

An analysis on selected factors contributing to science and mathematics achievement among secondary school students in two SEAMEO member countries

Abstract

This paper sets out to examine critically the effects of selected factors contributing to science and mathematics achievement among 8th grade students in Malaysia and Singapore. The Trend in International Science and Mathematics Study (TIMSS) 2007 database was utilized to explore a) if there were correlations between students receiving additional support and/or gaining exposure from academic related enrichment activities at home and schools with their science and mathematics achievement and, b) How well do the knowledge/skills gained from the use of technological tools and Internet contribute towards their science and mathematics achievement among Malaysian and Singaporean Grade 8 students. The sample consists of 4,466 students from Malaysia and 4,599 students from Singapore who participated in the TIMSS 2007 assessment. This study will provide some insights on why some students perform better than others in science and mathematics by highlighting the effect of additional support and/or exposure from academic related enrichment activities at home and schools, and the knowledge/skills gained from the use of technological tools and internet on students' science and mathematics achievement.