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Ward E Canfield* (wcanfield@nl.edu), 1827 E. Bittersweet Ln, Mount Prospect, IL 60056-1905. Korean K-12 Mathematics Education System: What Can We Learn for the Undergraduate Mathematical Preparation of Teachers in the United States? Preliminary report.

Recent international comparisons in mathematics achievement have shown Asian countries to be at the top levels in the world. Several reasons for such high achievement in mathematics in Korea have been suggested, and which highlight significant differences with the system of K-12 mathematics education in the United States. Several of these suggested reasons for high mathematics achievement in Korea, however, are not culturally bound to Korea. It is therefore hoped that cross-national research in education systems like the Korean one will reveal important insights about how to improve schools in the United States.

Especially needed in cross-national studies is research in the connection between high mathematics achievement, and the curriculum and textbooks used. Such research may reveal important aspects of mathematics achievement which will foster new ideas and research in the United States. Such research could have a significant impact on the undergraduate mathematical preparation of teachers. For this purpose I am translating recently published Korean school mathematics textbooks into English. In my presentation I will share a sample of my translation work through a lesson in a Korean elementary school mathematics textbook. (Received September 28, 2005)