Patterns in Achievement in TIMSS

National Assessment of Achievement of Students Completing Grade 8 in Year 2016 in Sri Lanka

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Contents

Executive Summary

The national assessment of learning outcomes of 2016 included administering of the Sri Lankan version of the TIMSS as well. The main objective of administering the "TIMSS" was to find out Sri Lankan students' performance in relation to internationally accepted standards. The Sri Lankan version of TIMSS was first designed in 2012. Since the same test was administered in 2014 and 2016 the present report will compare the student achievement between 2014 and 2016.

The national assessment covered the entire country and the sample was drawn to enable analysis by province, type of schools, gender and medium of instruction.

Students' performance in TIMSS is low with an all island mean score of 23.16 and an SD of 13.51. Findings further revealed that there is disparity in achievement among gender, school type and according to the medium of instruction.

Gender wise the female performance is higher than that of the males and also above the national mean, an exceptional performance among some students, both males and females could also be observed.

Medium wise, Sinhala medium student' performance is above the all island mean, while the Tamil medium students' performance is below. However, among both Sinhala and Tamil medium students there are students who have performed very well and also exceptionally well.

According to the school type 1AB schools' performance is higher than the national mean while 1C and Type 2 performances are below the national level. However, in all three school types there are students who have performed very well and a few who have performed exceptionally well.

Provincial wise Southern ranks first with Western, Sabaragamuwa, and North Western also having mean scores above the national mean value. A significant feature observed is that in spite of the low mean value there are also students who have scored very high marks. Further, even among the low performing provinces

like Eastern and Uva there are a few students who have performed exceptionally well confirming the disparity in achievement inter and intra provincial wise.

In the analysis of cognitive skills it was revealed that students' performance across all three skills – knowing, applying and reasoning appears to be similar. On the other hand, in subject content students' performance in geometry is the lowest while performance is highest in data and chance.

The comparison of achievement between 2014 and 2016 indicates a slight decrease in performance. Gender wise a decrease in performance could be seen among both males and females. On the other hand, while a slight decrease in performance could be seen in 1AB schools an increase performance could be seen in both 1C and Type 2 schools. When provincial performance is considered there is a significant increase in performance in the Southern Province while a significant decrease in performance can be seen in the Eastern Province.

An important finding is that the areas where student achievement was low in 2014, remains to be low even in 2016.

It is recommended that curriculum developers study the item analysis to identify the difficult areas for students in all three cognitive domains. Such an analysis is necessary to find out the reasons for the low performance and suggest remedial measures.