

Chapter One

Background of the Study

1.1 Introduction

The study on National Assessment of Achievement levels of Grade 08 students attempts to identify the patterns and trends in the three subjects First Language, Science and Technology and Mathematics in the junior secondary school cycle. A study similar in nature was carried out in 2005 at National Level with the objective of evaluating the performance of students, whether they have obtained the required abilities to study in Grade 09 where the compulsory education or the basic education cycle ends. The National Assessment of Grade 08 students enables comparison of the progress in learning and teaching three years after the first National Assessment of Achievement of Grade 08 Students was conducted in 2005. The International and Sri Lankan Background to the study is detailed, in chapter one. This chapter also discusses the research findings prior to 2008 and, the findings of the Grade 08 National Assessment in year 2005 conducted by the National Education Research and Evaluation Centre (NEREC).

1.2 International Background

The Declaration of Human Rights (1948) highlights that “Education” is a right of every citizen. At least Primary or Elementary Education has to be made compulsory. The World Conference on Education For All (WCEFA) held in Jomtien, Thailand in March 1990, was a historic initiative intended to stimulate international commitment to a new and broader vision on basic education; to “meet the basic learning needs of all and to equip people with the knowledge, skills, values and attitudes.”

1990 EFA Declaration

- World Conference on Education for All (Jomtien, Thailand, 5-9 March 1990)
- This is a major milestone in the international dialogue on the place of education.
- Recalling that education is a fundamental right for all people, women and men, of all ages, throughout our world.
- Understanding that education can help to ensure a safer, healthier, more prosperous and environmentally sound world.
- A framework for action to meet Basic Learning Needs is provided.

“Basic education should be provided to all children, youth and adults”, and further amplified this by reference to provision of equality of opportunity to “achieve and maintain an acceptable level of learning” (Article 3, No.2); the most urgent priority is the quality of education for girls and women and to remove every obstacle that hampers their active participation (Article 3, No.3).

The Convention on the Rights of the Child (CRC, 1989) has been stronger, committing state parties to affirmative action in cases of need; providing access to higher education on the basis of ability; taking steps to improve attendance and reduce drop-out traits; and most specifically, confirming the right of every child to primary education and making it compulsory.

A Framework for Action to meet basic learning needs was also adopted by the Jomtien conference. Six main areas of action were identified in the framework. They were expansion of early childhood care and development activities, universal access to completion of the primary education cycle, improvement in learning achievement, reducing adult illiteracy, expansion of basic education and skill training for youths and adults and increased acquisition of knowledge, skills and values for better living conditions of individuals and families. Major goals and targets towards achieving Education For All were set in the framework of action, that is improvement in learning achievement such as an agreed percentage (80 percent) of appropriate age cohort attainment, reduction in adult illiteracy rate, expansion of early childhood care and development activities etc.

Convention on the rights of the child 1989

- Focusing on existence, protection, development and participation of a child.
- Signed on 20th November 1989.
- Consists of a Prologue & Articles

Articles 1-41- The rights of the child
42-45-How the convention has to be implemented
46-54- Responsibilities of the member nations and the role of the United Nations

The post Jomtien period showed a remarkable increase in the interest of the non-governmental organizations in primary education. Governments have not only encouraged them, but also actively worked for building up partnerships between governments and the NGOs. UNICEF, SIDA, GTZ, NORAD and UNESCO have contributed through sizeable investment of resources to improve primary education.

International studies provide more knowledge and insights on the educational system in different countries than a single study could offer; two such international studies involving Mathematics, namely PISA (Programme for International Student Assessment) and TIMSS (Third International Mathematics and Science Study). Each of these studies PISA and TIMSS involves approximately 50 countries and thousands of students from each participating country.

The first round of TIMSS took place in 1995, the second in 1999, the third round in 2003 that made TIMSS famous world wide. The fourth round of TIMSS was in 2007. It collected data on educational achievement of students at the fourth and eighth Grades. PISA is conducted every three years; in 2000, 2003, 2006 and the next one, in 2009. The tests are administered to 15 year- old students. The tests are supposed to assess how well students are prepared for their full participation in society.

The aims and target population differs in TIMSS (8th Grade study) and PISA. This is an opportunity to get more knowledge and insight in the educational system in different countries than one single study could offer. Several countries have participated in both studies in 2003. By comparing the countries' ranks in the two studies it is evident that a group of countries, particularly some Nordic and English-speaking countries, perform relatively better, in PISA. On the other hand, the East European countries perform much better, in TIMSS.

1.3 Sri Lankan Background

Sri Lankan education system needs improvement in quality of learning and teaching. According to statistical figures, Sri Lanka has a high rate of literacy. During the last two decades some important organizational changes and modifications were introduced to improve the delivery of general education in the country.

A National Education Commission was instituted in

Primary education in Sri Lanka, some special features

1. Five year primary cycle;
2. Ranges from Grades 1-5;
3. Divided in to three Key stages;
4. Integrated curriculum;
5. Activity based learning events;

1991 and a Presidential Task Force on General Education was set up in 1997. A Primary Education Unit was established in the Ministry of Education, Sri Lanka to implement and monitor all activities related to primary education. In addition, a separate Department of Primary Education was set up in the National Institute of education and a comprehensive education reform was implemented in 1998 throughout the country.

Legislation was enacted by the Parliament of Sri Lanka, making education for the children of the age group 5-14 compulsory, from 1997; it became effective in 1998. Special committees are constituted at village level to identify and motivate non-school goers to go to school. Mass media and other approaches have been adopted to improve public awareness about the need to educate children and youth.

1.4 Findings of the Grade 08 National Assessment in the Year 2005

1.4.1 Performance in First Language

The all island average performance level in First Language (Sinhala Language/ Tamil Language) was high. The all island mean value in the First Language was 59.9%. The highest percentages of the students were within the class interval of 60-69. This shows that most of the students were able to obtain scores above the average. A percentage of 33.8 students have scored more than 69 marks. Vocabulary comprehension, syntax, writing and appreciation were the abilities tested in First Language. From the above sub skills, the highest performance was in vocabulary and the lowest, in writing.

Grade 08 National Assessment 2005

1. Conducted by National Education Research and Evaluation Centre
2. Execution of the survey during July 2005
3. Achievement tests in Sinhala Language, Tamil Language, Science and Technology and Mathematics were conducted
4. The sample of 10134 students from 629 schools selected from 92 educational zones that represented all 25 districts in Sri Lanka

1.4.2 Performance in Science and Technology

In Science and Technology, the all island mean value was 53.19. A percentage of 48.7 students were above the mean and a percentage of 52.3 below the mean. 25.3 percent of the students had scored below 40 marks. A percentage of 22.9 students had scored 70 and above. The numbers of high achievers were relatively less and the numbers of low achievers, more. In Science and Technology, abilities such as knowledge, comprehension, application, analysis and synthesis were tested. The performance shown by the students in these abilities seem to be of average level, except in synthesis.

1.4.3 Performance in Mathematics

In Mathematics, the all island mean value performance was 45.19. The performance in Mathematics was low. More scores in Mathematics piled around the score of 40. A percentage of 38.8 students had scored below 40 marks. Only 10.3 percent of the students had scored marks above 69. In Mathematics, the percentage of students below the mean value was around 56, and the percentages above the mean value, around 44. Knowledge and skills, communications, connections, reasoning and problem solving were the abilities tested in Mathematics. When compared with the other abilities, problem solving ability was the poorest.

1.4.4 Differences in Achievement by Gender, School Type, Medium of Instruction and Location of Schools

In all three subjects, mean values of female students were higher than the mean values of male students. Though the differences were significant at 0.05 level, the differences between mean values were not so large. In all the three subjects, performance of urban school students were better than that of the rural school students.

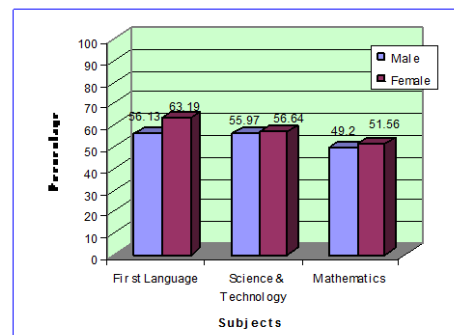


Figure 1.1: All Island Differences in Mean Values, by Gender - Grade 08 - 2005

Relatively larger differences in achievement levels were noted, in Mathematics.

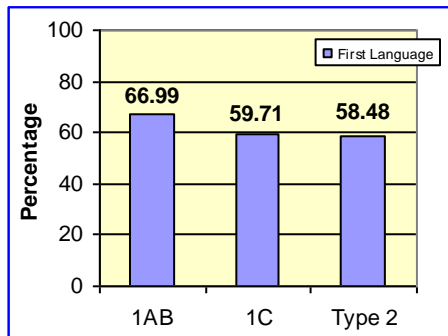


Figure 1.2 : All Island Differences in Mean Values, by School Type - First Language - 2005

Out of the three schools types (1AB, 1C, Type 2), the best performing schools were 1AB. The significant feature was that the mean values in the 1AB schools were always higher than the all island mean values, in all three subjects. Performance of Type 2 schools was the lowest. The performance levels of 1C schools remain in between 1AB and Type 2 schools, in all three subjects tested.

In the two subjects First language and Science and Technology, Sinhala medium students' achievement levels were better than those of Tamil medium students. However, the achievement level of Tamil medium students was better than that of Sinhala medium students, in Mathematics. The mean values of Sinhala medium students and Tamil medium students in Mathematics mean values were 44.6, and 47.4 respectively.

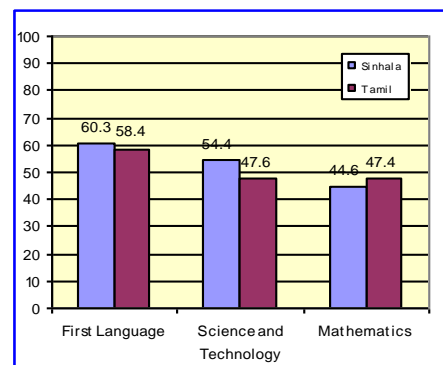


Figure 1.3: All Island Differences in Mean Values by Medium of Instruction - 2005

1.4.5 Provincial and District Level Differences in Achievement

In the subjects tested in 2005 a common pattern was identified in the rank order of performance, in all three subjects. First Language has come first and Science and Technology secured the second place. Mathematics was in third place. This pattern was common to all provinces. In First Language, Central, Uva, Northern, and Eastern Provinces had average performance levels below the all island averages. In Mathematics, average performance of Uva Province is poor and in Science and Technology performance of North Central Province is not satisfactory, when

compared to the all island mean value. Composite index based on provincial mean values revealed that the Western Province is the best performing province.

1.5 Summary

The Declaration of Human Rights (1948) highlights that “Education” is a right of every citizen. At least Primary or Elementary Education has to be made compulsory. In 1990, the EFA declaration highlights that basic Education has to be provided on an equity basis. Targets were set to achieve the status of providing basic education for all, by the year 2015. Sri Lanka is in the process of achieving the target by the year 2015; in order to achieve this target, Sri Lanka is taking measures to eradicate illiteracy and provide universal access to education.

According to the findings of the Grade 08 National Assessment in year 2005, students have shown the best performance in First Language. The lowest performance is shown in Mathematics. The performance of Science and Technology remains in between the other two subjects.

The achievement levels of female students are better than those of male students in all three subjects. In First Language and Science and Technology, Sinhala medium students perform better than Tamil medium students. In Mathematics, Tamil medium students perform better than Sinhala medium students. Average performance levels of 1AB schools are the highest. Performance levels of Type 2 schools are the lowest. Composite index based on provincial mean values revealed that the best performing province is Western and the lowest, Uva.

Key Points

Background of the Study

The Declaration of Human Rights (1948)

- “Education” is a right of every citizen. At least Primary or Elementary Education has to be made compulsory.

World Conference on Education For All – Jomtien, Thailand in 1990

- “Basic education should be provided to all children, youth and adults”
- “Achieve and maintain an acceptable level of learning”
- The quality of education for girls must be improved
- A framework for action to meet Basic Learning Needs was proposed

Convention on the Rights of the Child 1989

- Focused on the existence, protection, development and participation of the child.

Primary Education in Sri Lanka

- Five year primary cycle
- From Grade 1-5
- Divided in to three Key stages
- Integrated curriculum
- Activity based learning events
- Essential Learning Continuum identified

Parliamentary Legislation - 1997

- Education for the children of the age group 5-14 made compulsory

Grade 08 National Assessment 2005

- Conducted by National Education Research and Evaluation Centre
- Execution of the survey during July 2005
- Achievement tests conducted in Sinhala Language, Tamil Language, Science and Technology and Mathematics
- Best performance in First Language.
- The lowest performance in Mathematics.
- Science and Technology maintains a position in between the other two subjects
- In Mathematics, Tamil medium students perform better than Sinhala medium students
- Average performance levels of 1AB schools are the highest. Type 2 schools are the lowest.
- Best performing province is Western and the lowest is Uva.