

Conclusion

6.1 Introduction

This concluding chapter will focus on key patterns in achievement unearthed through the National Assessment of Achievement of Students Completing Grade 8 in Year 2014. It presents an overall evaluation of findings in relation to various patterns identified through the study. It analyzes the key patterns recognized against the objectives of the national study. The chapter ends with a discussion on additional action to be taken at all island level to maximize more equitable provision of education.

6.2 Conclusions Based on the Findings on the National Assessment 2014

6.2.1 Achievement Level of Students

The achievement of mathematics (mean=50.87 and median=47.51) is relatively more satisfactory when compared with those of science and English language. The achievement of science (mean=41.16 and median=40.05) is lower than that of mathematics. Achievement of English language is the lowest of all three subjects with a mean of 35.23 and median of 30.05 respectively. For all three subjects, the achievement level is above 35 while the mean value for overall achievement in mathematics is above 50. This shows that at this national assessment, mathematics, despite being a difficult subject for students, has recorded the highest performance against the other two subjects.

6.2.2 Distribution of Marks in Achievement

The nature of the distribution of marks can be considered as an indicator of the performance levels of students. The overall distribution of marks of mathematics is positively skewed. Yet, this skewness is quite marginal. On the other hand, the skewness of the distribution of marks of English as well as science, which is positive, is conspicuously higher than those of the other two subjects. Nevertheless, one noticeable finding is that 1AB schools belonging to Municipal and Urban Council areas show either negatively or very low positively skewed distribution indicating somewhat satisfactory performance in all three subjects while 1C and Type 2 schools and schools belonging to Pradeshiya Sabha areas show a highly positively skewed score distribution which indicate an unsatisfactory achievement pattern. When examining the provincial marks, the same trend can be seen. Yet, in some provinces such as Western and Southern, this skewness is negligibly low showing a satisfactory pattern of achievement.

6.2.3 Disparities in Achievement

Disparities in achievement are visible among students belonging to different groups. Achievement of students who study in 1AB schools is higher in all three subjects tested than that of 1C and Type 2 schools. The lowest performance is seen in students attending Type 2 schools. However, the difference between the performance level of students attending 1C and Type2 schools is not significantly high. Performance of students studying in 1AB schools is substantially high when compared with the other two types of schools. This trend can be seen in all the provinces. This is an indication that there can be distinct factors common to both 1C and Type 2 schools affecting their overall performance.

Gender has also played a notable role in terms of performance in all three subjects in the national assessment. The performance of girls is higher than that of boys. This phenomenon was found in previous studies conducted by the NEREC as well.

Medium of instruction is yet another factor that has affected the achievement of students. Students studying in Sinhala medium show higher achievement levels than

those who study in Tamil medium. Once again this can be observed in the achievement of all three subjects tested in the current study.

However, one noticeable phenomenon is that though these two groups use different languages of instruction, these languages are primarily their mother tongues. Therefore, one may argue that the discrepancies of achievement may not have been caused by the medium of instruction alone. There can be different factors that play an influential role on achievement concerning this phenomenon. Further investigations to uncover why this phenomenon recurs in every national assessment should follow.

The location of the school where one learns, according to this study (and in previous studies undertaken by the NEREC too), has also acted as a key factor on the achievement of students. The study reveals that students attending schools in Municipal Council areas show the highest achievement while those who study in schools located in Pradeshiya Sabha areas display the lowest. Again this propensity is seen in all three subjects which were tested. As mentioned previously, same disparities were identified in previous NEREC studies conducted for Grade 4 and 8. When the data were analyzed according to rural urban categorization, performance of students belonging to urban areas is higher than that of rural areas.

6.2.4 Achievement of Competencies

In the present national assessment, in determining the achievement, competencies and competency levels were assessed using only questions that require written answers. Consequently, it was not possible to test some competencies. For example, certain competencies related to ‘speaking skill’ in English language were not possible to be assessed. Therefore, based on the written responses to the questions in the test papers in all three papers, the achievement of the students was measured. The study revealed that the majority of students have not been able to display satisfactory achievement of the competency levels expected to be achieved by them in the said subjects. This development is seen in all three subjects but it is particularly poignant in English language where the achievement of competency levels associated with questions concerning writing tasks is not desirable. Yet, in mathematics nearly half of the

competency levels assessed through the test have been achieved by the majority of the students.

6.2.5 Achievement at Provincial Level

Analysis of performance at provincial level shows that Western, Southern and Sabaragamuwa Provinces have taken the 1st, 2nd and 3rd places in the achievement of mathematics respectively, while the central province has achieved the lowest according to the mean value. However, mean value of the achievement of students in mathematics in all provinces is above 44.96 and below 55.49. This suggests that the achievement level of students in mathematics somewhat satisfactory.

With regard to science, Southern, Sabaragamuwa and Western Provinces have taken the 1st, 2nd and 3rd places in terms of achievement while the Northern Province has got the last in terms of rankings. However, the 1st, 2nd and 3rd places have once again been obtained by Western, Southern and Sabaragamuwa Provinces despite different orders of ranking for science and mathematics. Achievement of science at provincial level is somewhat lower than that of mathematics. Central and Northern provinces have not been able to reach even 35 in science.

In terms of achievement of English language, the 1st, 2nd and 3rd places have gone to Western, Southern and North-Western Provinces thereby depriving Sabaragamuwa of its stay among the first three places as shown in achievement of mathematics and science mentioned above. As in mathematics, Northern Province has become the last in terms of rankings of the achievement of the English language. Another significant finding is that except Western, all the other provinces have achieved the level of 40. If we consider the mean value, all the provinces are below 35.

6.3 Suggestions for Future Action

In chapter one it was noted that the resolve of a national assessment, in addition to determining the realization of objectives of learning and how far learning outcomes have been achieved, is to convey such information to relevant authorities so that it

could lead to improvement in future student achievement thereby contributing to the decision making process. Therefore, a national assessment is undertaken with a determination to allocate resources and reform education in the light of its findings (Kellaghan, Bethell & Ross, 2012). World Bank (2011) too highlights that the findings of national assessments of learning outcomes should be better utilized for policy purposes (World Bank, 2011).

6.3.1 National Level Solutions

According to the analysis of the achievement of students in all 3 subjects, common pattern can be seen in all the provinces; low achievement level, positively skewed marks distribution, low performance of boys, low performance of Tamil medium students, low performance of students in rural areas, low performance of students belonging to 1C and Type 2 schools. Therefore, remedial measures should be taken at national level rather than at provincial level.

6.3.2 Provision of Equal Educational Opportunities

The study shows that the overall achievement in all subjects at all island level is not satisfactory. This proves that this low achievement is predominantly a national issue and not particularly a provincial one. It is, therefore, suggested that this phenomenon should be addressed at a national level rather than at provincial level. Hence, priority should be given to common factors associated with achievement of learning outcomes. In this regard, action pertaining to following areas is suggested.

6.3.3 Quality Development of Teachers

Increased achievement levels of students are the result of increased quality in teaching. In this respect, the role the teachers play in the teaching learning process is unmistakably important. Attention must be paid to various training requirements of teachers irrespective of the type of appointment they have. It is vital to observe whether the teachers are equipped with necessary skills to handle the competency-based curriculum in use.

6.3.4 Supervision and Monitoring

For smooth functioning of proper guidance to students, a continuous mechanism to monitor and supervise the teaching learning process at both national and provincial levels is required. This can ensure that what should be applied to maximize the teaching learning is actually taking place within the classroom and elsewhere as well.

6.3.5 Revisiting the Curriculum

It is well-known that the subject contents in the Sri Lankan secondary school curriculum are heavier than those in the curricular of some of well developed countries such as Finland and Denmark whose educational achievement tops the world rankings. It will be noteworthy to examine the suitability and thereby the mastery of the contents in given syllabi while identifying proper delivery methods of the same.

6.3.6 Incentive Program for Teachers

Incentive programs are good motivators to get the best performances of teachers. China in preparing her students for the 21st century rewards the teachers who produce outstanding performances of students (Asia Society, 2005). This may be difficult depending on the context due to various reasons. Yet, it will be important to explore some program to reward teachers who bring about excellent results which eventually contribute to achievement of students.

6.3.7 Low-Stakes Testing

Another possible reason for low achievement could be the particular grade (in this case Grade 8) at which the national assessment is conducted. Furthermore, the results are particularly used by policy makers and teachers. At this grade students are not preparing for a national or a competitive examination and as such they may not be using their maximum strength to sit for standardized tests. The assessment was conducted after the final day of the 3rd term test of the year 2014. Students are aware that this kind of testing does not provide them with either a certificate or a grade. Thus, this feeling of relaxation alone can act as a barrier for them to display their maximum performance.

6.3.8 Gender Disparity

As noticed in the previous chapters, the achievement of girls is higher than that of boys in all three subjects. This is a positive feature in terms of gender equity. Girls have surpassed boys in terms of achievement of learning outcomes. But, it is needed to find out why boys' performance is less than that of girls. The reason for low achievement by boys may be found in the teaching-learning process adopted by teachers. It is possible that this process may suit well for girls but boys. On the other hand, the assessment mechanisms could be more favorable for girls than boys. Furthermore, the attitude of boys towards education may have changed over the years and they may not be pleased with the curriculum, and the knowledge and skills promoted by it. Their thinking towards education may have taken a revolutionary turn where they question the relevance of cleverness expected to be achieved through school education to a competitive labor market. Whatever the case may be, further investigations in order to determine why boys' performance less must be conducted.

6.3.9 The Question of Medium

Performance of students in Tamil medium is lower in all three subjects. There can be a number of reasons related to this phenomenon. Years of disruption to continuous general education due to various reasons such as war and destruction particularly in the North and the East could hold back smooth functioning of learning. Thus one may say there can be social and cultural factors which can affect general achievement levels of such students. This needs further investigation.

6.3.10 Revisiting Competencies

The national assessment in 2014 shows that the percentages of achievement of all competencies in general are low. In English, achievement of competency levels is below basic level. A comprehensive study examining the competency levels and the tasks attached to each competency must be carried out. The achievement of higher order cognitive abilities cannot be viewed as satisfactory. The teachers should be made aware of the need to develop higher order cognitive skills in problem solving in mathematics

and application of proper use of grammar in the English language. In English language, competencies related to the skill 'writing' have been achieved by a very small percentage of students. As suggested elsewhere, programs to compensate the training requirements of teachers so that they will be better equipped with most effective methodologies to teach the specific competencies must be introduced.