Chapter Seven

Conclusion and the Way Forward

7.1   Introduction

The purpose of this chapter is to discuss the main patterns in learning outcomes identified through the National Assessment 2015. This chapter has three main objectives.

1. Summarize the findings in relation to the patterns and trends observed.
2. Analyze the main patterns observed, in the light of the main objectives of a national assessment.
3. Identify further measures to provide opportunities to achieve 'education for all'.

7.2   Patterns and trends identified in the achievement of learning outcomes -2015

7.2.1 All island performance

Patterns in performance in Sinhala

The overall performance in First Language differs according to the two languages. The all island mean value for the Sinhala language is 64.47. Disparity in achievement prevails with approximately 13.99% of students scoring below 40% and 19.52% of students scoring between 80-89 marks. However, there are also a few outliers- those whose marks are very low compared to others.

Trends in achievement - Sinhala

When the performance in the Sinhala language in 2013 is compared with that of 2015 the mean value has decreased from 64.56 - 64.47. This minor drop as shown in chapter 3 is not significant. However, it is important to identify the possible reasons for this decline.

In 2015 the percentage of students who has scored below 40 marks has dropped from 15.30 to 13.99. On the other hand, the percentage of students who has scored between 80–100 has also dropped from 29.40 to 27.24. This drop in the high performers has impacted on the mean value.

Patterns in performance - Tamil language

The all island mean value for the Tamil language at National level is 61.57. Disparity in achievement prevails with approximately 22.62% of students scoring below 40% and 19.65% of students scoring between 80-89 marks and another 13.72% scoring between 90-100 marks. Therefore, student heterogeneity is greater in the Tamil as a first language performance.

Trends in Tamil language performance

There is an increase in student performance in the year 2015. This increase is due to the percentage of high achievers being increased and the percentage of low achievers being decreased. The percentage of high achievers belonging to the class intervals 50-59 to 90-100 has increased. On the other hand, the percentage of students belonging to the class intervals 0-9 up to 30-39 has decreased. This trend has resulted in an increase in the all island mean value from 58.28 to 61.57.

Patterns in performance - English language

For the second language English the national level mean is 53.53. Even though the overall achievement in English language is satisfactory, there is wide disparity in achievement resulting in a SD of 25.13 There is a high percentage of students with low marks. At the same time those who have scored high marks are also relatively high. Thirty six percent of the students has scored less than the pass mark of 40.

On the other hand, 13.93% has scored between 70-79 percent.

Trends in English language performance

Comparison of performance of students in 2013 and 2015 indicates an improvement. In the year 2015 the number of students who has scored high marks has increased. Even

though still there are two groups of high and low achievers those who have obtained low marks have decreased.

Patterns in performance - mathematics

When the achievement in mathematics is considered the national level mean is 62.25 Disparity in achievement prevails with approximately 15.67% of students scoring below 40% and 46% of students scoring above 70%. However, the highest number of students falls within the mark range of 80-89.

Therefore, it could be concluded that even though the overall performance in all subjects is satisfactory, there is disparity in all island achievement in all subjects.

Trends in achievement

There is an improvement in students' achievement in the year 2015. As discussed in chapter 6, the percentage of low achievers has decreased and the percentage of high achievers has increased. This has resulted in an increase in the mean value from 60.32 to 62.25

7.2.2 Provincial wise performance and trends

The findings of the present study indicate that there are variations in provincial wise achievement in all three subjects.

Patterns in achievement in First Language - Sinhala

Achievement wise the provinces can be clustered into three categories in relation to the performance in the Sinhala language. North Western, Sabaragamuwa and Southern, with mean scores above the national mean. Northern, and North Central cluster in the middle slightly below the national mean.

Western, Uva, Central and Eastern are the lowest performing provinces and are below the national mean. Disparity of marks within a province is highest in the Western Province. In the Northern Province the disparity of marks is less. Therefore, achievement is more homogeneous within the province.

Trends in achievement

The performance in the different provinces have fluctuated. While in four provinces the achievements have declined slightly in North Central and Uva there is a slight increase in achievement. On the other hand, in the Northern and Eastern Provinces there is a marked increase in achievement and these changes are significant. The reason for this trend as explained in chapter 3 could be due to the increase in high achievers. In the Northern Province those who scored above 50% has increased more than 100% (36%-78.90%). On the other hand, in the Eastern Province also there is a 10% increase (62.70–72.08%). However, in the other provinces the increase has been by 2 or less percentage.

Patterns in achievement in First Language - Tamil

According to the achievement in Tamil language also the provinces fall into three categories North Central, Sabaragamuwa, Central, Northern and Western with mean scores above the national mean (61.57) fall into category one. Eastern, North Western and Uva Provinces with mean scores above 58 cluster in the middle. Southern Province with a mean score below 50 fall into category three. Disparity of marks within a province is the highest in the Southern Province. Disparity is also high in Sabaragamuwa and Uva Provinces. On the other hand, in Western and Central Provinces the disparity of marks is less. Therefore, in these provinces achievement is more homogeneous within the province.

Trends in achievement

In all provinces except in the Eastern Province student achievement in 2015 has increased. While the decrease in the Eastern Province (.91) is very slight the increase in the North Central and Southern is quite high and significant. While the increase in the Southern Province is 24.20% in the North Central Province it is 13.43%. These increases have contributed positively to increase the all island mean value. In the Southern Province the percentage of students that scored 50% or above has increased from 8.30% to 46.15%

Patterns in achievement in Second Language - English

Unlike in the performance of the other two subjects in the achievement of English language the provinces fall into two categories.

Western, Southern, Sabaragamuwa and North Western with mean scores above the national mean, fall into the higher category. Central, North Central, Northern, Eastern and Uva Provinces which are below the national mean fall into the lower category. There is variation among as well as within the provinces with respect to achievement in English. However, among the lower category there is much variation in achievement than in the higher category**.** Yet, all provinces have obtained mean values above 40.

Trends in achievement

There is an increase in student achievement in most of the provinces. This has resulted in an increase in the national performance in the English language with an increase in the mean value from 51.68 to 53.53. However, there is a slight decrease in student achievement in the Southern and Sabaragamuwa Provinces, which is not significant.

Patterns of achievement in mathematics

Achievement wise the provinces fall into three categories. Southern, Sabaragamuwa, North Western, Western and Central with mean scores above the national mean (62.25) fall into category one. Central, Uva and Northern Provinces cluster in the middle and Eastern falls into category three with a mean value of 56.14 While the disparity of marks within a province is highest in the Eastern Province, in North Central and Sabaragamuwa Provinces the disparity of marks is less.

Trends in achievement

All provinces have recorded an improvement in achievement. Therefore, they have all contributed to the increase in the all island mean value. It is significant to note that the increase is more in the low performing provinces than in the high performing provinces. Central, Northern and Eastern Provinces performances have increased by nearly 4 points while in the other provinces the increase is by 1- 3 points.

7.2.3 Achievement according to school types

Different patterns could be observed in the achievement of students in all three subjects in all school types.

Patterns in achievement in Sinhala language

The achievement of the Sinhala language indicates that there is not a considerable gap between the mean scores of 1AB and Type 3 schools. On the other hand, Type 2 and 1C school types' mean values are quite similar and below the national mean. Therefore, while the gap between 1AB and Type 3 schools' achievement is narrowing the gap between these schools and Type 2 and 1C seems to widen.

The highest percentage of students' marks (24.83%) in 1AB schools and Type 3 (23.51%) fall within the class interval 80-89. On the other hand, in 1C schools the highest percentage of marks falls within the class interval 70-79. However, almost equal percentage of student marks is also spread between the class intervals of 50-59 and 80-89. In Type 2 schools the highest percentage of marks falls within 60-69. However, the high marks are spread from 60-69 up to 80-89.

Trends in achievement

Compared to 2013 there is an increase in student achievement in 1AB and Type 3 schools. The achievement levels of these two school types have been approximately similar in the year 2013 and they have maintained this trend in the year 2015. On the other hand, the Type 2 schools performance had been above 1AB and Type 3 in 2013. However, in 2015 their performance has declined almost by 5 points. Similarly, 1C schools' achievement also has declined further. Therefore, the gap in achievement between 1AB and Type 3 schools and that of Type 2 and 1C has increased and impacted on the all island achievement negatively. This negative trend needs to be arrested.

Patterns in achievement in Tamil language

Similar to the performance in Sinhala, the performance in Tamil is lowest in the Type 2 schools. On the other hand, the performance is highest in the 1AB schools. The 1C and Type 3 schools performance is in between these two extremes and the mean values are

quite similar. Except for Type 2 schools, all the other school types have achieved median values above the national mean for the Tamil language.

In all school types the highest percentage of students belongs to the class interval 80 - 89. However, the percentage is greater in 1AB and Type 3 schools. Further, in the 1AB schools there is also a large percentage (23.14) that falls into the higher class interval 90-100. The percentage of students who has scored less than the pass mark (40%) is considered, the 1AB schools have the lowest percentage. On the other hand, the highest percentage is in Type 2 schools. Standard deviation is also highest in Type 2 schools and it is above the all island mean. This suggests that within the school type there is variation in marks.

Therefore, it could be concluded that the overall performance in the Tamil language in the Type 2 schools needs to be improved.

Patterns in achievement in English language

When English language performance is considered, 1AB and 1C Type schools' mean values are above the all island mean, while the mean values of other two school types are below the all island mean.

Except in 1AB schools in other school types more than 30% of students' scores are below 40%. In 1AB schools this percentage is only 19.21%. However, the highest percentage (47.35%) of those who have scored less than 40% is in Type 2 schools. This shows the diversity in achievement within the school types.

There are two clear groups of high as well as low achievers. However, in the 1AB and Type 3 schools the percentage of high achievers is greater than the percentage of low achievers. On the other hand, in the case of Type 2 and 1C schools the percentage of low achievers is greater than the percentage of high achievers.

Trends in achievement

In 2015 student achievement in 1AB and Type 3 schools have increased by more than 6 points. On the other hand, in Type 1C and Type 2 schools student achievement has decreased by 2 to 4 points. In 2015 the high scoring group in 1AB and Type 3 schools has increased and the low scoring group has decreased.

Patterns in achievement - mathematics

There is differences in the overall achievement in mathematics in the different school types. The mean values range from 57.87–67.66 While the performance in 1AB and Type 3schools are relatively similar, the performance of Type 2 and 1C schools are similar.

However, in Type 2 and Type 3 schools student achievement deviation from the mean is high. Type 1AB and 1C schools have SD values less than the all island SD value, but Type 2 and Type 3 schools have SD values above the all island SD.

Trends in achievement

There is an improvement in achievement in Type 1AB schools as well as in Type 3 schools. This increase is almost similar and the performance of these two school types has contributed to the increase in all island mathematics performance in the year 2015. On the other hand, there is a decrease in performance in Type 1C and Type 2 schools. The downward trend in these two school types is also identical. Therefore, action needs to be taken to improve the performance of Type 2 and 1C schools as otherwise the gap between the performances in different school types will increase.

7.2.4 Achievement according to gender

In all subjects females have performed better than their male counterparts.

Patterns in achievement in Sinhala language

In the performance of the Sinhala language, the overall performance of girls is higher than the males. There are more high performing female students than male students. The highest percentage (24.01%) of female students' fall into the class interval 80-89.

On the other hand, the highest percentage of male students, (18.27%) falls into the class interval 60-69.

Even though there are only 8.26 cumulative percent of female students who has scored below 40 marks, there are 16.58% of male students who has scored less than 40 marks. Therefore, the overall achievement in Sinhala of the boys is lower than the girls.

However, there are some female students who compared with the majority are very low performing.On the other hand, there are no outliers among the males.

Trends in achievement

In 2015 male students' achievement has increased slightly. On the other hand, the female performance has decreased slightly. The increase in male performance is a positive sign. However, the gap in achievement between males and females continue and measures need to be taken to arrest this trend

Patterns in achievement in Tamil language

There is considerable difference (almost ten points) between males and females in relation to the achievement in the Tamil language. Female students' achievement is higher than male students' achievement. There is also less variation in achievement among females. Therefore, boys performance needs to be improved.

Trends in achievement

Except in Type 2 schools there is an improvement in performance in 2015. However, there is a significant improvement only in 1AB schools. In Type 2 schools there is a slight decline. Therefore, 1AB schools' performance has greatly contributed to the improvement in the all island performance.

Patterns in achievement in English language

Female performance in the English language is higher than all island and male performance. Female students' English achievement has contributed greatly for the all island mean to rise.

Among both males and females there is a larger percentage of low achievers. However, the percentage of low achievers are high among the males than among the females. On the other hand, the number of high achievers among the males is less than among the females. Therefore, the disparity in achievement in the English language is very high.

Trends in achievement

There is an increase in both male and female students' achievement in the year 2015. While the male performance has increased corresponding to the class interval 70-79 among the females the increase is in the class interval 80-89.

Patterns in achievement in mathematics

In mathematics female performance is better than all island and male performance. The percentage of low achievers (below 40 marks) is lower than among the boys.

There are high performers among both males and females. Highest percentage of females, 20.00% as well as 18.35% of males fall into the mark range 80 -89.

Trends in achievement

There is an increase in both male and female performance. The increase in performance has contributed to the increase in all island performance.

7.2.5 Achievement according to medium of instruction

There is wide disparity in achievement among students belonging to different medium of instruction in the English language and mathematics.

Patterns in achievement in the English language

Sinhala medium students' mean achievement in the English language is better than the achievement of the Tamil medium students' achievement. While the Sinhala medium students mean value is above the all island mean value, the Tamil medium students' mean achievement is very much below the national mean.

There is a large group of low achievers among the Tamil medium students. On the other hand, among the Sinhala medium students there are two groups- a group of high achievers as well as a group of low achievers.

Variation of marks from the mean is higher among the Tamil medium students than among the Sinhala medium students.

Therefore, it could be concluded that even though there is disparity in achievement between both Sinhala and Tamil medium students it is greater among the Tamil medium students.

Trends in achievement

Achievement of both Sinhala and Tamil medium students has increased, However, the increase in the Tamil medium students is 5 points which is greater than the Sinhala medium students increase which is only 2 points.

Patterns in achievement in mathematics

In mathematics performance there is wide disparity among students belonging to different medium of instruction. However, the Sinhala medium students' mean score is above the national mean while the Tamil medium students' mean is lower. On the other hand, while the percentage of Tamil medium students are in the lower marks range a higher number of Sinhala medium students are in the higher mark range.

The highest percentage of the Sinhala medium students' marks is in the range of 70-100. On the other hand, the highest percentage of Tamil medium students marks concentrate between 40 -70. While only11.4% of Sinhala medium students has scored below the pass mark 24.98% of Tamil medium students has scored below the pass mark.

Trends in achievement

There is an improvement in both Sinhala medium as well as Tamil medium students' performance However, whereas the Sinhala medium students' performance has been increased by 2 points, the Tamil medium students' performance has increased by nearly

4 points. This increase is a positive trend that indicates that the gap in achievement between the medium of instruction is decreasing

7.2.6 Achievement according to location

Patterns in achievement in Sinhala language

There is variation in achievement in the Sinhala language among the schools in the different localities. The Urban Council area schools have performed better than the rural schools.

There are more high performing students in the urban area schools. The highest percentage (24.30%) of students falls into the class interval 80-89 in the urban area schools. Even though, a high percentage of students (17.94%) in the rural area schools also falls into the class interval 80-89, there is also a higher percentage of students (18.20%) who falls into the 60-69 class interval.

On the other hand, while there are only 7.72 cumulative percent of students in the urban area schools who has scored below 40 marks, there is 15.88% of students in the rural area schools who has scored less than 40 marks. Therefore, the overall achievement in Sinhala language of the students in the urban area schools is higher than the students in the rural area schools.

However, there are outliers in both localities and more outliers in the urban area schools.

Trends in achievement

In 2015, there is a decline in achievement in rural area schools while there is an increase in the achievement in the urban area schools. This trend while having an impact on the all island performance has also increased the gap in achievement of students in the rural area schools and urban areas schools.

Patterns in achievement in the Tamil language

In considering the achievement in Tamil, Urban Council area schools have performed the best and their mean value is also above the all island mean. On the other hand, the rural area schools performance is below the national mean. There is approximately 10 point difference between the performance of the two localities.

The deviation of the marks from the mean in Tamil schools, all island as well as in rural schools is high. Therefore, there is a need to improve the performance in the Tamil language of the rural schools in order to improve the all island performance.

Trends in achievement

There is an improvement in the achievement of Tamil language both in the urban and rural area schools. Although the gap between the rural schools and the urban schools still exists, it is a positive sign that the increase in student achievement in the rural areas is greater than the increase in the urban areas. Therefore, the improvement in the rural schools' performance has contributed positively to the all island performance.

Patterns in achievement in the English Language

In considering the English language performance, the urban council area schools have performed better than the rural area schools. The percentage of high achievers is greater among the urban council area schools, while the percentage of low achievers is greater among rural schools.

Even though there is disparity in achievement the deviation of the marks from the mean is quite similar in all localities. The highest percentage of students fall between 80-89 class interval in urban area schools. On the other hand, in the rural schools the percentage is highest in the 20-29 class interval.

Trends in achievement

The rural students' performance has decreased slightly while the Urban students performance has incresed slightly. As a result the gap between the urban and rural students' performance still remains.

Patterns in achievement in mathematics

In mathematics performance there is variation in achievement among the schools in the different localities. The Urban Council area schools have performed better than the rural area schools. Rural area schools have performed below the national mean while the urban schools have performed above the national mean.

There is less variation in achievement in the urban area schools. While the SD of the rural schools is closer to the all island SD, the urban schools SD is less than the all island SD denoting less variation.

Trends in achievement

The urban students' performance has increased by three points. On the other hand, the rural area students' performance has increased only by .23. Hence this increase is very minimal. Action needs to be taken to improve the rural students achievement levels as otherwise the gap between the rural and urban achievement widens.

7.2.7 Achievement of skills and Essential Learning Competencies

The analysis of the facility indices for the three subjects indicates that there is great variation in the achievement. The ranges for the facility indices for each subject is given below.

First Language

      Sinhala   0.29 to 0.96

      Tamil   0.24 to 0.86

English   0.26 to 0.82

Mathematics   0.22 to 0.87

The facility indices given above indicate that there is wide disparity in achievement among students.

when the achievement of sub skills of languages were considered similar patterns could be observed.

In the first language Sinhala the mean values of all four sub skills were above 50. The lowest achievement could be seen in writing. The percentage of incorrect sentences was rather high in the writing task. Further, some students had not even attempted to write even the first sentence.

When the achievement of ELCs is considered the lower competencies are 6 and 8. These competencies relate to spellings and subject verb agreement. Therefore, even though students overall competency in grammar is satisfactory their application of these skills in writing is weak.

Trends in Achievement

When comparing the achievement in the sub skills of the Sinhala language it was found that there is improvement in comprehension and syntax. However, writing still remains the weakest skill. Further, even though there is improvement in syntax there is no improvement in certain ELCs such as spellings and subject verb agreement. These skills impact on the writing skill which was highlighted in the 2013 report as well. This is an area that needs immediate attention.

Patterns in achievement in the Tamil language

The same structure was followed in the two first language papers. When the achievement of sub skills in the Tamil language is considered the same pattern could be observed. Mean values of all four skills were above 50 with vocabulary achievement being the highest and the weakest is writing.

When the achievement of ELCs is considered the lower competencies are 6 and 8 which relates to spellings and subject verb agreement. The analysis of the writing task revealed that more than 50% of the students could not write a grammatically correct sentence.

Trends in achievement

When student performance in the language skills is considered there is a decrease in the performance in vocabulary and comprehension. On the other hand, achievement in syntax and writing has increased. However, as discussed before this increase has not

resulted in the overall improvement of the writing skill. Therefore, as 50% of the students could not write a grammatically correct sentence immediate attention needs to be paid to revise the ELCs and the curriculum.

Patterns in achievement in the English language

It is interesting that when the second language English achievement is considered still the same pattern could be observed as in the first language. Even though the first language and second language papers differed in content the structure of the paper as discussed in chapter 2, was the same.

When the achievement of sub skills is considered except for syntax, the mean values for the other three skills are above 50. The weakest skills appear to be syntax and writing. For English the only ELC related to writing is to "write the students name". Only 32.85% of students has been able to write their names in a grammatically correct sentence. The analysis of the writing task revealed that the lack of knowledge in syntax appears to affect the writing skills similar to the first language performance

Trends in achievement

The comparison of the performance in syntax revelaed that students' correct esponses to question number 23, which relates to personal pronouns has been reduced considerably. This could have contributed much to the drop in achievemnt in syntax.

On the other hand students' performance in question number 30 which relates to the third person singular present tense has been the lowest in both years. Therefore, it could be concluded that students' knowledge of grammer is weak.

Accordingly the percentage of grammatically correct and one word answers has increased for each response in the year 2015. This has contributed positively to the over all performance in writing.

Patterns in achievement in mathematics

A pattern can be observed in students' achievement of sub skills in mathematics as well. For all three sub skills the mean value is above 50. However, of the three sub skills the weakest is the concepts.

When achievement of ELCs are considered except for competency 16 which is "Names objects situated both at left and right sides of one's own position" responses to questions related to other ELCs seems satisfactory. The correct responses for the questions related to these ELCs are above 50%.

Trends in achievement

According to 2015 data students' performance in relation to the sub skills of procedures and problem solving has increased. This is a positive trend. On the other hand, the knowledge of concepts has declined. This is a trend that needs to be paid attention to as lack of conceptual knowledge will affect the other skills if this trend continues. Further, students appear to have improved the procedural skill without having the conceptual understanding. Such a situation could be the result of mechanical practice of doing mathematical operations. Therefore, such a situation should be arrested.

As discussed above the achievement of competency 16 which has been identified as unsatisfactory had been identified in 2013 also as needing improvement. Therefore, it is necessary to find out the reason for students not been able to understand and apply this concept.

7.3   What the findings reveal

7.3.1 Opportunities for equitable quality education

A new education agenda and the Framework for Action, Incheon Declaration, 2030 has been proposed. This declaration having examined the remaining challenges has identified on future priorities and strategies for its achievement hoping to "leave no one behind". As discussed in Chapter 1, this new vision is also in keeping with the proposed

Sustainable Development Goal 4 (SDG 4) "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all"

Promoting "Equity" and "excellence" and reducing disparities in the education system is also one of the main focuses of the Government of Sri Lanka and this is highlighted in the Education Sector Development Framework and Programme (ESDFP) from 2013-2017.

One of the main objectives of a national assessment is to provide country-wide information about an array of learning outcomes according to nationally defined standards and identify areas for government attention and policy intervention and to assess curricular knowledge and skills.

One of the major areas identified in the ESDFP is "improving the quality of basic and secondary education" (p.2). Under the Primary Education Development programmes one of the objectives is "to ensure quality and accessible education for all as to reduce disparities in the quality and access to primary education"(p.33). Therefore, it is necessary to find out whether any particular subgroups in the population perform poorly. For example, whether disparities exist, between the achievements of boys and girls, students from different language or ethnic groups, or students in different regions of the country.

As discussed in section 7.2 in comparing the students' performance between 2013 and 2015 some positive trends can be observed. Increase in achievement of learning outcomes in the Tamil language, English language and mathematics is a positive sign. There is a slight decline in the achievement of learning outcomes in the Sinhala language which is insignificant. However, this trend needs to be arrested.

Considering the provincial wise achievement there was a marked improvement in 2015 in some of the provinces which had not performed well in 2013. This is a positive trend which should be sustained. Similarly, the improvement in achievement in Type 3 schools and even though slight the increase performance in Tamil medium schools in 2015 are trends that need to be sustained as well as further studied to find the causes.

On the other hand, there is disparity in achievement between provinces, between boys and girls, between different language or ethnic groups, among school types, different medium of instruction and according to the location of the school. There is not only inter provincial disparities but also intra provincial disparities. Some of these patterns that emerged in 2013 has continued up to 2015. Therefore, it could be concluded that students' performance at the end of the fourth year of schooling indicates that equal opportunities to achieve the goal of 'education for all' had not been successful.

7.3.2 Impact on the curriculum reforms

As discussed in chapter 1, there are several objectives of a National assessment. One such objective is to find out whether the findings indicate particular strengths and weaknesses in students' knowledge and skills so that it would provide input for curriculum reforms.

As discussed in section 7.2, when considering the achievement of the first language it was revealed that in 2013 that both Sinhala and Tamil students writing skills were weak. It was further revealed that achievement of the ELCs related to spellings and sentence construction is weak. This trend had continued to 2015. These are two areas that need to be strengthened in a new curriculum revision.

It was also revealed that there is a lack of balance in the identification of ELCs. There were only six ELCs relevant to reading and writing. Further, they do not adequately represent competencies relating to all four sub skills of language. Even though, the ELCs do not correspond to all sub skills the syllabus and the textbooks are skill based.

The deficiencies identified in the first language curriculum also applies to the second language curriculum. Imbalance in the ELCs is even worse in the English Language curriculum as there is only one ELC pertaining to writing, Even that is not very clear. When considering the ELCs for mathematics, there are only 8 competencies. They also do not adequately represent all sub skills of mathematics. Therefore, this mismatch needs to be rectified in a future curriculum revision.

It could be concluded that the findings of 2013 are valid for 2015 as well and it has to be reiterated that a curriculum revision should take into consideration these suggestions.

The ELCs are not given in the Teacher Guides or Pupil's books. Therefore, whether the teachers consider the ELCs in their lesson planning is also questionable. As it is expected that "100 percent of the children complete primary education achieving ELCs" (ESDFP, 2013-2017, p.33) teacher awareness is vital.

7.3.3 Impact on pedagogy

As discussed in 7.2.7 a trend appears to be developing where students are learning mechanically. As the skill analysis in relation to mathematics revealed students' knowledge of procedures is better than their conceptual understanding. In languages the knowledge of vocabulary and grammar is better than writing. Although they are able to use the knowledge in completing a discrete exercise they are unable to use this knowledge in process writing. Such a situation could be the result of teachers coaching students for examination by mechanically practicing exercises in past papers.

7.4 The way forward

It has been stressed that the national assessment of learning outcomes should be better utilized for policy purposes (World Bank, 2012). The Ministry of Education (MoE) in collaboration with the Provincial Education Authorities(PEAs) and national level education institutions has developed Education Sector Development Framework and Programme (ESDFP) from 2012-2016. As a rolling plan of this strategic plan, the ESDFP plan for 2013 -2017 has been formulated (Ministry of Education, 2013)

Section 7.4 of this chapter examines how the findings of the national assessment 2015 can further strengthened the proposals of the ESDFP.

Equity in learning opportunities

Increase equitable access in primary and secondary education and strengthening divisional level planning and enhancing resources to promote student learning at all levels are some of the strategies identified by the ESDFP. However, the national

assessment results indicate that there are inter and intra disparities among provinces, school types, ethnic groups and to a certain extent between genders. Multiple variables may influence these disparities and special attention of the policy planners and more public resources should be targeted to these provinces and low performing sub groups.

In this regard, as discussed in section 7.4 certain positive trends were observed in 2015 such as provinces that were not performing well in 2013 improving considerably in 2015. It is necessary to find out whether the reason for the improvement was more funding been channeled to these provinces as a result of the 2013 findings. Further, studies are needed to identify the good practices of these provinces and disseminate them to other provinces.

Impact on policy

Findings of the 2015 study revealed that 1AB and Type 3 schools have performed better than Type 2 and 1C. Further, there is decline in achievement of some subjects in these schools. Therefore, it is pertinent to consider whether Type 3 schools having only primary classes and 1AB schools having separate primary sections have an impact on their performance. On the other hand, the other two school types having both secondary and primary sections together leads to less focus on the primary grades needs to be considered. If so there will be support for a proposal to separate primary schools.

Curriculum revision

According to the ESDFP (2013-2017), one of the strategies identified for the development of primary education is curriculum revision and upgrading of primary education curriculum. Accordingly, it is claimed that "curriculum upgrading will include the identification of the curricular areas that need improvement" (p.34). Among the activities identified to achieve these strategies are

   (a) Develop standards for each key stage
   (c) Upgrade ELC

As the discussion in section 7.3.2 revealed upgrading of ELC's is necessary. In order to do so there must be coordination between the different stakeholders such as the

primary education branch and the subject directors of the MoE and the NIE. The findings of the national assessments should be considered in curriculum revision.

Section 7.3.1 discussed the provision of equity. The findings revealed that there are disparities in achievement at all levels – provincial, school wise, gender, medium wise and location wise. As a result students are at different levels. Developing standards for each key stage and linking them with the ELCs was proposed in the 2013 study as a solution to this issue. The findings of the 2015 study confirm this need.

Diversify the curricula

The trend identified confirms that there are high achieving as well as very low achieving students who are not catered to by the present curriculum. This was especially evident in the performance of English language. Use of common teaching methodologies to teach students who are in different performance levels in the same classroom has been repeatedly identified as an issue in teaching any subject and especially the English language and mathematics. Therefore, as suggested in 2013 there is a need to adopt the practice of countries such as Singapore and UK and introduce multiple textbooks or at least multiple activities to suit at least three different levels.

Diversified curricula could be linked to the identified standards. This would enable to develop activities and assessments to suit the different levels

Teacher development

The analysis of data clearly showed that there are high achievers in all subjects. Similarly there were group of low achievers as well. Teachers need to identify these students with exceptional abilities as well as learners needing special attention. Further, they should be able to adapt the learning material to provide fast track programmes for the best students and remedial programmes for the low achievers. Thus teacher development programmes should include these skills as well as to train teachers in the use of strategies such as mixed ability and same ability groupings.

As discussed in 7.3 teachers should be made to reflect on their teaching pedagogy and to move away from mechanical coaching for examinations.

Further, findings of the national assessment should feed into teacher development programmes. Provincial and zonal level teacher development programmes should use the NEREC findings to plan the School Based Teacher Development programmes where teachers can be involved in action research to develop their practice.

Research and Monitoring

There are certain trends that have emerged over the period 2013–2015. Further, studies are need to confirm these trends. The purpose of a national assessment is to identify patterns and trends. It is the responsibility of the stakeholders to find out the causes which can be context specific. Therefore, research and monitoring is essential at provincial, zonal and school level.