Availability of school resources and TIMSS grade 8 students’ science achievement: a comparative study between Malaysia and Singapore

Abstract

Studies have shown that resources are crucial for improving schooling, perhaps even more so in developing countries than in economically developed countries, where adequate school structures and material resources may be taken for granted. Recent research reviews suggest that computer use continues to grow in mathematics and science instruction, and that it can positively affect students’ mathematics and science achievement. Hence, the most successful schools tend to have students that are relatively economically affluent and speak the language of the instruction. Successful schools also are likely to have better working conditions and facilities as well as more instructional materials. The ultimate goal of this study is to investigate the contribution of school resources towards the achievement in science among Malaysian and Singaporean eighth-graders. Data were obtained from 5,733 Malaysian students and 5,927 Singaporean students who participated in the TIMSS 2011.