Chapter One

Introduction to the Study

1.1 Background

The World Conference on Education for All (EFA) held in Jomtien in 1990, an extended vision for meeting learning needs was outlined. This included the requirement to improve and assess learning achievement (UNESCO, 1990). Hence, a worldwide emphasis on the need for timely and credible data on student learning, that may inform the design of effective mechanisms to improve educational outcomes, rather than only on education inputs has become a primary concern among educationists.

In the year 2000, The World Education Forum held in Dakar placed special emphasis on the quality of Education. This is mentioned in goal no. 6 which states "improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills" (UNESCO 2000: iv, 7). As observed by economists, education systems can provide pathways to economic advancement (Ross, Paviat & Gnevois, 2006). It is often argued that good quality education in terms of increased learning outcomes 'in literacy, numeracy and life skills can contribute to increased work productivity, higher individual income levels, economic and social growth, improvement in health, and the generation of innovative ideas' (Saito & Cappelle, 2010: p5). As a result, there has been an increased global growth in the use of learning assessments (Kamens & McNeely, 2010).

This is evident in Sri Lanka as well. Being a member country agreed on the World Declaration on Education for All, it strives to enhance the quality of education by implementing procedures that will provide information on students' learning. One such measure adopted was monitoring student achievement through national assessments at different Grade levels conducted by the National Education Research and Evaluation Centre (NEREC).

1.2 What is a National Assessment of Education?

A national assessment "is designed to describe the achievement of students in a curriculum area aggregated to provide an estimate of the achievement level in the education system as a whole at a particular age or grade level" (Kellaghan, Greaney and Murray. 2009, p.xi). It is an investigation of schools and students (and sometimes teachers) that is designed to provide evidence about students' achievements at a particular stage of education, in identified curriculum areas such as, reading or writing, English language, mathematics or science. 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. In other words, the ultimate objective of a national assessment while determining the achievement levels is to contribute to the expansion of the quality of students' learning. According to Kellaghan, Greaney and Murray (2009), national assessment can throw light on the following issues in education.

Access Obstacles to attending school, such as limited availability of places or distance of students' homes from school (or the type of school).

Quality The quality of inputs to and outputs of schooling, such as the resources and facilities available to support learning (responsive curricula, teacher competence, textbooks); instructional practices; learner-teacher interactions; and student learning.

Efficiency Optimal use of human and financial resources, reflected in pupil-teacher ratio, and grade repetition rates.

Equity Provision of educational opportunities to students and attainment of parity of achievement for students, irrespective of their characteristics, such as gender, language or ethnic group membership, and geographic location

Furthermore, according to Kellaghan, Greaney and Murray (2009), all national assessments seek answers to one or more of the following questions:

- How well are students learning in the education system (with reference to general expectations, aims of the curriculum, preparation for further learning, or preparation for life)?
- Does evidence indicate particular strengths and weaknesses in students' knowledge and skills?
- Do particular subgroups in the population perform poorly? Do disparities exist, for example, between the achievements of (a) boys and girls, (b) students in urban and rural locations, (c) students from different language or ethnic groups, or (d) students in different regions of the country?
- What factors are associated with student achievement? To what extent does achievement vary with characteristics of the learning environment (for example, school resources, teacher preparation and competence, and type of school) or with students' home and community circumstances?
- Are government standards being met in the provision of resources (for example, textbooks, teacher qualifications, and other quality inputs)?
- Do the achievements of students change over time? This question may be of particular interest if reforms of the education system are being undertaken. Answering the question requires carrying out assessments that yield comparable data at different points in time?

  (Kellaghan and Greaney, 2008, p.9).

1.3 Equity and Excellence

It is generally argued that minimizing inequalities among individuals could be achieved through general acquisition of education. This will, in turn, lead to reduce inequalities within and among nations (Farrel, 2002). Theories such as 'Human capital Theory' and different interpretations of them became the bases of increased expenditures on education around the world in relation to access and equality. Findings of national assessments in this regard play an important role in informing policy planners of the quality of education received by students at a given time so that necessary changes to certain educational practices could be adjusted (World Bank, 2007).

Over the years, various steps have been taken to enhance the provision of equity in order to achieve excellence in Sri Lanka. One example is the widening of access to education through Kannangara reforms which were introduced as far back as 1944 with a view to providing equity in education irrespective of race, caste or ethnicity (Sumathipala, 1968). Therefore, one can see that promoting "equity" and "excellence" and reducing disparities in the education system has been a primary concern of the Governments of Sri Lanka. In this regard, a comprehensive medium term Education Sector Development Framework and Programme (ESDFP) from 2006–2010 was developed (Ministry of Education, 2011). One of the Major areas identified in this framework is "improving the quality of basic and secondary education" and "increasing equitable access to basic and secondary education" (p.2) This Framework further emphasizes, the meaning of equitable access as "each child can access an education appropriate to his /her individual learning potential and needs" (Pg.4). The plan for the second stage of the ESDFP for the period 2012 -2017 is an extension of the policy framework which comprises three policy themes as follows (Ministry of Education, 2013).

Theme 1: Increase equitable access to primary and secondary education

Theme 2: Improve the quality of primary and secondary education

Theme 3: Strengthen governance and service delivery of education

In addition, it provides a foundation theme and a crosscutting activity to ensure the achievement of policy themes related results and outcomes.

The foundation: Overarching education sector development rolling plan : and
Crosscutting activity: Results – based monitoring and evaluation. (p.1)

Under theme 2 – Improving Quality of primary and secondary education, National Assessment of Learning Outcomes are expected to be utilized for program development.

1.4 National Assessment Studies Conducted in Sri Lanka

National Assessment of Learning Outcomes has become an important component of education policy analysis and program monitoring in Sri Lanka. The Ministry of Education in Sri Lanka has commissioned such studies to The National Education Research and Evaluation Centre (NEREC) of the Faculty of Education, University of Colombo with the kind patronage of the World Bank.

NEREC has conducted National Assessments of Learning Outcomes both at primary and secondary levels. At primary level, assessments were conducted for Grade 4 in 2003, 2007, 2009 and 2013 respectively. At secondary level, National Assessment of Learning Outcomes were conducted for Grade 8 in 2005, 2008 and 2012. The results from these studies, it is claimed provide "useful information for analysis of policy and the monitoring of the progress of the education system" (Aturupana, 2009, p.31).

1.5 Rationale for the Present Study

The national assessments conducted in grade 8 in 2005, 2008 and 2012 reveal that on average there is an improvement in achievement levels of Grade 8 students in Science and Mathematics. The achievement of the English language, which is the second language of the students was not assessed in 2008. While there was an improvement in the achievement of learning outcomes, it was also revealed that there are inequalities in provision of education in relation to provinces, gender, medium of instruction and locality (NEREC, 2008). Although, there is a substantial increase in achievement over the period, the need "for these findings to be supported by further national assessments in the future, in order to reach a reliable and robust conclusion about the magnitude of improvement" (Aturupane, 2009, p.33) has been stressed.

Besides, a new competency based curriculum was introduced to grade 8 in 2009. Therefore, the need to find out in what way the introduction of the new curriculum had an impact on the learning outcomes was evident. Hence, the national assessment conducted in 2012 used various competency levels as indicators of achievement in English, Mathematics and Science. The analysis was done based on percentages of students who had achieved such competencies in varying degrees. The national

assessment results in 2012 indicated that 'there were inter and intra disparities among provinces, school types, ethnic groups and to a certain extent between genders' (NEREC, 2013). This report presents the findings of the national assessment of achievement of students completing grade 8 in year 2014 for English, Mathematics and Science.

1.6 National Assessment of Learning Outcomes- 2014

As mentioned elsewhere, the National Assessment of Learning Outcomes of 2012 used new instruments to test cognitive skills in English, Mathematics and Science in keeping with the new curriculum. In 2012, it served as a starting point for monitoring the level and distribution of learning outcomes overtime. Thus, a comparison of learning outcomes was not possible. However, a comparison would have been possible if there had been a repetition of the same test. Therefore, the National Assessment of 2014 used the same instruments used in 2012 to determine the achievement levels of the students in English, Mathematics and Science.

The national assessment in 2014 covered the entire country and the sample was drawn to enable analysis by province, type of school, gender and medium of instruction. This report presents the analysis of the achievement of learning outcomes related to cognitive skills. Chapter 2 of this report will discuss the methodology of the study. Chapters 3-5 will focus on the findings pertaining to the achievement of cognitive skills in Mathematics, Science and English respectively. The final chapter will emphasize on the areas that require attention by the educational planners based on the findings of this study.

1.7 Summary

This chapter discussed the nature of national assessments with particular references to their aims and objectives in improving the quality of education. Having introduced the rationale for the present study, it also presented why national assessments are important in the Sri Lankan context and how useful they are in determining the achievement levels of students in various subjects in relation to various aspects such as school type, gender, medium of instruction and school location among many other determinants.