
How do Comparative Studies of Educational Achievement Inform us About Education Quality?

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EXTENDED ABSTRACT

In the past two decades, large-scale international comparative studies of educational achievement such as Trends in International Mathematics and Science Study (TIMSS), Progress in International Reading Literacy Study (PIRLS) and Programme for International Student Assessment (PISA) have attracted much attention in the education community and beyond. These international studies purport to allow policy makers around the world to gauge the knowledge and skills of students in their own countries in comparison with those in other countries, and thus help to improve the quality of education in the participating countries. But how is this achieved? In this presentation, the results of some international comparative studies of educational achievement will be presented, and the nature and limitations of these studies will be discussed. It is argued that education quality should not be equated with ranking of student achievement in these international studies. When the results of these studies are interpreted appropriately, we can examine

education quality of the participating countries in terms of the strengths and weaknesses of students' performance in different curriculum subjects and strands within subjects, and make use of the trends of the results to examine whether changes in education policy are effective in raising education quality. However, achievements scores are just one aspect of education quality. Equity in education is another important hallmark of education quality, and data collected in these international studies can inform us about education equity in the system. In the presentation, the mathematics results of TIMSS will be utilized to examine the status of education equity in Hong Kong. Percentages of students achieving different international benchmarks; gender differences in achievement; achievement of students of different socio-economic status as measured by family income and parents' education level and jobs; and the types of schools students attend will be examined to answer the question of how equitable education provision in Hong Kong is. Finally, an important aspect of education quality, the attitudes of

students towards studying, will be examined using the TIMSS data. It is argued that in an era of life-long learning, student attitudes are as important as their academic achievement, for it is interest in studying that will motivate students to continue to learn after they have left school. In this regard, Hong Kong and other high performing countries in East Asia do not fare very well. Using their attitudes towards mathematics learning as an example, it is found that these East Asian students do not like mathematics a lot; they don't value mathematics much; and they in general have rather low confidence in learning mathematics. Seen in this light, although students in these East Asian countries achieved high scores in mathematics and other academic subjects, we cannot conclude that the education quality in these systems is high because of the negative attitudes of the students that these education systems nurture. The presentation will end by alerting to the strengths and weaknesses of these international comparative studies in informing us about, and hence improving, the education quality of a country.