with the traditional lecture in Mathematics Content and Methods for the Elementary School course. The results of this study suggest the use of a Web-based instruction (WBI) in learning fractions is more effective. When compared with the traditional, lecture-based control group methodology, the WBI treatment results were significantly more effective for procedural and conceptual knowledge of fraction. While WBI method was more effective over the duration of the instructional period, the longer term retention effects. (Received August 24, 2007)