

# Travis Rice, Elementary Education

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## **What teachers should know: Comparison of 4th grade mathematics in Hong Kong and the U.S.**

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The purpose of this study was to compare 4th grade mathematics teacher in Hong Kong and United States responses to teacher readiness, professional development and participation and overall teacher satisfaction. Data was gathered from the 2003 TIMSS 4th grade mathematics Teacher Questionnaire. Data results showed the United States with an overall mean score in mathematics of 518, 23 points above the international average of 495 as compared to Hong Kong with an average mean of 575, (which is 80 points above the international average and 57 points above the United States' average). A correlation of the two countries and the three data sets were ran. In the case of Hong Kong, there was a significant positive correlation between Teacher Satisfaction and Professional Development. In the case of the United States, there is a significant positive correlation between Professional Development and Teacher Readiness, and between Teacher Satisfaction and Teacher Readiness. Quantitative analyses for the three scales, Teacher Readiness, Professional Development and Teacher Satisfaction indicated significant differences between means for all three areas with the United States possessing higher averages in all three areas. Although no causal relationships can be drawn from these results without an experimental design, implications and suggestions for further research are discussed.