

**Dispositions towards science and science achievement in TIMSS 2011: A comparison of eighth graders in Hong Kong, Chinese Taipei, Japan, Korea, and Singapore**

**Abstract**

East Asian education systems have consistently been outperforming their counterparts in mathematics and science on each and every cycle of the Trends in International Mathematics and Science Study (TIMSS) ever since its inception in 1995. This study explored the predictive effects of eighth-graders' dispositions towards science on science achievement in five of the highest-performing education systems: Hong Kong, Chinese Taipei, Japan, Korea, and Singapore, which participated in the TIMSS 2011. The results of the present study indicated that eighth-graders' liking and valuing of learning science, and confidence in learning science were positively associated with their science achievement in these five education systems, except students' liking of science in Japan.