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Comparing Korean and U.S. third grade elementary student conceptual understanding of basic multiplication facts.

Woo, Jeong-Ho (ed.) et al., Proceedings of the 31st annual conference of the International Group for the Psychology of Mathematics Education, PME, Seoul, Korea, July 8–13, 2007. Vol. 1-4. Seoul: The Korea Society of Educational Studies in Mathematics. Part 2, 161-168 (2007).

Summary: Elementary students who were currently third graders in Korea and the U.S.A. were asked to complete the Researcher-made Multiplication Questionnaire (RMQ) that contained four open-ended questions in order to examine their conceptual understanding of multiplication. The U.S. third graders provided better and more divergent definitions of multiplication than Korean students. However, Korean students created a multiplication word problem and represented it with a number sentence better than U.S. students did. Also, Korean students better identified the situations when multiplication was used in their real lives. But, Korean students lacked understanding of the different meanings of multiplication for all questions compared to the U.S. students' understanding.

Classification: F42 C32 A62

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