## National Assessment of Achievement of Grade 04 Students in Sri Lanka - 2009

# **National Report**

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#### **Preface**

I am very much delighted to write the preface to this research study titled "National Assessment of Achievement of Students Completing Grade 04 in Year 2008 in Sri Lanka". This research was completed by the National Education Research and Evaluation Centre (NEREC) with the financial assistance of the World Bank and the Ministry of Education. This study is an extension of earlier two studies completed by the NEREC in 2003 and 2007 which was a national assessment of achievement of grade 04 students of Sri Lanka of First Language, English Language and Mathematics. Further to these three subjects achievement of Mathematics has been assessed using TIMSS test items. Pattern of the achievement of three subject areas and the trend of the achievement during the three studies (2003, 2007 and 2009) has been studied thoroughly.

The report present the data related to the pattern of the achievement level of the students who completed the grade 04 studies by the end of 2008 and the trend of the achievement of students shown in the present study and the previous two studies.

Achievement level of the students has been analysed Island wide then provincial wise analysis has been conducted. Also the pattern of the achievement has been analysed in relation to the medium of instruction, school type, location and gender. In addition to the overall achievement in three subject areas in the present study achievement in sub skills in each subject areas has been done. To find out Sri Lankan students performance in TIMSS a test has been conducted.

One objective of the present study was to examine whether the trend observed in previous two studies are sustained. Data has been analysed to see the trend of the achievement. This has been done Island wide as well as provincial wise.

I have no doubt the present study will provide necessary information for policy makers to take necessary actions to improve the quality of primary education and to reduce the disparities seen in different categories in respect of school type, location of schools, etc.

The research team of the study comprised of experienced education researchers. Their contribution to the study is invaluable. I would like to take this opportunity to thank them, specially the NEREC Director, Dr. M. Karunanithy for coordinating Tamil

medium activities and Prof. Marie Perera for writing the research report. Also Mr. J. Nonis, Mrs. P. Jasinghe and Mrs. R.D.C. Niroshini contributed enormously to complete this study. I offer my sincere thinks to Dr. Harsha Aturupane, Senior Economist of the World Bank, Tom Kellegan, the Head of the Research Institute, University of Dublin for their immense support and also to Prof. Upul Sonnadara.

Dr. W. Chandradasa Team Leader, Grade 04 National Assessment Head, Department of Educational Psychology. Faculty of Education.

#### Message from Dean

It is my pleasure and privilege to writhe this message to the report "National Assessment of Achievement of Grade 04 Students in Sri Lanka - 2009". Since its establishment in 2000, NEREC has contributed to educational research in several ways. NEREC has now completed almost 21 studies on various aspects of Sri Lankan education. Reputed International Organizations such as World Bank, GTZ, JICA and UNICEF have supported several important studies undertaken by NEREC. All national assessments were entrusted to the NEREC by the World Bank. All these organizations have understood the research capacity of the NEREC and that is the reason for their continuous support to the research activities of the NEREC.

The present study is on national assessment of achievement of Grade 04 children in Sri Lanka. It is the third important study in this series. This kind of studies have been conducted internationally for the purpose of comparative analysis and for greater understanding of the effectiveness of school system in providing high quality education to an increasing number of students. Moreover the studies of this nature could contribute enormously to enhance the quality of Sri Lankan school education to reach international standards in the contemporary world in the context of globalization. It has become necessary to promote our system of education to reach international standards and it is also very crucial to understand our position among the developing nations and the neighbouring countries. This study will help us to understand the shortcomings and gaps which could help the policy makers to think about innovative and best practices in teaching the subjects under study.

I am very happy to state that the findings of the NEREC studies pertaining to this aspect of education have received national and world wide attention. The findings are cited in various international studies. It should be mentioned that the Sri Lankan policy makers at the national level have taken a very keen interest in making use of the NEREC studies to facilitate their task in relation to policy formulation.

I am duty bound to thank Professor (Mrs.) Kshanika Hirimburegama, Vice Chancellor, University of Colombo and Dr. Harsha Aturupane, Senior Economist, World Bank for their assistance and support in completing this study successfully. We are also thankful to Professor Upul Sonnadara for his guidelines and advices to improve the quality of this study.

We wish to express our sincere thanks to Mr. S.U. Wijerante, Dr. Jayantha Balasuriya and Ms. Madura Wehella for their support and assistance to complete the study successfully.

Professor S. Sandarasegaram Dean, Faculty of Education, University of Colombo.

### Message from Director- NEREC

The National Assessment of Achievement of Students in Grade 04 in 2008, is a valuable contribution by the National Education Research and Evaluation Centre (NEREC), to the school system of Sri Lanka to identify the strengths and weaknesses of teaching learning process. NEREC carried out two studies of this nature with Grade 04 students in 2003 and 2007 and highlighted the issues related to students performance in four subjects, namely First Language, Mathematics, English Language and TIMSS. Like our previous studies, the present study too will remarkably contribute to policy formulation and encourage educational planners, curriculum developers and the educational officers in provinces and zones.

It gives me pleasure to express my thanks to all those who helped the NEREC to complete this study.

Professor Kshanika Hirmburegama, Vice Chancellor, University of Colombo and Professor S. Sandarasegaram, Dean, Faculty of Education gave initiative to NEREC to carry out this study. I thank them for their immense support and encouragement.

National Assessment of Achievement of Grade 04 Students is a national initiative, and without the support of World Bank and Ministry of Education this study would not have been a success. I wish to thank Dr. Harsha Aturupane, Senior Economist, World Bank Sri Lanka, Professor. U. Sonnadara, Consultant and Dr. Thomas Kellagan for giving directions for making several changes in approach to the third study.

It is also a pleasure to thank the officials from the planning division of the Ministry of Education, Mr. S.U. Wijeratne, Mrs. Madura Wehella, Dr. Jayantha Balasooriya for their valuable suggestions and help to make this study a success.

It is also pertinent at this juncture to thank the Team Leader, Dr. W. Chandradasa and the members of the research team Professor Marie Perera, Mr. P.K.J.E. Nonis, Ms. Prasadi Jasinghe and Ms. R.D.C. Niroshini for their contribution to this study. Specially to Professor Marie Perera for undertaking the responsibility of report writing.

I thank the members of the NEREC, Nayanie, Fathima, Ganga and Kanishka for rendering their services to complete this important task. And also

Mr. Ariyadasa Edirisinghe, former Assistant Commissioner of Exams for organizing the National Assessment test at national level.

At last but not least, I acknowledge my special gratitude to the role played by the Research Management Unit, University of Colombo, for the support extended.

Dr. M. Karunanithy
Director, NEREC
Faculty of Education,
University of Colombo.

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- Professor Marie Perera, Department of Humanities Education, University of Colombo for writing the research report.
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- All other professionals from the provincial, zonal and school levels who contributed in numerous ways in carrying out this project,
- All others who assisted me in their respective capacities in making this venture a success.

Let me thank all of them, once again.

Dr. W. Chandradasa Team Leader, Grade 04 National Assessment Head, Department of Educational Psychology. Faculty of Education.

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## **Executive Summary**

As a member country agreed on the World Declaration on Education for All, Sri Lanka 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 two national assessments conducted by the National Education Research and Evaluation Centre (NEREC), at Grade 04 level in 2003 and 2007 respectively. According to the findings of the 2007 study, during the four years from 2003 to 2007 a considerable improvement in achievement can be seen. Although there is a substantial increase in achievement over the period, there was a need to find out whether this trend is sustained. Therefore, the present study conducted in 2009 by NEREC was to find out whether the positive trends observed over time is sustained and to identify areas for further improvement.

Students who had completed fourth grade in the education system of Sri Lanka in the year 2008 were considered as the desired target population of this study. The sample procedure had a multi stage approach. In the first stage schools were selected for the sample. Schools were selected within strata with Probability Proportional to Size, without replacements.

In the second stage a group of students were selected from the sampled schools using cluster sampling approach. An entire grade 04 class from each sampled school was selected. Province was taken as explicit strata. The medium of instruction and school type were considered as the implicit stratum.

In the 2009 study five achievement tests were used like in the 2007 study as instruments to assess student achievement. That is tests in Sinhala language, English language, Tamil language, English Language and "TIMSS" (Trends in International Mathematics and Science Study). In 2009, the Sri Lankan version of TIMSS was revised to include 40 items. The construct assessed in these studies had been the essential learning competencies that were expected to be achieved by Grade four students at the end of Key Stage II. Based on these competencies Tables of specifications were prepared for each subject to maintain content validity.

Data gathered through the achievement tests were analysed on a national and provincial basis in relation to medium of instruction, school type, location and gender.

Patterns and trends in learning achievement were discussed using three indicators mean, standard deviation and skewness values.

The findings revealed that while the patterns of achievement identified in the previous studies continue there were also changing patterns. The shift from the Western province being the highest performing province to North Western is one such change. On the other hand, while student performance in Sinhala as a first language is high, the achievement in Tamil as a first language is moderate and achievement in English language is satisfactory. Further, increasing trend observed over time in all subjects (except in TIMSS) is positive. Improved performance in students in Type 2 schools and rural schools is also another positive trend.

However, there are negative trends that policy makers need to focus attention. Continuous low performance of Northern, Eastern and Uva province, declining performance of male students, especially in mathematics and low performance in some provinces in English are some of these negative trends.