

Raising the Quality of Education

Proposals for a National Policy on General Education in Sri Lanka



**NATIONAL EDUCATION COMMISSION
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TABLE OF CONTENTS

PREFACE	V
ABBREVIATIONS.....	VII
EXTRACTS FROM THE NATIONAL EDUCATION COMMISSION ACT, NO. 19 OF 1991. X	
MEMBERS OF THE NATIONAL EDUCATION COMMISSION.....	XII
MEMBERS OF THE STANDING COMMITTEE ON GENERAL EDUCATION	XIII
INTRODUCTION	1
National Goals	3
Guiding Principles	4
Proposed Structures and Legislation to Implement Policy.....	6
CURRICULUM DEVELOPMENT.....	14
Introduction	14
Trends in Curriculum Development.....	15
Issues in the Curriculum Development in Sri Lanka.....	17
Curricular Reform Proposals and their Rationale.....	18
Policy Proposals	30
EARLY CHILDHOOD EDUCATION.....	33
Introduction	33
Trends in Early Childhood Education	33
Current Issues of Early Childhood Care and Education in Sri Lanka.....	38
Policy Proposals	40
THE TEACHING PROFESSION.....	44
Introduction	44
Trends in the Teaching Profession.....	45
Issues of the Teaching Profession in Sri Lanka.....	49
Policy Proposals	56
STUDENT ASSESSMENT.....	60
Introduction	60
Trends in Assessment Practices	62
Issues of Assessment Practices in Sri Lanka.....	64
Policy Proposals	69
QUALITY ASSURANCE IN EDUCATION	72
Introduction	72
Trends in Quality Assurance in Education	74
Issues in the Present Quality Assurance System	78
Policy Proposals	84

EDUCATION PLANNING AND MANAGEMENT	86
Introduction	86
Trends in Education Planning and Management.....	87
Issues in Education Planning and Management in Sri Lanka	88
Policy Proposals	93
LEARNING ENVIRONMENT	96
Introduction	96
Trends in the Learning Environment.....	97
Issues in the Learning Environment in Sri Lankan Schools.....	105
Policy Proposals	108
INVESTMENT IN EDUCATION.....	109
Introduction	109
Issues of Investment in Education in Sri Lanka.....	110
Policy Proposals	112
CAREER GUIDANCE IN SCHOOLS	113
Introduction	113
Trends in Career Guidance.....	115
Issues of Career Guidance in Sri Lanka	118
Policy Proposals	119
MEDIUM OF INSTRUCTION, NATIONAL, SECOND NATIONAL AND INTERNATIONAL LANGUAGES	121
Introduction	121
Trends in the Medium of Instruction.....	123
Issues of Medium of Instruction, National, Second National, and International Languages	125
Policy Proposals	128
SPECIAL EDUCATION	130
Introduction	130
Trends in Special Education	131
Issues of Special Education in Sri Lanka.....	133
Policy proposals	135
NON-FORMAL EDUCATION	137
Introduction	137
Trends in Non-formal Education.....	139
Issues in Non-formal Education in Sri Lanka	141
Policy proposals	142

PREFACE

According to the provisions of the National Education Commission Act No. 19 of 1991 the President may declare from time to time the National Education Policy which shall be conformed to by all authorities and institutions responsible for education in all its aspects.

The said Act further stipulates that the National Education Policy shall be formulated on a consideration of the recommendations and advice made to the President by the National Education Commission established by Section 3 of the Act. In pursuance of its mandate the National Education Commission has prepared in respect of General Education a set of recommendations embodied in this document titled “Proposals for a National Policy on General Education in Sri Lanka”. This document is a sequel to “Proposals for a National Policy Framework on General Education in Sri Lanka” submitted in December 2003.

In the preparation of the present set of recommendations the Commission was guided by the key concept of **Raising the Quality of Education**. The Commission notes that the present General Educational System has the quantitative capacity to educate the entire child population of Sri Lanka from Grade 1 to Grade 13. Nevertheless the Commission notes with regret that the quality of Education has not risen to meet national expectations in certain important aspects as befitting the aspirations of a nation with a long tradition of education with enlightened ethical and social values.

The present set of proposals is building on the educational resources as at present to advance towards a vision of a prosperous Sri Lanka, consistent with the national policies in respect of the Economy, Industrialization, Agriculture, Health and Social Services, and Science and Technology.

It offers a holistic policy that would impact on the entirety of the General Education System comprising the schools, teachers, students, curriculum, management, and financial resources; and is based on the new thinking and educational philosophy developed during the past decade.

Particular attention is paid to critical issues such as primary education, early childcare and education and special education for the differently-abled children, as well as career guidance and psychosocial counselling. Attention is also paid to outstanding issues of medium of instruction, learning environment and span of formal schooling. The proposals also concern the post-educational prospects of the

children in terms of employability and entrepreneurship; and points to matters arising from the policy proposals regarding implementation and monitoring.

The Introduction to the set of proposals outlines the guiding principles and the methodology used in the development of the education policy presented herein; and is followed by sections on Curriculum Development, Early Childhood Care and Education, the Teaching Profession, Student Assessment, Quality Assurance, Education Planning and Management, the Learning Environment, Investment on Education, Career Guidance, Medium of Instruction, Special Education and Non Formal Education.

The proposals contained herein are the outcome of ten research studies, views and ideas from the general public, and a series of workshops and discussions with participation of experts and stakeholders, besides advice and guidance from Standing Committee members and Commission members.

The National Education Commission thanks the members of Research Teams and of the Standing Committee on General Education, individuals who offered valuable suggestions in response to our newspaper advertisements, and many others who made submissions to the Commission on their own. Thanks are also due to all experts and stakeholders for sharing their experiences. The National Education Commission is particularly grateful to the World Bank for its financial support for conducting the relevant research studies.

ABBREVIATIONS

AaL	- Assessment as Learning
ABOE	- Activity based Oral English
AfL	- Assessment for Learning
AoL	- Assessment of Learning
AQA	- Academic Quality Agency
ASS	- Advanced Secondary Stage
CBSE	- Central Board of Secondary Education
CGP	- Common General Paper
CLIL	- Content and Language Integrated Learning
CPD	- Continuing Professional Development
CPE	- Council for Private Education
CRC	- Convention on the Rights of the Child
DEO	- Divisional Education Office
DEP	- Department of Educational Publications
DMR	- Data Management and Research Branch
DoE	- Department of Examinations
ECCE	- Early Childhood Care and Education
ECEC	- Early Childhood Education and Care
EMIS	- Education Management Information System
ERA	- Environment Related Activities
ERO	- The Education Review Office
G.C.E. O-L	- General Certificate of Education (Ordinary Level)
G.C.E. A-L	- General Certificate of Education (Advanced Level)
GDP	- Gross Domestic Product
HND	- Higher National Diploma
HOT	- Higher Order Thinking
IBO	- International Baccalaureate Organization
ICSE	- Indian Council of Secondary Education
ICT	- Information and Communication Technology

IEA	- International Association for Evaluation of Educational Achievement
ISA	- In-Service Advisor
LMIS	- Labour Market Information System
LOT	- Lower Order Thinking
MHRD	- Ministry of Human Resource Development
MOE	- Ministry of Education
NCEA	- National Certificate of Educational Achievement
NCERT	- National Council of Educational Research and Training
NCOE	- National Colleges of Education
NDT	- National Diploma in Technology
NEC	- National Education Commission
NFE	- Non-Formal Education
NGO	- Non-Governmental Organization
NIE	- National Institute of Education
NVQ	- National Vocational Qualification
NZQA	- The New Zealand Qualifications Authority
OECD	- Organization for Economic Cooperation and Development
ONFEC	- Office of the Non-Formal Education Commission
OUSL	- Open University of Sri Lanka
PBIS	- Positive behavioural interventions and supports
PBS	- Positive behaviour support
PEA	- Provincial Education Authority
PGDE	- Postgraduate Diploma in Education
PRCC	- Performance Review and Coordination Committee
PSI	- Programme of School Improvement
QA	- Quality Assurance
QTS	- Qualified Teacher Status
SBA	- School Based Assessment
SEM	- School Excellence Model
SEQI	- School Educational Quality Index

SLEAS	- Sri Lanka Education Administrators Service
SLPS	- Sri Lanka Principals Service
SPBEA	- Secretariat of the Pacific Board for Educational Assessment
SQAA	- School Quality Assessment and Accreditation
SSS	- Senior Secondary Stage
TIM	- Teacher Instruction Manual
TVEC	- Tertiary and Vocational Education Commission
UAP	- University Academic Programmes
UK	- United Kingdom
UN	- United Nations
UNESCO	- United Nations Educational, Scientific and Cultural Organization
UNZ	- Universities New Zealand
USA	- United States of America
USAID	- United States Agency for International Development
VTa	- Vocational Training Authority
ZED	- Zonal Education Director
ZEO	- Zonal Educational Office

EXTRACTS FROM THE NATIONAL EDUCATION COMMISSION ACT. NO. 19 OF 1991

The National Education Commission and its Functions

- (1) The functions of the Commission shall be -
 - (a) to make recommendations to the President, on educational policy in all its aspects, with a view to ensuring continuity in educational policy and enabling the education system to respond to changing needs in society, including an immediate review of educational policy and plan or plans and the making of recommendations to the President, on a comprehensive National Educational Policy;
 - (b) to review and analyse periodically, the National Educational Policy and Plan or plans in operation and where necessary, to recommend to the President, changes in such Policy, Plan or Plans;
 - (c) to advise the President on any other matter relating to education which may be referred to it by the President, for its advice.
- (2) Without prejudice to the generality of the matters in respect of which recommendations may be made by the Commission under subsection (1), the Commission may make recommendations to the President on the following matters:-
 - (a) the changes in curricula and teaching methods in educational institutions that are necessary to match education to employment, industry and social needs;
 - (b) the adequacy of guidance and counselling to students in educational institutions, to enable them to develop their potential to the full;
 - (c) the measures necessary to strengthen the links between educational institutions and the community;
 - (d) the development of educational institutions as resource centres for all round human development in the community;
 - (e) the measures necessary to reduce area-wise disparities among schools;
 - (f) the measures necessary to enhance the professional standing of teachers and other education service personnel;
 - (g) the alternate programmes that could be provided for the benefit of the children leaving primary and secondary schools prematurely, to enable them to develop their potential to the full;

- (h) the changes in curricula necessary to foster the cultural and religious aspirations of students of all communities and religions;
- (i) the legislative changes necessary to give effect to any such recommendations.

The National Education Policy includes the following matters:-

Aims and goals of education; the structure of the educational system-pre-school, primary, secondary, tertiary, higher, informal, non-formal, adult, special, professional and religious; the establishment, location and distribution of educational institutions, including methods and criteria for admission of students and recruitment of teachers; the content of education, including medium of instruction, diversification of curricula, text books and learning material, the place of religious knowledge, observance and practice, assessment and evaluation, the examination system, certificates, diplomas and academic awards and recognition of qualifications; recruitment, placement, disciplinary control and professional growth of education service personnel, including teachers, para-educational personnel, supervisors, and administrators; resources for education, including the mobilization of community participation; and ancillary services, physical education and sports.

Constitution of the Commission

The Commission shall consist of the following:-

- (a) the Chairman of the University Grants Commission established by the Universities Act, No. 16 of 1978;
- (b) the Chairman of the Tertiary and Vocational Education Commission established by the Tertiary and vocational Education Act, No. 20 of 1990.
- (c) a member appointed by the President on the recommendation of the Minister in charge of the subject of Education and Higher Education;
- (d) a member appointed by the President on the recommendation of the Minister in charge of the subject of Finance;
- (e) a member appointed by the President on the recommendation of the Minister in charge of the subject of Provincial Councils;
- (f) ten other members who shall be appointed by the President from among persons who have shown capacity in the fields of Education, Administration or Management or have achieved distinction in any profession. The Chairman, the Vice Chairman (Policy) and the Vice Chairman (Planning) appointed under Section 5 shall work full time for the Commission.

MEMBERS OF THE NATIONAL EDUCATION COMMISSION

Chairman

Prof. Lakshman Jayatilleke

Vice Chairman

Prof. Sivanandam Sivasegaram

Dr. (Mrs.) Jayanthi Gunasekara (From 24.04.2013 to 25.04.2016)

Ex Officio Members

Prof. Mohan de Silva, Chairman, University Grants Commission

Prof. (Mrs.) K. Hirimburegama (From 19.02.2013 to 22.12.2015)

Prof. Gamini Samaranayaka (From 18.09.2012 to 19.02.2013)

Prof. Rajiva Wijesinha, Chairman, Tertiary and Vocational Education Commission

Mr. Chandra Embuldeniya (From 29.06.2014 to 22.12.2015)

Prof. Dayantha Wijeyesekera (From 18.09.2012 to 29.06.2014)

Appointed Members on the Recommendation of the Ministers

Mr. W.M. Bandusena, Secretary, Ministry of Education

Mr. Anura Dissanayaka (From 29.10.2013 to 22.12.2015)

Mr. Gotabaya Jayarathna (From 18.09.2012 to 29.10.2013)

Mr. H.T. Kamal Pathmasiri, Secretary, Ministry of Local Government and Provincial Councils

Mr. R.M.S.P.S. Bandara, Director, Department of Public Enterprises, Ministry of Finance

Ms. Ayanthi de Silva (From 18.09.2012 to 05.08.2015)

Other Appointed Members

Ven. Dr. Akuratiye Nanda Nayaka Thero

Ven. Prof. Bellanwila Wimalaratana Thero (From 28.09.2012 to 25.04.2016)

Mr. Ariyaratne Hewage

Prof. Dayantha Wijeyesekera

Mr. M. Kingsly Fernando

Prof. S. Sandarasegaram

Prof. Jayasena Kottegoda

Dr. (Mrs) Hiranthi Wijemanna

Mrs. Pushpa Kalubowila

Ms. Anoja Wijesekara (From 28.09.2012 to 22.03.2014)

Secretary to the Commission

Mrs. H.N.N. Gunasekera

Mrs. P.G.D. Pradeepa Serasinghe (From 27.05.2013 to 28.01.2015)

MEMBERS OF THE STANDING COMMITTEE ON GENERAL EDUCATION

Chairman of the Committee

Mr. Ariyaratne Hewage

Members of the Committee

Prof. Lakshman Jayatilleke, Chairman, NEC

Dr. Sivanandam Sivasegaram, Vice Chairman, NEC

Prof. Chandana Jayaratne, Department of Physics, University of Colombo

Prof. Narada Warnasuriya, Former Vice Chancellor & Senior Professor of Paediatrics, University of Sri Jayawardenepura

Prof. S. Sandarasegaram, Emeritus Professor of Education, University of Colombo.

Dr. T.A. Piyasiri, Vice Chancellor, UNIVOTEC.

Dr. Chulantha Kulasekara, Dept. of Electronic and Telecom Engineering, SLIIT

Dr.(Mrs) J. Gunasekera, Director General, NIE.

Mr. S.U. Wijeratne, Additional Secretary, Ministry of Education.

Mrs. H.N.N. Gunasekera, Secretary, NEC.

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Mrs. Gayathri Abeygunasekera, Commissioner-Research and Development, Department of Examinations.

Mr. Piyadasa Ratnayake, Provincial Education Director, Uva Province.

Mr. J.A.A. Chandrasiri, President, Siyane National College of Education.

Mr. Sisira Mallawarachchi, Zonal Education Director, Gampaha

Mr. M. Salahudeen, Director, Ministry of Education.

Mr. Deepal Sooriyarachchi, Commissioner, Sri Lanka Inventors Commission.

Mr. A. L.M. Zarudeen, Zonal Education Director, Galewela.

Mrs.W. D. P. K. Samarasinghe, Principal, Devi Balika Vidyalaya.

Mr. Gamini Rajapaksha, Principal, Vidyaloka Vidyalaya, Veyangoda.

Secretary to the Committee

Mr. Anura Hettiarachchi, Senior Policy Research Officer, NEC.

INTRODUCTION

General Education should prepare children for a satisfying life in which they live and work together productively with fellow adults. They would be virtually adults when they leave school, and they should be equipped with the knowledge and other competences that would enable them to contribute to the wellbeing of their family, the community in which they live, and the nation as a whole.

The National Education Commission as mandated by Sections 2.(1), 2.(3), and 8(1) (a), (b) and (c) of the National Education Commission Act, No. of 1991 respectfully submits this set of Recommendations in respect of formal General Education.

Policy proposals were submitted earlier in 1992 and 2003 by the Commission. In formulating proposals now, the Commission went through the following process -

- A Standing Committee on General Education comprising persons with expertise and experience in various aspects of General Education and policy formulation was appointed to identify and guide the process
- Through press announcements the Commission requested members of the public and other interested parties to send their proposals for the development of National Policies on General Education
- The views of professionals and practitioners were obtained through consultation.
- Research studies on 10 areas covering the entire General Education System were undertaken by Research Teams and their Reports critically reviewed by a panel of experts
- The findings and recommendations of the Research Teams were presented to Stakeholder Groups for further improvement and then cast into the format of policy recommendations.

The key guiding principle was that every component of the General Education System should be designed and implemented to serve the educational needs of each Sri Lankan child. By the time a child leaves school he/she should be able and motivated to develop through experiential learning, to be a team member, to share and care, to be tolerant and respectful of the rights of others, sensitive, unbiased, friendly and compassionate; practically and technically skilled in the broadest sense; able to use theory to understand situations, and to think critically, logically, inductively, deductively, analytically and holistically; and be healthy both mentally and physically.

In school, beginning with the primary stage, students should be introduced to the Sri Lankan culture and ethos as the gamut that guides their conduct, while understanding their productive application. Culture is not only about music or art. These are important to provide aesthetic experience, pleasure and enjoyment that are also basic human needs. More importantly, children should be facilitated to develop self-awareness in social contexts to ensure that their conduct does not prove disruptive or cause hardship to others.

The education system should produce people able to put their educational attainments, as manifested in terms of personal competencies, to work for the national good and the wellbeing of the Sri Lankan people, and not solely for personal gain. They should engage in lawful and fair practices in life and work situations. An important aspect of desirable conduct in the national context is the conservation of the nation's resources and the environment.

From birth to 4 years, a stage of Early Childhood Development mainly centred on the home and the community results in rapid and intense physical, social and emotional development. At the age of 4 children enter formal Early Childhood Education that enables a smooth transition to Primary Education, and provides requisite skills for successful completion of Primary and Secondary Education cycles.

Every lesson in the Primary stage should contribute to wholesome human relations. Students would be facilitated to develop as individuals with their own unique set of potentials and capabilities. The content should be integrated in the student's mind and give a holistic view of the self and its relationship with the community. The student should learn largely through activities, and become a self-directed and self-reliant learner. At this stage competition for marks and rewards would not be beneficial. Rather, children should learn to work and play together. Assessment should be formative and lead to further opportunities to practice skills, acquire and apply knowledge and information, enhance personal knowledge, remember and recall, learn where and how to find information, gather data, and make measurements.

Education at this stage must involve committed nurturing, in particular to overcome negative feelings and emotions. Education must necessarily include advice, counselling and guidance for the development of the mind for dealing with emotional difficulties and mitigating their ill-effects. It must also facilitate concentration, the recognition of patterns and the development of systems, life skills that are essential to live productively amidst the welter of distractions that modern living imposes on us.

General Education must not only impart knowledge and skills for living, but also make a person self-disciplined, and with a spirit of friendship. Another very important attribute is the capability to communicate effectively, to engage in discussion, and also to negotiate and resolve conflicts through discussion without resorting to violence. Appreciation of others' viewpoints is essential if Sri Lankans are to live together as one nation where all respect and safeguard the rights of others.

A wide range of knowledge and skills is necessary for productive living, including health practices, dealing with ethical, legal and rights issues relevant to the age, sensitivity and wholesome conduct in social and interpersonal contexts, awareness of duties and responsibilities within family and community, and developing a valid personal philosophy.

A person must be able to improve continuously by identifying needs and opportunities, setting objectives and targets, gaining experience, acquiring knowledge and information, developing skills, identifying and associating with persons who could be resources in efforts for self-improvement, gathering relevant material resources, and applying oneself assiduously. These ideas are encapsulated in the concepts of "learning to learn" and "lifelong learning."

National Goals

General education must necessarily lead to the attainment of National Goals as given below.

- (i) The achievement of **National Cohesion, National Integrity and National Unity.**
- (ii) The establishment of a pervasive pattern of **Social Justice.**
- (iii) The evolution of a **Sustainable Pattern of Living - A Sustainable Life Style** which is vital for the year 2000 and beyond, when, for the first time in the history of Mankind even air and water cannot be taken for granted.
- (iv) The generation of **Work Opportunities** that are, at the same time, **dignified, satisfying and self-fulfilling.**
- (v) In the above framework, the institution of a variety of possibilities for All to **Participate in Human Resources Development, leading to cumulative structures of growth for the nation.**
- (vi) The active partnership in Nation Building Activities should ensure the nurturing of a continuous **sense of Deep and Abiding Concern for One Another.**
- (vii) In a rapidly changing world, such as we live in today, it is imperative to **cultivate and evolve elements of adaptability to change – Learn to Adapt to**

Changing Situations. This must be coupled with the competencies to guide change for the betterment of oneself and of others.

- (viii) The cultivation of a **Capacity to cope with the Complex and the Unforeseen**, achieving a sense of security and stability.
- (ix) The development of those competencies linked to **Securing an Honourable Place in the international community**.

These demand a sense of social justice and sensitivity to the needs of others, concern for the environment, self-reliance, initiative, entrepreneurship and adaptability. General Education should at every stage promote such qualities. They should be in the minds of those designing curricula, in deciding on the knowledge and skills content of the curriculum. Secondly, the teacher should also be adaptable and oriented towards developing skills rather than knowledge for its own sake. The curriculum should not be overloaded with content and there should be emphasis on making all children learners able to identify their own learning needs at any given time and to learn on their own in a self-reliant manner. Every lesson should have provision for developing ability and interest to cooperate with other learners, be resourceful and self-aware, and to experience the fun of learning.

Guiding Principles

- (a) A child is defined as every human being under the age of 18 years.
- (b) School is the principal provider of educational services to the community, and these services should be provided to every Sri Lankan child as a right.
- (c) The State shall promote with special care the interests of children so as to ensure their full development, physical, mental, moral, religious and social, and to protect them from exploitation and discrimination.
- (d) Any child, who by reason of physical and mental immaturity or by being differently abled, needs special safeguards, attention and care, including appropriate legal protection.
- (e) Children living in exceptionally difficult conditions need special consideration.
- (f) Schools are responsible for the care and protection of children and should conform to basic standards in the areas of safety and health.
- (g) It is the duty of every parent or guardian and every school to initiate and develop in children love for the nation and their fellow citizens.

- (h) The State shall recognize the right of every child to a standard of living adequate for the child's physical, mental, spiritual, moral and social development. Appropriate measures should be taken by the State to assist parents and guardians to implement this right with, in case of need, material assistance and support particularly with regard to nutrition, clothing and housing.
- (i) Education shall be compulsory for children from the age of four to sixteen years. Appropriate measures should be enforced to encourage regular attendance at schools and for the reduction of drop-out rates.
- (j) The State shall take all appropriate measures to ensure that discipline is maintained in schools for the well-being of the community in a manner consistent with the child's human dignity.
- (k) The Worldwide Web or Internet provides much data and information that could be accessed by a person irrespective age. Children need to be inducted to use the Internet with due safeguards and selectively. Relevant regulatory authorities must try to ensure this while parents and teachers must also accept responsibility for this. Items that have industrial and academic value are not free of cost, whereas more than 75 per cent of materials available free are estimated to have minimal educational value. There is also material that could be harmful and offensive to children, and access to these should be restricted to access only by adults.
- (l) The State must recognize and enforce the right of the child to have leisure hours to engage in appropriate play and recreational activities, and should respect and promote the right of the child to participate in cultural and artistic life. Schools must provide for appropriate and equal opportunities for cultural, artistic, recreational and leisure activity for every Sri Lankan child.
- (m) The General Education System is a hierarchical one composed of Offices, Departments, Statutory Bodies and Schools. But it is also operationally linked to other organizations that are not directly under the purview of the Ministry of Education, but which are responsible for the welfare of children. Those concerned with education must therefore liaise with other relevant service providers. Understanding of the desired end product must therefore be developed in all sectors, and schemes for quality improvement must necessarily be targeted all relevant personnel, with regular consultation mechanisms to ensure productive action.

- (n) The General Education System requires teachers and administrators with advanced **formal education**. It also has persons with technical competencies who give specialized support services. As with all else, the system, its pupils and personnel must benefit from **continuous improvement and innovation**. Teachers, administrators and other personnel are exposed a wide range of situations, issues and demands, generating experience and significant tacit knowledge relating to their duties. There should be opportunities to reflect on these, share what is important and use it for practical progress.
- (o) Each child served by the General Education System has a unique set of needs, aspirations, motivations and personal circumstances that help determine educational outcomes and attainments. They have to be served without any discrimination as required by the Constitution of Sri Lanka to enable all children to attain their full potential.
- (p) The pre-service education of teachers is done mainly in national colleges of education. Some teachers are recruited direct from universities, but it is desirable they should have pedagogical training either at university or afterwards before being recruited as teachers. The support staff are recruited as in the general public service. Those engaged in technical functions should have appropriate NVQ Levels, and given on-the-job training to enable them to install, operate and maintain the equipment found in schools.
- (q) Since schools are in various locations throughout Sri Lanka, the continuous professional development of the teachers, principals, administrators and support staff should be decentralised. For this purpose there would be appropriately equipped Personnel Development Centres. There should be four types of centres, namely: (i) Centres for Continuous Professional Development of teachers; (ii) Centres for Continuous Professional Development of Principals and Administrators; (iii) Centres for Continuous Professional Development of support staff, and (iv) Centres for Continuous Professional Development of teacher educators and in-service advisors. All personnel should attend refresher programmes at least once each year. These should not disrupt the school calendar, but should be held at weekends or during the holidays. Given the extra leisure time that school personnel enjoy, they should be required to engage in relevant professional activities during some of the school holidays.

Proposed Structures and Legislation to Implement Policy

Education cannot be treated in isolation. Though officials and administrators in the relevant education ministries and education offices, principals, teachers and support

staff are primarily responsible, they function within a community and an inter-sectoral structure. They need to liaise with a mix of other authorities and officials responsible for the welfare of children, including those in the Ministry of Health, and others responsible for the welfare, safety and attendance of children. The block diagram in Figure 1 shows the school and all its supportive organizations.

It is proposed that the key centre for day to day educational administration and coordination be the Division. The current practice of having Educational Zones that comprise one or more Divisions inhibits effective coordination. Instead, the Divisional Director of Education should work with the Divisional Secretary, Divisional Child Protection authorities and other officials who have a role in respect of children to ensure a holistic and healthy education for all children in the Division.

The School is the educational service provider to its community. It is largely funded by the state. The usual government practice of apportioning funds for General Education through the National Budget is not an acceptable procedure as it does not have the flexibility and responsiveness for meeting the needs of schools as and when they arise. There will be established a National Education Development Fund (NEDF) to which will be credited all unspent money from development funds, donations, endowments etc. There will also be a National Lottery for General Education the profits from which will be added to this Development Fund. This Fund would be released on demand for schools, Personnel Development Centres and National Colleges of Education for the upgrading of facilities and purchasing and replacement of educational equipment, and projects for action learning and on-going institutional development.

Principals are responsible for the effective functioning of their schools, and should not be burdened with excessive paperwork and visits to education offices to attend meetings. They should not have to visit the Divisional or any other Education Office more than once a month. A Principal's role comprises academic leadership and management of personnel and resources of the school with aim of ensuring that the school and classroom are adequately resourced with the assistance of the Directors who will appropriately attend to all operational and funding details. Facilities for communication should be available in all schools to obviate the need for the principals and teachers to actually visit education offices for any purpose. Electronic communication should be used in all schools and offices to maximum effect for this purpose. Schools with inadequate staffing, poor infrastructure and shortcomings in educational resources should be identified as a matter of routine with assistance of ISAs, and those disadvantaged owing to official neglect should receive remedial attention as a matter of priority.

The Divisional Education office should be accountable for the condition of all schools in its Division irrespective of whether they are national or provincial. The DEO is responsible for child welfare in liaison with the Divisional Secretariat and other relevant authorities. For this purpose the boundaries of the educational divisions should be either re-demarcated **or** barriers to communication across the divisional administration boundary be removed by giving access and authority to the Divisional Director of Education to directly communicate with Secretaries of the neighbouring Administrative Divisions. For the maintenance, repair and on-going improvement of all physical plant and equipment of schools and personnel development centres within the Division, the DEO should be staffed with a Technical Officer and assistants who will visit the schools and personnel development centres both routinely and on-call so that there would be no undue delay.

The Zonal Education Office will attend to all personnel matters and quality improvement of education within the zone, and the management of operations in the Personnel Development Centres in the respective Zones and their on-going improvement in liaison with the Quality Management and Improvement Division of the Ministry of Education, National Institute of Education, Universities, and National Colleges of Education. The Zonal Education Offices will collect information regarding the condition and operation of schools through the ISAs, conduct the necessary surveys, and prepare formal reports for the Provincial and Central Ministries of Education, and refer to the relevant Provincial Authority to resolve problems that cannot be solved locally. Their function should not be limited to periodic inspection and inquiry from principals and teachers but should extend to be one of direct engagement for corrective action.

The Provincial Education Office would have authority over the admission of children to **all** schools in the province. Review meetings at Provincial level should be held three times a year during the school holidays with representation at high level from all organizations responsible for providing services to schools. Principals of schools that have issues regarding services that have remained unresolved should inform the Provincial Director in writing of such issues, five working days prior to the meeting. This meeting will also take up projects for development of schools, based on proposals from the Quality Management and System Improvement Division. Principals of schools with such projects may be invited to the meeting.

The Provincial Ministry of Education would be the appointing authority of teachers in the respective province. The Ministry will also propose the apportioning of funds for the construction, development, major rehabilitation and equipping of schools,

personnel development centres and education offices in the Province. It would delegate the operational, contracting and effecting payments within the limits of discretion.

Given the many developments since the last comprehensive Education Act, there is need to expedite the introduction of a new one, which has been in preparation for a decade. The purpose of educational legislation is to:

- Declare the School as the **educational service provider** to the children of its community;
- Declare the General Education System as including all the public sector and private sector institutions, and formal and non-formal arrangements for educating and tutoring Sri Lankan children and youth from infancy to 18 years of age;
- Define “student” for the purposes of this Act as a Sri Lankan from 4 to 18 years of age who is being served in any way by the General Education System as declared above;
- Prohibit, under the threat of dismissal, the participation in sales promotion and political propaganda of any kind in matters directly or indirectly relating to the School by: teachers, principals, administrators, managers of schools and education offices, and employees of provincial ministries of education and of the Ministry of Education;
- Prohibit the participation of elected representatives in school functions and ceremonies of any kind as a named guest;
- Prohibit the naming of a school or any part thereof after any person;
- Prohibit the use of school activities and functions in any venue for sales promotion and propaganda;
- Provide for the creation and operation of the School Board for each school, with reporting mechanisms that ensure accountability to the wider community;
- Provide for the creation and operation of the General Education Development Fund;
- Define the roles, responsibilities, obligations and functions of all the authorities and agencies outside the school that directly contribute to the safety, welfare, and health of the children, the upkeep of the school and its ongoing improvement, and operate mechanisms that will ensure coordination and reporting to the community of measures being taken;
- Define the role of the different institutions, authorities and positions in the System, and their functions, deliverables, responsibilities etc. in relation to the educational service function of the School;

- Specify the number of days the schools should be operated per year, the distribution of these days into terms and vacations in the overall General Education Calendar;
- Specify the arrangements of working hours for pupils and teachers during the terms, and the working day arrangement for teachers and support personnel during the vacations;
- Specify that all schools conduct extra-curricular activities outside classroom learning periods and ensure that students participate in activities in at least two of the following areas—sports, cultural activities, handicraft activities, and group activities to develop skills in organizing, discussing, debating, public speaking and negotiating with the objectives of social progress and environmental conservation;
- Specify the conditions under which the students may take part in functions and the activities they may engage in, especially with a view to prevent their exploitation, immodest exposure and abuse. This clause should also have provision for restricting the exposure of photographs and names of individual students to the public and the media;
- Specify the purposes for which the facilities and premises of schools may be used, and the terms and conditions for such use;
- Specify the qualifications of persons who serve as teachers, instructors, administrators, managers and executives in the General Education System;
- Provide for the establishment of an authority within the Ministry of Education for the regulation, registration, enforcement of standards and quality control of private schools and international schools that educate Sri Lankan children;
- Provide for the regulation, registration and inspection of any premises and facilities used for giving private tuition to groups of 20 or more Sri Lankan children, licensing persons engaged as private tutors to ensure that they are competent to function in that capacity, and for enforcing the custodial function of the owners and operators of private tutoring establishments;
- Specify the penalties for violating the provisions in the legislation, and the respective disciplinary authorities.

The introduction of this legislation is of high priority in the context of increasing the funding for education within a short time frame as declared by the Government. This increase should impact significantly on the quality of formal education provided to children and youth of Sri Lanka.

A Quality Management and System Improvement Division should be developed in the Ministry of Education for strengthening subject knowledge and continuous

professional development of teachers; initiating and directing of quality enhancement projects in schools and offices; quality monitoring of General Education System operations at all levels; detailing of school and office development projects; and continuing professional development of directors and principals. This Division would absorb the in-service advisors and directors in charge of quality of education assigned to education offices into a combined and hierarchically arranged service. In this service there should be provision for obtaining further educational qualifications, career development, and transferability between education offices, teacher education institutions and schools.

The services provided to the children by the school are in the form of a safe and healthful environment for teaching-learning activities; indoor and outdoor spaces and facilities for extracurricular and co-curricular activities; adequate number of teachers with appropriate education and training as required for implementation of the curriculum; indoor and outdoor spaces that are clean and adequately equipped as required according to standards and norms for a school; and a curriculum consistent with the realization of National Goals.

The principle of equity should be upheld in providing services to students. Equity is not simply the equal distribution to each school of resources. Rather the principle of equity demands that policies, practices, operations and situations be adjusted to encourage equality in educational performance and attainment of all pupils. This would imply in operational terms that less developed schools are apportioned extra inputs and attention in comparison with those that are better endowed and advantaged at present.

Teachers and principals should be members of a professional group that is incorporated through an Act of Parliament and is self-regulating like other professions. They should be in a set that includes all teaching and training personnel in the country so that they are afforded the recognition, respect and dignity that is due to all those who educate the nation.

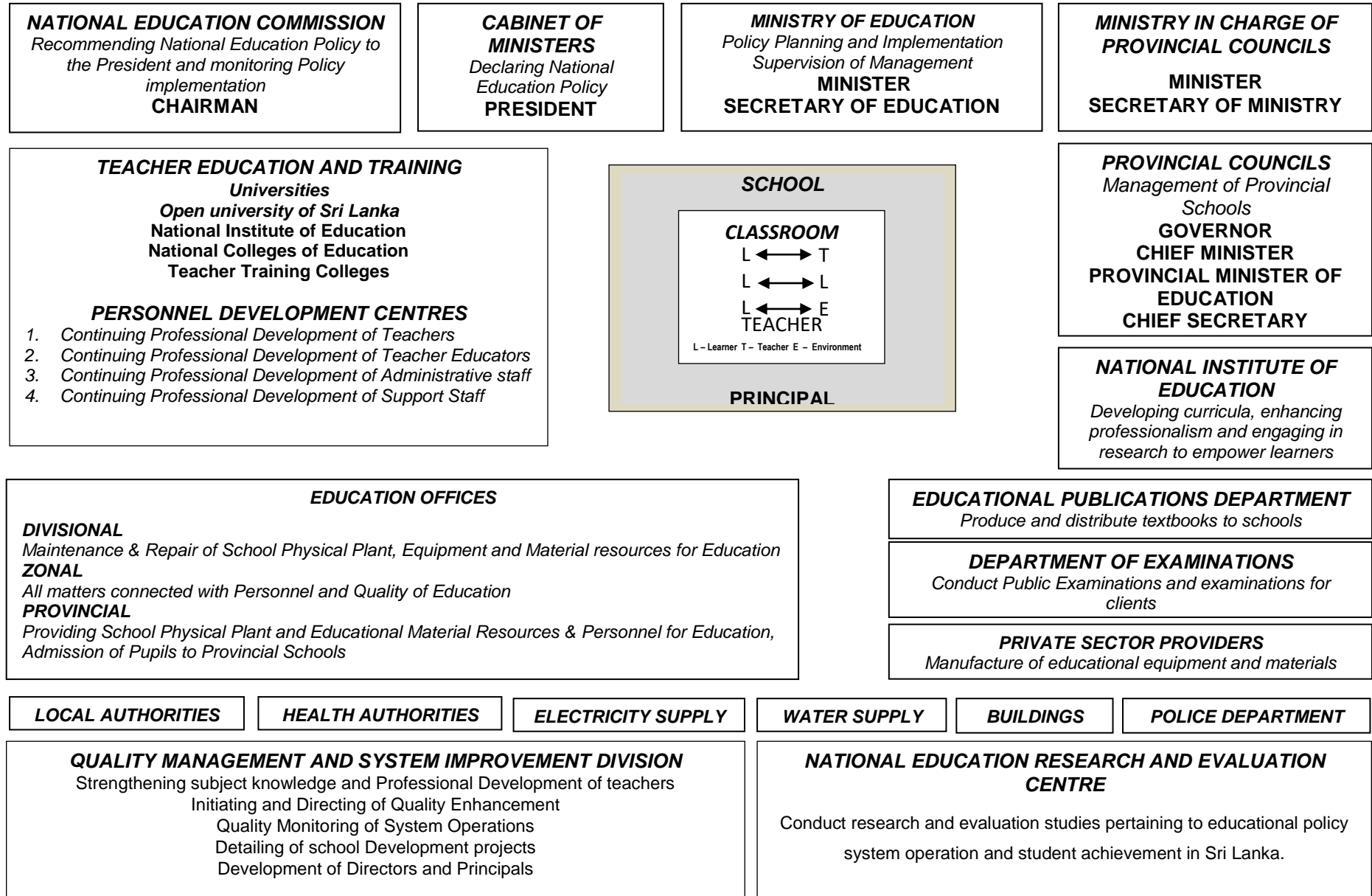
The proposals embodied in this document for the reform of General Education would be an input to the formulation of a General Education Policy that is to be declared by the President of Sri Lanka. A Strategic Plan for implementation of this National Education Policy will be prepared by the Ministry of Education under the guidance of the National Education Commission with the participation of the National Institute of Education and other stakeholders.

According to the National Education Commission Act, the Commission has a monitoring, reviewing and reporting brief to ensure that the declared National

Education Policy is implemented by the agencies concerned and the interests of the various stakeholders are safeguarded. The Commission will arrange a mechanism for receiving periodic reports on specific aspects of programme implementation from the respective implementing agencies and stakeholders. It will also entertain representation from the public regarding malfunctions and shortcomings in the formal General Education System that would have adverse effects on the education and the upbringing of the nation's children.

The national education system is a dynamic that will have in its course failures, successes, contradictions, singularities, and emergences. It must take corrective action and also set new horizons and visions in a cyclic process on a non-partisan basis. While it goes without saying that any shortcoming anywhere in the system that adversely affects the educational service delivery to the child should be corrected without undue delay, there should also be a cyclic process of educational reform that impacts on the schools and all the supportive agencies and offices without exception.

Figure 1



CURRICULUM DEVELOPMENT

Introduction

The Curriculum is a structured series of planned learning experiences. It includes such learning experiences provided through identified subject, disciplines in the classroom, as well as the desired curriculum based on a common vision, mission, policies, traditions and ethos of the schools. All these should contribute to the holistic development of child, in all aspects which are considered to be the ultimate goal of education. The different aspects of personality as propounded by educational philosophers include the physical, mental, social, emotional and spiritual development of the child.

Besides this general goal, Sri Lanka has specific national goals based on the country's historical and cultural heritage, social mores, and political, social and economic needs. Considering the general goals of education and specific needs, the National Education Commission has formulated National Goals as stated in the Introduction. The Commission in its reports of 1992 and 2003 has also identified a set of Basic Competencies as a means of achieving those Goals. Their attainment by inculcating the Basic Competencies is the principal aim of curriculum development in Sri Lanka.

The curriculum has always been prescribed by the central authority on education in Sri Lanka. This practice began during British rule, when the present school system was first introduced. The curriculum to be taught in schools was prescribed by the Department of Education and issued to schools as a circular. After independence the government established a Curriculum Development Centre which subsequently developed into the National Institute of Education. This Institute was entrusted the task of curriculum development in addition to the professional development of all categories of educational personnel and to conduct research pertaining to education.

Curricular specifications developed centrally include the programme structures, subject disciplines and content, teaching approaches or methodologies, resource materials based on the curriculum, the assessment and evaluation techniques which could measure its success. Based on them the national authorities prepare detailed resource materials comprising the syllabi, course guides or teacher instructional manuals indicating the learning outcomes or competencies with the teaching learning methodology, the textbooks, aids and model questions. Monitoring the implementation of the curriculum is the responsibility of the MoE and the Provincial Education Authorities.

All curricular material is designed and supplied to schools by the National Institute of Education and the Education Publications Department. However, the effectiveness of centrally prepared curricula depends on the guidance provided to adopt various techniques that will motivate students and lead to behavioural changes in them. Therefore, classroom interaction between the teacher and the students is mostly determined by the quality of the teacher. It is not possible to control this process through regulation. Learning depends very much on both motivation of the teacher and the pupils in the class. This is very important in the present context where education is not merely learning of facts, but the development of competencies and skills, essential to lead a successful life in society which is becoming complex.

It is also true that there are wide gaps between the intended, the implemented and the attained curricula. The intended curriculum is what is prescribed by the central authorities. The implemented curriculum is what actually occurs in the classroom. The attained curriculum is what the learner gains as a result of participation in the teaching-learning process. If one examines the proposals for curricular reforms made by various committees and commissions in the past one finds excellent proposals, but flawed in implementation. Therefore, curriculum planners need to be more concerned with the implementability of the proposed curriculum.

The National Curriculum cannot remain the same with time as we are open to global pressure as a result of changes in knowledge, technology and business trends that affect us across our borders. In addition, as a nation, our aspirations and needs, geo-climatic changes which are beyond our control, and individual requirements make it necessary for education to enable response to changing needs. Therefore, the curriculum should be regularly reviewed to accommodate these changes. Thus the curriculum development process is a cyclic activity requiring a study the on-going implementation of the curriculum, obtaining regular feedback from teachers and other stakeholders, incorporating new developments where necessary, field trials, finalizing of proposals and the training of teachers.

Trends in Curriculum Development

In the contemporary world, countries have adopted national curricula driven by the imperatives of globalization and technological advances. Furthermore, the need for people to cross borders for work compels them to obtain comparative certification. This has led to the conduct of national level examinations conforming to international standards. Countries like UK where schools once had the freedom to design their curriculum have changed to national curricula in the 1980s. A national

curriculum is defined as a common programme of study in schools that is designed to ensure nation-wide uniformity of content and standards in education.

All countries of the world are moving towards knowledge based societies as knowledge has become the most important factor in creating wealth. In this context human resource development has come to greater prominence than traditional aspects of production. A strategy adopted by many nations is to have a national curriculum to achieve high standards of educational attainment. Most developed countries in the West as well as the East have opted for a national curriculum. Sri Lanka has had a national curriculum from the beginning of the modern period.

Alongside the national curriculum, content based standards are developed in advanced countries. These standards are intended to clarify and raise expectations by providing a common set of expectations for all students. Such standards are further elaborated by specifying standards for each subject. Central authorities supply schools with a curriculum framework for each content area, which provides sample teaching strategies, adaptations and background information relevant to the content area. In addition the central level assessments are aligned to the curriculum content standards. Once the standards are set, the local education authorities and schools have the freedom to align their curriculum and instructional programme to the specified standards.

Another trend is to have a common integrated curriculum in the primary stage and gradually move on to a subject based specialized curriculum as the student proceeds to the collegiate level. The primary integrated curriculum comprises languages, i.e. the mother tongue and a foreign language, mathematics, basic science, health and physical education and aesthetic education. Some countries provide religious instruction in school, while others expect it to be given by religious denominations. Countries such as Singapore pay greater attention to languages, mathematics and science. U.K, Australia, Malaysia and India are concerned with a broad curriculum including humanities and social sciences. At secondary level there is a group of core subjects as well as choice for students depending on their aptitudes. In this respect Sri Lanka is not different from the pattern followed in other countries.

Development of skills to meet the future needs takes precedence over imparting knowledge. This trend has prompted educational reformers to argue that schools must provide students with a broader set of “21st century skills” to survive in a technology saturated world. However, determining what these skills are is challenging. These skills have been described as soft skills, life skills, key skills,

inter-personal skills, work-force skills, non-cognitive skills and others. In this respect competency based curricula are being experimented in many advanced countries.

It has been pointed out that another trend is the increasing influence of information technology in the classroom. Use of computers, virtual classrooms and Internet access are revolutionizing access to knowledge. Technology facilitates not only formal learning in the classroom, but also informal learning outside.

Unlike in the past the school and the teachers are not the sole suppliers of knowledge. Children learn constantly as they engage in day to day living activities. They also learn from parents, societal contacts, peers, media and other influences operating in the environment. This tacit learning that often takes place informally is more effective than the organized learning that is taking place in the classroom. Curriculum designers need to take cognizance of these factors which can be effectively utilized to complement learning.

Issues in the Curriculum Development in Sri Lanka

Sri Lanka has paid great attention to curriculum development since the 1960s. Even the Report of the Special Committee on Education (1943) made very relevant proposals on curriculum reforms. The establishment of the Curriculum Development Centre is a landmark in the movement towards improving the quality of education. At that time it was viewed as a model by several Asian countries. Together with the national curriculum, the supply of detailed course guides or Teacher Instructional Manuals (TIMs), resource books and textbooks have proved to be useful for teachers. Training of teachers in the new curriculum through a widespread network of in-service advisors with follow up action has been useful in teacher development.

With all the supportive structures for quality improvement, learning in the classroom has not changed much from the traditional knowledge imparting model. Students tend to learn facts for reproduction at public examinations to obtain high grades. Even there in that respect the results are not encouraging. The pass rate at public examinations is around 60 percent and after 11 years of schooling a significant number of students fail in all subjects at the G.C.E. O-L Examination. Employers complain that the output from the education system does not have the basic competencies required by the workplace. Meanwhile a private tuition industry parallel to the formal school system has developed which had turned out to be a costly item to parents and a barrier to children enjoying their childhood. Their leisure time is spent in uncomfortable tutorials, often with anti-social influences. Students hardly engage in physical exercises or games essential for physical and personality development.

The deterioration in moral standards in society is another issue on which the education system is blamed. Mistrust and lack of understanding among the different ethnic and religious groups has led to disruption of national and social integration. Conflict resolution is not discussed to achieve compromise based on democratic principles. Lack of knowledge of healthy living has increased the incidence of non-communicable diseases and stress-led psycho-social problems. All these issues cannot be attributed to shortcomings in the school curriculum, but it could be made to contribute in its own way to minimize the impact of these influences. Some of the shortcomings in the school curriculum discussed above and remedial measures are given below.

Curricular Reform Proposals and their Rationale

Duration of Curriculum Cycle

The present National Curriculum Policy specifies that the Curriculum Cycle should be of 8 years duration. Accordingly, the national curriculum is revised every 8 years. This exercise involves a heavy work load. The pros and cons of the existing curriculum have to be studied, feedback obtained from teachers, the views of all stakeholders considered and prepare curriculum specifications, syllabi, teacher instructional manuals and textbooks prepared, a trial carried out on a pilot basis, and teachers aligned for delivery of the revised curriculum.

At present some of these essential steps are bypassed due to time constraints. For example, pilot testing is hardly done. Also, these revisions have not affected most of the subject matter. So what actually takes place is a “tinkering exercise”. Therefore it is recommended that curriculum reform is done every 10 years. Since knowledge is growing fast and new knowledge needs to be incorporated in the curriculum, this incorporation can be effected by providing the teachers with up-to-date knowledge through knowledge sharing mechanisms and by networking.

Curriculum development is a continuous process which takes into account changes in knowledge, demands from society and industry, global and local influences, technological advances, economic and political imperatives, and environmental impacts. Therefore, curriculum development specialists have a critical role which involves getting feedback from implementers, beneficiaries and other stakeholders, keeping track of advances in knowledge and technologies, and engage in surveys, research and innovations.

Curriculum Content

Over the years overloading of the curriculum with too much of content has been a general criticism. Covering the content specified for a year in the curriculum of each subject in each grade is not possible. This results in increasing pressure on teachers, students and parents. As a result, students are ill-prepared and resort to private tuition to prepare themselves for public examinations. Attempts in the recent past to scope the curriculum to overcome this criticism were unsuccessful. The distribution of content across Grades is uneven. For a given Grade, there are overlaps of content between subjects. The reason for this is the lack of due attention from the curriculum developers to horizontal and vertical integration of the curriculum.

National Goals and Basic Competencies to be the basis for Curriculum Development

The National Goals and Basic Competencies as stated in the First Report (1992) of the NEC and its subsequent revision in 2003 provide the basis for curriculum design. Nevertheless, the current curriculum does not reflect these adequately. For example the first goal of the promotion of national cohesion is crucial to build a unified nation, but this concept has not been fully conveyed through the current curriculum in all relevant learning situations. A better attempt should be made to link every content item and the teaching situation methodically to one or several of the National Goals. Curriculum developers are more concerned with imparting of knowledge rather than inculcating desirable competencies among students. The soft skills essential for success in the complex modern society can be inculcated through proper methodology of teaching. This has not received sufficient priority.

Inculcation of values is an important objective of education. However, in contemporary Sri Lankan society, there is evidence of rapid deterioration of human values. To counteract this, the curriculum should address the issue through appropriate measures, such as teaching the content together with practical activities to convey the desired messages, inculcating religious values useful in everyday life, and providing time and opportunities to discuss issues relating to values and personal conduct.

The curriculum should also address issues connected with sustainable development, economic use of dwindling resources, and promotion of practices and skills for healthy living and personality development. The current syllabi, teacher instructional manuals, and textbooks do treat these issues adequately.

Shortcomings in the Curriculum Documentation

One shortcoming has been that TIMs give excessive details of content without due attention to guiding the teacher on the educational process. When TIMs have an excess of details teachers do not use them. Furthermore, teachers are expected to use sources besides TIMs to find material to supplement their knowledge, but they avoid doing so. TIMs should not only be a source of information but also be a practical guide on how to make the lesson interesting to the learner, what practical activities are possible and how the learning outcomes help to acquire competencies.

Another shortcoming is the mismatch between the TIMs and textbooks. Incompatibility between the textbook and the TIM harms the educational process in the classroom. Obvious differences between TIMs and textbooks compel the teacher to ignore the content of the TIMs, and use textbooks possessed by the pupils. Yet another disadvantage is that both teachers and students are misled about the assessment procedure because of confusion about the valid source of content. Thus the use of TIMs is considered unimportant by the teachers resulting in the waste of a potentially valuable resource.

The competency-based curriculum in current practice lacks clear definition of key competencies and learning outcomes in the TIMs of each subject discipline to direct the lessons towards the holistic development of the student. Hence, the teachers as well as the supervisory personnel have not been fully aware of how a competency-based curriculum is implemented to attain its objectives.

Textbooks are written by panels appointed by the Department of Educational Publications. Each panellist is usually assigned the task of writing one or two chapters which are then put together to produce the textbook. This results in lack of coherence with no one responsible for the overall quality of the book and the accuracy of facts therein. Thus there is a need for a panel leader who will also be the chief editor responsible for the coherence and accuracy of the textbook.

Illustrations and textbook layout leave much to be desired. Illustration is not just an add-on but an integral and essential part of the content. Design of the layout of the textbook is a specialized professional activity, and should be duly recognized. The layout should guide students in reading the content and facilitate learning. This guidance supplements the effort of the teacher and enables the student to learn more effectively at his/her own pace.

The present arrangement is to prepare the Sinhala version and then to translate it to Tamil and English languages. The translations are done by persons who are

language experts but not specialists in the subject. As a result there are many inaccuracies in the English and Tamil versions of the books. Therefore, it is recommended the curriculum content specification is prepared in English and then given to separate textbook writing teams in three media to prepare the draft textbooks in three media concurrently. The three drafts should be reviewed together by multicultural panels of content experts.

Duration of School Span

The span of general education in nearly all countries varies from 12 to 13 years. A child enters school at the age of 5 or 6 years. Sri Lanka currently has a school span of 13 years: primary 5 years, junior secondary 4 years, and senior secondary 4 years (G.C.E. O-L – 2 and G.C.E. A-L – 2). If a child proceeds without failing any grades he/she will be out of school at the age of 19+. After the G.C.E. O-L Examination, students are compelled to wait at least 6 months before starting G.C.E. A-L classes for lack of classroom space to accommodate them. As a result they are compelled to stay in school after passing the age of 18 years which is the legal beginning of adulthood.

Under these circumstances by the time a student enters a university or an Institute of Further Education he/she will be 20 or 21 years and is likely to pass out at the age of 24 or 25 years. The best years of youth are wasted in school. Therefore, it is proposed that the **school span be reduced to 12 years**. The 4 years spent at the junior secondary stage can be easily curtailed to 3 years. Schools seeking to load students with facts are no longer necessary as knowledge changes rapidly and gets outdated fast. What is necessary is to develop the capacity to learn. Hence the school span can be reduced to 12 years through reducing by one year the junior secondary stage.

The long intervals between the G.C.E. O-L Examination and the commencement of G.C.E. A-L classes, and between the G.C.E. A-L Examination and admission to an institution of higher education can be reduced by re-scheduling the examination calendar. If the G.C.E. O-L Examination results are released a month earlier than now, and G.C.E. A-L classes commenced soon after, then the G.C.E. A-L Examination can be advanced resulting in the reduction of total waiting time for higher education or for employment. Although this appears to be a tight schedule, with the application of modern technology and strict adherence to time schedules and conference marking, it is possible. It is worth providing the Department of Examinations with additional staff and technology as necessary.

Content of Subjects and Coordination at Different Levels.

It has been proposed above that the school span should be 12 years and divided into three stages of primary, junior secondary and senior secondary.

The Primary Stage.

The aim of the Primary Stage is to lay a firm foundation for the child to pursue the secondary stages of education. Accordingly it is child centred and activity based. The 5 year primary span is presently divided into 3 Key Stages: Grades 1 and 2 – Key Stage 1; Grades 3 and 4 – Key Stage 2; Grade 5 – Key Stage 3.

At the Primary Stage there are 3 modes of learning. These include, play, activities and desk work. As formal learning begins in Grade 3 it should be a year of transition. Children should be acclimatized to formal learning gradually, and the Key Stages restructured in the following manner:

- Grades 1 and 2 – Key Stage 1
- Grade 3 – Key Stage 2
- Grades 4 and 5 – Key Stage 3.

In keeping with the developmental levels, children at Grades 1 and 2 should engage mainly in play and activity. In Grade 3 there is a balance of all three modes of learning and in Grades 4 and 5 there is more deskwork and activity as approaches to learning.

There will be 4 main subjects, Mother Tongue, Religion, Mathematics and Environment Related Activities (ERA) with which other subjects are integrated. Language is the means through which one receives information, thinks logically and creatively, expresses ideas, understands and participates meaningfully in spoken, written and non-verbal communications, formulates and answers questions, and searches for, organizes, evaluates and apply information. During the early primary stage, children should have phonological awareness to be able to recognize words, be fluent in reading and the capable to answer questions, and have skills of vocabulary and concept development, understanding, thinking and inquiry. Formal language skills will be fortified when the child reaches the higher grades of the Primary Stage.

The notions of a knowledge society and globalization imply that people need to communicate not only by verbal information but also using information that incorporates pictures and diagrams, symbolic and iconic forms, and quantitative data. Therefore, a child receiving formal education should be presented with contents that carry all the above forms that represent reality.

Mathematics, like language, is a subject tool which develops logical thinking and the reasoning abilities of the child. Mathematical literacy is essential to understand the scientific and technological environment of modern society. Mathematics has now become boring because teachers concentrate mainly on imparting basic operations which are used in day to day transactions. In the globalized environment, students should be able to solve real day to day problems, reason effectively and make logical connections. The country needs not just a small elite group of mathematicians, but entire future generations should be competent in mathematics. Educators should adopt the premise that all students can learn mathematics and should learn mathematics. In order to do this there should be a learning environment where students are excited and are interested in the subject. Students should be able to learn concepts rather than memorize facts. They should engage in solving meaningful problems, and work in a cooperative setting learning from each other.

Mathematical concepts should be discussed in relation to daily activities to make it a part of life with a multiplicity of assessment tools used instead of mere paper and pencil tests, and teachers should have higher expectations for their students. These principles can be applied from Grade 1 to the secondary level, by adapting them to suit the learning level of students.

Under ERA there is vast coverage of science and technology, social studies, health and physical education, and aesthetics. This provides the teacher with an ideal opportunity to follow an integrated thematic approach. Then learning becomes meaningful for children. Emphasis should be on skills of observation and scientific inquiry related to the environment, life processes and living things, materials, properties and physical processes.

Religion is taught by an adherent of that religion. While teaching is based on the doctrine and practices of the religion, effort should be made to inculcate values among children as the aim of all religions is to promote an ethical living style. In the multicultural and pluralistic context, people should conform to a common culture through practicing acceptable behaviour. This would be conducive to harmony and the resolution of conflicts. Educating for this must start from the Primary Stage.

Activity Based Oral English (ABOE) is introduced for communication in Grade 1. Teaching of English as a second language begins in Grade 3. The policy on the Second National Language (Sinhala for Tamil speaking pupils and Tamil for Sinhala speaking pupils) is to introduce the language as a means for communication from Grade 3 onwards, while, formal teaching begins in Grade 6.

The role of the Primary Stage teacher needs to be revisited and redefined in view of the reality that in Sri Lankan society children do not always get the much needed care and attention of loving parents. Thus the mentoring and counselling aspects of teaching are critically important. By the end of Key Stage 1 all children should have developed enthusiasm for learning, be attuned to work in groups and have acquired basic numerical ability, writing and reading skills.

Junior Secondary Stage

Pupils move from an integrated curriculum to a subject-based curriculum at the Secondary Stage. As recommended earlier the Junior Secondary Stage covers three years instead of the current four, and the subject content will need to be scoped accordingly. At this stage too, the common curriculum will continue with a choice in the field of aesthetics.

The Junior Secondary Stage is where the pupil becomes aware of the richness and variety of human experiences, the importance of a healthy life and working habits, sharpened aesthetic sensibilities, and develop human qualities while learning to live free of conflict. This is a time of significant physiological change of a child and the education process must include features that assist the child to deal with the change and its implications. Curriculum developers should take note of this and make proposals for creating a school environment that is replete with resources and opportunities that are conducive to the total development of a child as defined above.

At the Junior Secondary Stage, Language, Mathematics, and Science and Technology should be compulsory subjects to guide a person to live successfully, align to the world of work, and engage in further learning. Curriculum must emphasize development of concepts, practical skills covering a broad range of fields, a sense of precision, reasoning and problem solving abilities.

Pupils in the Junior Secondary Stage would benefit greatly from an integrated thematic approach to their own habitat and society in general. Thus the teaching of History, Geography, and Citizenship Education as separate subjects would be inadequate. It is proposed that a single subject Civics and Social Studies should replace the above subjects.

In view of the need to attain the goal of social cohesion, the Second National Language should be formally taught as a compulsory subject at this level. For purpose of refinement one should be able to appreciate and enjoy a work of art or a performance. To enable this, the Junior Secondary Stage should include Aesthetic

Studies as a subject with four options from which a pupil may select one based on his/her abilities and inclination.

Health and Physical Education is a subject with a knowledge component as well as a practical component which helps to develop physical and life skills. But today very few schools engage in practical skills, which to have turned to be another examination subject where only knowledge is demonstrated. It is, essential that physical ability as well as health skills are taken into account and included in the student portfolio which is maintained to record such achievements alongside attainments in co-curricular and extra-curricular activities.

Pupils in the Junior Secondary Stage need to learn not only theory in the classroom but also carry out a significant amount of hands on activities which would form the experience base for further learning, help to integrate subject matter and introduce children to practical and technical skills. The activities could concern agriculture and food, making and doing with materials and tools, handling information in organizational contexts, performing arts and movement, and visual arts and design.

As there is no public examination at the end of this stage, every effort should be made to encourage activity based learning, experiential learning, learning by discovery, observation, and practical work and projects. Such exposure would also lead to the acquiring of soft skills and tacit knowledge.

Senior Secondary Stage - G.C.E. O-L

At the end of the G.C.E. O-L more than 50 percent continue staying school to read for the G.C.E. A-L in one of five different streams. The rest leave the school either to get employed or to join more advantageous fields of studies and training. The curriculum designers should recognize this need by giving optional subjects which can be selected by the pupil to give a better standing after completing his/her G.C.E. O-L. These subjects should have a bearing essentially on the world of work. Accordingly, the G.C.E. O-L examination should have six core subjects offered to all candidates and two elective subjects drawn from two clusters having technical and aesthetic disciplines.

A pupil at this stage should maintain a healthy body and also acquire living competencies that would enable him/her to develop into responsible adult. An important aspect is ability to maintain inter- and intra-personal relationships that are wholesome and dignified. Formal teaching and learning strategies should be included in view of the importance of Health and Physical Education in developing

practical skills for healthy living. This should not be a summative evaluation subject (i.e. G.C.E. O-L subject) but should involve a continuous formative evaluation.

To realize the National Goal concerning nation building towards national harmony, social cohesion and peace in the context of cultural diversity, promoting the learning of second national language should be recognized as important. Hence, it is strongly recommended to continue studying the Second National Language until completing to G.C.E. O-L. The four components of language learning namely listening, speaking, reading and writing should be given equal emphasis on the teaching-learning process. Evaluation should be done in a continuous formative manner testing writing skills as well as oral skills.

It is not practicable for government to set education standards and examinations at this level for teaching foreign languages in schools as statistics show very limited demand (less than 1 percent) at the G.C.E. O-L examination. However, it is recognized that there is an increasing demand for learning foreign languages from the youth arising from their search for foreign employment. It is expected that they would find service providers on their own for this purpose.

Advanced Secondary Stage - G.C.E. A-L

The G.C.E. A-L is the final stage of general education. This stage consists of two years and according to our new recommendation will comprise Grades 11 and 12. It is a specialized programme in which the students may select one of Physical Sciences, Biological Sciences, Commerce, Arts, and Technology streams. The pupils are expected to study three subjects in one of the above streams, the performance of which is considered for university admission. At present a pupil has also to study General English, General Information Technology in addition to the subjects in the relevant stream and has to sit for a Common General Paper (CGP). A pass in the CGP is a requirement for admission to universities.

We recommend that the five streams should continue as it is. It has been pointed out that the knowledge level of the First language is poor among students in the universities and other higher education institutions. Therefore, we recommend that first Language should be taught compulsorily at G.C.E. A-L., and every student should reach an acceptable standard in first language. There is a common belief that the present CGP has not served its purpose. We recommend that it should be restructured. The restructured CGP would have two parts: part 1 – Language component to test the ability to understand and to write an essay or a report; part 2 – General aptitude component to test analytical ability, awareness of living environment, social and non-verbal skills.

English as the International language should also be taught compulsorily and will be tested as at present. The grade obtained should be entered in the A-L examination certificate; but a pass should not be made compulsory for university admission.

G.C.E A-L is a highly competitive examination because of the competition for admission to universities. Therefore, it has distorted the whole school education system. The universities impose standards on the content that are mostly irrelevant and burdensome for large majority of the students at this stage. On the contrary, students should acquire competencies that are essential for living and the world of work. Furthermore, the G.C.E. A-L programme should serve the vast majority who leave school and look for work or pursue other tertiary training opportunities. All the above considerations make it necessary for the G.C.E. A-L examination to be made school leaving final examination. Therefore, it is recommended that the selection to universities be done on the basis of a selection process determined by the universities.

Box 1 gives a summary of proposed subjects under different stages of general education.

Box 1 Subjects to be studied at different levels of General education

Primary Stage:

- Mother Tongue
- Religion
- Mathematics
- Environment Related Activities
- English under ABOE in Key Stage I and English as a second language in Key Stages II and III
- Second National Language in Key Stages II and III
- Health and Physical Education

Junior Secondary Stage:

- Mother Tongue
- English
- Religion
- Mathematics
- Science and Technology
- Civics and Social Studies
- Health and Physical Education
- Practical and Technical Skills
- Aesthetic Studies
- Second National Language

Senior Secondary Stage- G.C.E. O-L

Core Subjects:

- Language and Literature
- Religion
- English
- Mathematics
- Science
- Civics and Social Studies

Optional Subjects:

- Technical Subject
- Aesthetic Subject or Language

Compulsory with portfolio assessment

- Health and Physical Education
- Second National Language

Advanced Secondary Stage- G.C.E. A-L

3 subjects from any one of the following streams

- Physical Sciences
- Biological Sciences
- Commerce
- Arts
- Technology

Language, General English, Common General Paper and General Information Technology

G.C.E. O-L Subject List

Core Subjects

1. Religion (Buddhism/Saivaneri/ Catholicism/ Christianity/ Islam)
2. Language and Literature (Sinhala Language and Literature/ Tamil Language and Literature)
3. Mathematics
4. Science
5. Civics and Social Studies
6. English

Optional Subjects

O1: Technical Subjects

Agriculture and Food Technology
Fisheries and Food Technology
Design and Technology
Arts and Crafts
Home Economics
Business and Accounting Studies
Entrepreneurship and Basic Economics
Information and Communication Technology
Communication and Media Studies

O2: Aesthetic Subjects and Languages

Music (Oriental/ Western/ Carnatic)
Art
Dancing (Oriental/ Bharatha)
Drama and Theatre (Sinhala/ Tamil/ English)
Appreciation of English Literary Texts
Appreciation of Sinhala Literary Texts
Appreciation of Tamil Literary Texts
Appreciation of Arabic Literary Texts
Languages

Compulsory with portfolio assessment

Health and Physical Education
Second National Language

Delivery of Curriculum (Institutional arrangements and development)

Three main institutions namely National Institute of Education (NIE), Department of Educational Publications (DEP) and Department of Examinations (DoE) are together responsible for the development and the delivery of curriculum.

The DEP is responsible for preparing textbooks based on the curriculum content as specified by the NIE. The DoE prepares the model question papers based on the curriculum content. Hence, there should be strong coordination and collaboration between the three institutions. In the past it appeared that these three institutions worked in isolation as indicated by the mismatch between the syllabi, teacher manuals, textbooks, and delays in issuing model papers together with the curriculum.

As the standards of operation and the outputs of three institutions converge and impact on the pupil in the classroom, their professionals should work in an integrated manner starting from the top level to operational level with well-defined work plan. This requires the capacity building activities which should be done together. It is recommended that all national and international capacity development programmes should have participation from all three organizations.

Policy Proposals

Main Features

1. The National Curriculum should contribute to the holistic development of the Sri Lankan citizen.
2. National Goals and Basic Competencies identified by the National Education Commission should be the basis for the National Curriculum.
3. The Curriculum should not be overloaded with unnecessary details of facts, but confined to key competencies.
4. The key competencies and learning outcomes of each subject discipline need to be specifically and clearly defined.

Curriculum Cycle

5. The duration of the curriculum cycle should be extended to 10 years with activities distributed as follows: Year 1 – drafting syllabi and TIMs; Year 2 – Piloting, Editing, Developing Textbooks; Year 3 – Finalizing, Printing, Distribution; Years 4, 5, 6, 7, 8 – Implementing, Feedback, New Developments; Years 9, 10 – Revisiting, Researching, Reporting.
6. Curriculum development authorities should establish a feedback mechanism with a research base during the implementation of the Curriculum Cycle.
7. A continuous supply of information on new developments in all subjects should be communicated to teachers through the ISA network.
8. Before starting a new cycle a comprehensive study of implementation of the curriculum should be carried out and findings submitted for public discussion.

Span of General Education

9. Reduce the present span of general education to 12 years by reducing one year from the Junior Secondary stage. It will comprise primary 5 years, junior secondary 3 years, senior secondary 2 years, and advanced secondary 2 years.

Primary Stage

10. The Key Stages in the primary school should be rearranged as: Key Stage 1 – Grades 1 and 2, Key Stage 2 – Grade 3, Key Stage 3 – Grades 4 and 5.
11. Health and Physical Education should include both instruction and practice compulsorily at the primary stage.
12. As Environment Related Activities at the primary stage cover a vast area, they should facilitate the development of aesthetic sensibility, scientific inquiry, experimentation, discovery and observation.
13. Inculcation of values through all the subjects from early years should be emphasized.
14. The medium of instruction should be the mother tongue.
15. Teaching of Activity Based Oral English should be strengthened from Grade 1, and teaching of English formally should start from Grade 3.
16. Teaching of Second National Language should start at Grade 3 with priority given to developing oral skills.

Junior Secondary Stage

17. As the number of years is reduced at the Junior Secondary Stage the Curriculum should be scoped accordingly.
18. The common curriculum should be continued, with variations in Aesthetic Subjects.
19. The teaching of the Second National Language should be strengthened with more weightage given to the spoken language.
20. Health and Physical Education should involve both instruction and practice compulsorily at the Junior Secondary stage.

21. History, Geography and Citizenship Education should be integrated as Civics and Social Studies; Basic concepts of Economics too should be included in this subject.
22. Life skills need to be incorporated in all subjects in general, and specially in Practical and Technical Skills, Health and Physical Education and Civics and Social Studies.
23. ICT literacy should be incorporated into Practical and Technical Skills development.

Senior Secondary Stage (G.C.E. O-L)

24. Six core subjects and two groups of optional subjects should be taught at the SSS.
25. Health and Physical Education and Second National Language should be taught compulsorily at the SSS but not examined at National Level.
26. Contents from History, Geography, Civics and Governance and Basic Economics should be integrated into one subject as Civics and Social Studies.

Advanced Secondary Stage (G.C.E. A-L)

27. ASS should comprise five main streams: Physical Sciences, Biological Sciences, Commerce, Arts and Technology, with specialized curriculum in three subjects for each stream.
28. An appropriate mechanism should be developed by the universities to select students for universities, from among those who perform well at G.C.E. A-L.

Curricular Material

29. Teacher Instructional Manuals need not contain facts found in the textbooks, but guide the teachers on methodology, particularly on inculcation of generic competence.
30. Textbooks should be designed by multi-cultural panels and different language versions written by sub-teams of the panel. There should be a general editor who should be responsible for the accuracy of the content. Two persons can jointly edit the three language versions.

EARLY CHILDHOOD EDUCATION

Introduction

World Education Forum 2015, Incheon Declaration – Education 2030, has focused on the free and compulsory provision of at least one year of quality pre-primary education and access of all children to quality early childhood development, care and education. Sri Lanka too endorses to this concept as well as recognizes the need to raise standards and ensure access to high quality Early Childhood Education for all Sri Lankan children.

Early Childhood Stage has been defined internationally as the age range from 0 to 8 years. A child during this stage undergoes rapid and intense physical, social and emotional development; and the following basic needs should be provided to children during this period:

- Good health care and nutrition
- An environment which encourages proper physical, emotional and psycho-social development
- High quality learning opportunities
- Psycho-social counselling for parents/guardians and children

Malnourishment, and lack of adequate love, protection and care result in tremendous harm to the physical and mental development of children. Thus, it is crucial that children at this stage have good health care, nutrition, protection and love, at home and at the preschool and primary school. Without it, mere entry to a Pre-school will not provide opportunity or even possibility of access to quality learning.

Quality Early Childhood Education enables smooth transition to Primary Education, and provides the requisite skills for successful completion of Primary and Secondary Education Cycles. In addition to its impact during the Primary and Secondary Education stages, it provides a strong foundation for life as a decent citizen in society. Adequate input for Early Childhood Education would speed up human development and strengthen social justice besides affording the country long term economic benefits.

Trends in Early Childhood Education

The Education for All Global Monitoring Report 2014 recognizes that early childhood programmes across the world benefit a higher proportion of advantaged than disadvantaged children. Inequity in access to a good quality preschool is the

root cause of children's diverging educational trajectories through primary schooling and beyond. Children's circumstances strongly determine their opportunity to learn during the early years. Studies in the US found the benefit-to-cost ratio to be 5.8, and that in India the return in the labour market for quality preschool education would be US\$14.07 per dollar spent.

Preschool education, however, is unequal. The International Association for the Evaluation of Educational Achievement (IEA) Pre-primary Project 1, a most significant cross-national study of Early Childhood Care and Education (ECCE) programmes in seventeen countries or regions of differing size, political constitution and economic development, measured language and cognitive development in relation to the type of preschool programme. It was found that in all countries, children who at age 4 years had early learning in the manner of free-choice activities rather than pre-academic activities (literacy and numeracy), open and exploratory learning rather than frequent direction from adults, adult participation in children's activities, individual or small group activities rather than more of whole-group activities, and greater availability of play and learning material had better language and cognitive development by the age of 7 than others.

The Republic of Korea has separated legislation covering child care and early childhood education. Following the adoption of the Early Childhood Education Promotion Act and priority for the Act in National Policy, the private sector including churches and NGOs initiated programmes leading to a proliferation of private kindergartens; and the government of Korea faced the problem of accommodating various private ECCE programmes within an institutionalized public education system.

Korean kindergarten teachers are graduates of either four-year colleges or two or three-year junior vocational and correspondence colleges, with a major in preschool education. The recruitment of teachers between public and private sectors is, however, not uniform. Public kindergarten teachers are selected through a rigorous national examination while private kindergarten teachers are not required to pass the examination or possess four-year college degrees.

The Korean Educational Reforms Committee insisted that:

- Children of age 3-5 year should be included in a new public preschool system where education and care services are integrated and provided together;
- Priority should be given to disadvantaged children from low-income families to ensure educational equity;
- At least one year of free preschool education should be provided, so that every child may have an equal start.

The kindergarten curriculum consists of five life areas: physical, social, expressive, language, and inquiry. Curriculum guidelines and teaching-learning material are centrally developed; and the municipal and provincial education authorities decide the details of the structure and operation of individual kindergarten curricula. While the standard instructional time is three hours per day, kindergartens offer half-day and full-day programmes.

In Malaysia the 1984 Child Care Act (Act 308) refers to all ECCE programmes for children less than four years of age. The supervision and coordination of these programmes are by the Department of Social Welfare and the Ministry of Rural and Regional Development. The Education Act of 1996 made pre-school education a part of the national school system, with the Ministry of Education, Ministry of Rural and Regional Development and the National Unity Department responsible for supervision and coordination of kindergarten programmes for children between 3 and 5 years. The ECCE programmes are government funded.

ECCE programmes are also operated by municipalities, local government bodies, and non-governmental and private sector organizations. The Ministry of Education provides training for kindergarten teachers. The qualifications of teachers in pre-schools are:

- Four-years integrated Bachelor's degree
- One-year postgraduate degree in Education
- Six-semester Diploma in Teaching offered by teacher training colleges
- Two-semester Diploma in Teaching for university graduates seeking to enter the field of education.

ECCE programmes for children under the age of 4 years are provided by the Ministry of Rural and Regional Development, and the Department of Social Welfare. The private sector also contributes to the Government's effort.

In Malaysia all preschools conform to the National Preschool Curriculum designed to facilitate the achievement of preschool education goals comprising the following objectives:

- To develop love for their country;
- To be well mannered and upholding moral values;
- Mastering basic communication skills;
- Having respect for the national languages;
- Mastering the basics of the English language;
- Recognizing physical activities as a basis for good health
- To develop physically and practice good health and safety measures;
- To develop critical thinking skills through enquiry and the use of all senses.

The above stated objectives are materialized through the following learning areas.

- Language and communication;
- Cognitive development;
- Socio-emotional development;
- Spiritual and moral development;
- Physical development;
- Aesthetic and creative development.

Evaluation of children's performance is part of the preschool programme. Teachers evaluate children through on-going assessments which including observation, children's projects and portfolio.

The recommended instructional time in Malaysia is three and half hours a day, five days a week. The suggested time table is as follows.

Class activities:	90 minutes
Group activities:	60 minutes
Free activities:	30 minutes
Break/snacks/rest:	30 minutes

In Finland, Early Childhood Education and Care (ECEC) has guidelines based on the Finnish Government's National Policy Definition of early childhood education and care. Two national regulations and policy documents cover the content and quality of ECEC, and the upgrading of local ECEC curriculum:

- National Curriculum Guidelines on Early Childhood Education and Care
- Core Curriculum for Preschool Education.

Municipalities are allowed to adopt local policy definitions and strategies relevant to the ECEC as part of their respective child policy programmes. The local ECEC curriculum is drafted by a municipality or several municipalities based on National Curriculum Guidelines. The local preschool curriculum and the ECEC curriculum constitute an integrated whole with continuity between them. Unit-specific ECEC curricula are more detailed than the local ECEC curriculum, and describe the special features and priorities of units or districts. Individual ECEC plans and preschool education plans are drafted by professionals and parents to provide a basis for the implementation of the child's care, early education, and preschool education.

The Finnish system includes day-care programmes for babies and toddlers, and a one-year preschool or kindergarten for six-year olds. Early childhood education emphasizes respect for each child's individuality and prospects of each child developing as a unique person. Finnish early educators guide children in the

development of social and interactive skills, encourage them to pay attention to other people's needs and interests, to care about others, and to have a positive attitude towards other people, other cultures, and different environments.

Municipal child care centres for children between three and six years have three adults (a teacher and two nurses) for 20 children. These centres are either private but subsidized by local municipalities or paid for by the municipalities with support from the central government. Payment where applicable is scaled to family income and ranges from free to a maximum of about 200 Euros a month.

The qualification of a kindergarten teacher is a university or university of applied sciences degree. All day-care centre personnel must have at least an upper secondary-level qualification in social welfare and health care. Family day-care providers must have a vocational qualification in a family day-care or other appropriate training.

The core content area of ECEC is based on the following six orientations.

- Mathematical orientation
- Natural sciences orientation
- Historical-societal orientation
- Aesthetic orientation
- Ethical orientation
- Religious-philosophical orientation

Each orientation has its specific way of critical thinking and creative expression, practicing imagination, refining feelings and directing activity.

Language as a means of communication and interaction in the context of all orientations is of vital importance in all care, education and teaching situations so that educators use language with care and precision in their teaching.

Sri Lanka has achieved the highest coverage for pre-primary education in South Asia through combined initiatives of private actors, non-governmental organizations, religious organizations, community associations and the Government. Out of 100 children entering school, 96 would have attended some type of preschool.

Responsibility for Sri Lanka's overall childhood development has been delegated to the Ministry of Child Development and Women's Affairs, and that for health and nutrition to the Ministry of Health while the Ministry of Social Services is responsible for disadvantaged groups. There are also several institutions and departments active in the subject area.

According to Section 2 of Appendix III of the 13th Amendment to the Constitution of Sri Lanka, the responsibility for pre-school supervision, management and maintaining of standards has been retained with the Ministry of Education, while registration and other responsibilities have been devolved on provincial education authorities.

In 2004, the Ministry of Women's Empowerment and the Ministry of Social Welfare formulated a national policy on Early Childhood Protection and Development. However, the absence of a national policy on Early Childhood Education, an important component of early childhood development, remains a major drawback.

Although Early Childhood authorities have been set up by several Provincial Councils, it is known that they are not duly operational. Thus, funds allocated by the government and aid provided by non-governmental organizations to the Provincial Councils are not utilized in an efficient and planned manner.

In short, as a strategy for greater economic development, improvement of educational outcomes and a greater return on national investment, the introduction of a national policy to ensure access to quality preschool for Sri Lanka's children is essential.

Current Issues of Early Childhood Care and Education in Sri Lanka

Access

In the matter of access to early childhood education, Sri Lanka has shown greater progress than other South Asian countries. As a result, almost all children receive some kind of preschool education. Most of preschool education is provided by private, religious or non-governmental operators for a fee. Very few preschools are operated with government support. At present there are various types of preschools operating, some registered under local authorities, and a substantial number unregistered.

The Incheon Declaration requires the provision of at least one-year free quality pre-primary education. In conformity with this declaration and to uphold the principle of equity, the National Education Commission recommends that one-year of free pre-primary quality education be provided to every Sri Lankan child.

Curriculum and Medium of Instruction

A majority of parents with children in preschool age have high academic expectations for their children. They prefer their children to learn mathematics, mother tongue and English in the preschool to achieve academic skills rather than

participate in various activities for socialization and personal development. A minority of parents prefer English to be the medium instruction in pre-primary education. There are instances of provincial preschools conducting written examinations for children. Some preschool teachers who have not undergone a preschool teacher training tend to give wrong advice and direction to children.

Education and Professional Qualifications of Preschool Teachers

At present no specific qualification is prescribed for preschool teachers. There are teachers without G.C.E. O-L, with G.C.E. O-L and with G.C.E. A-L or above serving in pre-primary education. Some of them have undergone six-months or less of training while there are others without any training. Because of this, the standard and quality of teaching varies widely. Providing well qualified and trained teachers is of utmost importance to ensure that preschool education is of the highest quality and gives high return on investment.

Coverage

Pre-primary education is provided under various names and systems according to the coverage. Some operate as Preschools, Early Childhood Development Centres, Montessori Schools, and Infant Schools, but without defining the coverage.

Salaries of pre-primary teachers

With respect to salaries, there are three categories of pre-primary teachers: those receiving a regular monthly salary; those receiving a salary but not on a regular basis; those serving on a voluntary basis without payment. Although many receive a salary they do not consider it commensurate with their service.

Physical facilities for pre-primary education

Health, nutrition, protection, affection and quality learning opportunities are provided mandatorily for pre-primary education, and hence there should be sufficient physical amenities available. However, despite minimum standards drawn up by the Children's Secretariat, pre-schools lack sufficient wooden equipment, the required building facilities, suitable playgrounds, toilets, sufficient potable water, and an a protective environment. Furthermore, there is inadequate monitoring and supervision by the relevant authorities.

Health and nutrition

An important indicator of the health background in Early Childhood in Sri Lanka is the mortality ratio of children below five years, which has gradually declined to acceptable levels in the South Asian context. However, prevailing malnutrition in children below five years is a serious problem. A significant fraction of the child population below five years is underweight. This undoubtedly impairs the physical

and mental growth of children, especially their intellectual and cognitive capacity. Minimizing malnutrition among children is a precondition for quality pre-primary education for all children.

Protection

Despite general awareness of the need to protect children in Early Childhood, there are several children with no protection whatsoever, owing to the loss of one or both parents, or neglect by the family, or abject poverty. Such children face a great risk of becoming victims of abuse, molestation and violence. Avoidable situations often comprise mothers migrating for employment or addiction of one or both parents to drugs or liquor, leaving the children vulnerable and unprotected.

Policy Proposals

Access

31. The Government should provide one-year of free quality preschool education to every Sri Lankan child in conformity with national standards, and under conditions identical to Primary Education.
32. Every fee-levying preschool should conform to guidelines, standards, codes and circulars issued by the Government in respect of staffing, facilities, physical plant and operation; and should be subject to a ceiling on fees charged and be open to inspection by Government authorized agencies.
33. Every non-state preschool should be registered with a local authority (Provincial Councils, Municipal Councils and *Praadeshiya Sabhas*).
34. Unregistered preschools should not be allowed to operate in the future; and operating an unregistered preschool made an offence punishable under Penal Code.
35. As the legal foundation, the Early Childhood Education Promotion Act needs to be incorporated into the Law on Education.

Curriculum and Medium of Instruction

36. The medium of instruction in pre-primary education should be the mother tongue.
37. There should be a centrally developed national curriculum for ECCE and guidelines for introducing variations at local level.

38. The curriculum should be child-centred, i.e. stress free, activity based, and with joyful learning, to enable children to develop their creative potential.
39. The curriculum should fulfil the objectives of developing patriotism, respect for others, social harmony, moral values, sustainable living, good health, a spirit of inquiry, and the use of all senses.

Education and Professional Qualifications of Preschool Teachers

40. Teachers should be made competent to develop learning situations in conformity with curriculum guidelines.
41. Teachers should also be trained to provide for the protection and wellbeing of children, developing their personal and social skills, as well as ensuring inclusivity of children with special needs.
42. The minimum educational qualification of pre-primary teachers should be G.C.E. A-L with at least a 9-month Diploma in Pre-primary Education awarded by an institution approved by the National Institute of Education.
43. Special degree programmes in pre-primary education should be introduced within the next 3 years, for those aspiring to be pre-primary teachers. Holders of the Diploma in Pre-primary Education will be given due exemptions in the special degree programme.

Coverage

44. Pre-primary education centres for children of age four to five years should be named either as preschool or kindergarten.
45. Three to four year old children may be served by privately operated Early Childhood Development Centres accredited by the Provincial Authorities under the supervision of the Ministry in charge of Children's Affairs.
46. Children under three years (infants and toddlers) may be served by privately operated Day Care Centres accredited by the Provincial Authorities under the supervision of the Ministry in charge of Children's Affairs.

Salaries of pre-primary teachers

47. The appointment of pre-primary teachers, their remuneration and service conditions should conform to the Teachers' Service Minute. This would require the amendment of the existing Teachers' Service Minute to accommodate the absorption of pre-primary teachers into the state sector.

Physical facilities for pre-primary education

48. All pre-primary education providers should conform to minimum standards specified by Children's Secretariat.
49. The local authorities should not allow any ECCE provider to use facilities that do not satisfy the above conditions.
50. The Ministry of Education should conduct random monitoring and supervision to ensure that local authorities do not breach the above policy, and also look into specific complaints.

Health and nutrition

51. Each and every child in pre-primary education (age 4 to 5 years) should be provided a balanced mid-day meal.
52. The ECCE providers must maintain a record of the health and nutrition condition of each child. Children who are continuously malnourished, retarded in growth and stunted should be given due attention by the health authorities with the cooperation of the child's parents.
53. The living conditions of every child must be identified and placed on record. If the living conditions are not conducive to a child's wellbeing the ECCE provider must alert the local authorities and social service department regarding this condition for necessary action.

Protection

54. The teachers should be sensitive to the conditions of the children under risk and they should alert ECCE heads and necessary protective actions to be taken with assistance of relevant external authorities. This entire process must be carried out confidentially.

55. Child Protection, Law Enforcement and Health Authorities should promptly take necessary action to provide protection and to prevent or mitigate the ill-effects that may occur.
56. A calendar of dates for each year should be fixed by each school in advance for inviting the parents to attend counselling sessions to prevent conduct that may be damaging to the child; there should be arrangements to refer the parents to appropriate professional counsellors if and when necessary.

THE TEACHING PROFESSION

Introduction

In the past the role of the teacher was transmitting the cultural heritage to the new generation. The teacher conveyed what he/she knew to the child mostly by talking and the child was expected to listen and memorize the information given by the teacher. Although education is described as a process of conveying knowledge, developing skills and cultivating attitudes teachers were concerned with only the first domain of knowledge. With the growth of the progressive education movement in the West and the application of child psychology, educationists began to recognize the centrality of the child in the educational process. Research also showed that children learn by using all the sensory organs and that activities provided better opportunity for learning. Child centred and activity based methodology became the generally accepted process of learning.

Thus the present day teacher has to ensure that the child has the knowledge, is equipped with the necessary skills and generic competencies essential for success in life. This total change in the child can be brought about by the transformation role of the teacher. To enable children to cope with the emerging problems, teachers all over the world are undergoing change and adjusting themselves to meet the demands of this transformation role. They are adopting inquiry-based, experiential and constructivist approaches to teaching and learning where the student becomes the centre of the process.

The declared school curriculum defines and provides a base for formal learning. The environment supplements the learning opportunities through the experiences at home, in society, playing and interaction with peers and material presented through the print and electronic media. In this contemporary rich learning environment the teacher has a new role to facilitate opportunities for students to create knowledge and to become a self-motivated learner and a competent person.

The total capability of a person is developed through information gathering, doing practical tasks, observation and informal learning. This is referred to as tacit knowledge, unique to the person and difficult to either demonstrate or transferred to another person by means of writing it down or verbalizing it. This is an aspect of his/her individual strength and must be fostered by the teacher. In contemporary formal education tacit knowledge is not even mentioned as a person's repertoire. Scholars on this subject have suggested that concept mapping can be used as one of the tools of training or capturing and externalizing tacit knowledge. Teachers should

be able to utilize this area to supplement the explicit knowledge that is conveyed through formal instruction.

Firstly, the teacher should understand and appreciate the uniqueness of each child. Furthermore, the teacher should enrich a learning situation by:

- facilitating engagement of pupils in the learning experiences;
- promoting cooperation of pupils in learning;
- creating and managing a rich learning environment;
- assessing learning achievements;
- diagnosing learning difficulties and taking remedial action;
- maintaining records and preparing reports regarding development of pupils.

Other aspects of the teacher's role include:

- mentoring and counselling;
- resolving conflicts;
- engaging in extra-curricular activities;
- connecting with parents to maximize the benefits.

Personal and professional development of a teacher requires that: he/she conducts research continuously to enhance further development of the educational process; develops partnerships and cooperation among colleagues; and regularly updates and develops his/her own career. Furthermore, the teacher has a major responsibility to assist the principal for the effective functioning of the school to enhance productivity.

Considering all the above that a teacher has to perform in the classroom, the teacher has to be a professional in being thorough with the content of subjects, well versed in educational theory and practice, bound by a code of ethics, and be an example to the students in particular and the society in general. This needs an institution-based higher level education and training of at least three years duration before recruitment as a teacher. While in service he/she has to be given opportunity for continuous professional development.

Trends in the Teaching Profession

In order to develop teachers to meet modern needs, awareness of the needs of pupils in the 21st century should be considered. The "Assessment and Teaching of 21st Century Skills Project", brought about 250 researchers across 60 institutions worldwide who categorized 21st century skills internationally in to four broad categories:

- **Ways of thinking** – creativity, critical thinking, problem-solving, decision making and learning to learn
- **Ways of working** – communication and collaboration
- **Tools of working** – information and communication technology (ICT) and information literacy
- **Skills for living in the world** – citizenship, life and career, and personal and social responsibility

To help teachers to develop above skills effective learning environments need to be developed. According to the OECD's comparative review, innovative learning environments should:

- make learning central, encourage engagement, and be the place where students come to understand themselves as learners;
- ensure that learning is social and often is collaborative;
- be highly attuned to students' motivation and the importance of emotions;
- be acutely sensitive to individual differences, including prior knowledge;
- be demanding of every student, without overloading students;
- use assessments that emphasize formative feedback, and
- promote connections across activities and subjects both in and out of school.

Taken together these principles form a demanding framework for the teacher's professionalism and the OECD concludes that:

- teachers need to be well versed in the subjects they teach in order to be adept in using different methods and, if necessary, changing their approaches to optimize learning of each student. This includes content specific strategies and methods to teach specific content;
- they need a rich repertoire of teaching strategies, the ability to combine approaches, and the knowledge of how and when to use particular methods and strategies;
- the strategies used should directly indicate, whole-group teaching, guided discovery, group-work and facilitation of self-study and individual discovery. They should also provide personalized feedback;
- teachers need to have a deep understanding of how learning happens in general and of individual students' motivation, emotion and life outside the classroom, in particular;
- teachers need to be able to work in highly collaborative ways, working with other teachers, professionals and paraprofessionals within the same organization, or with individuals in other organizations, networks of

professional communities and different partnership arrangements, which may include mentoring teachers;

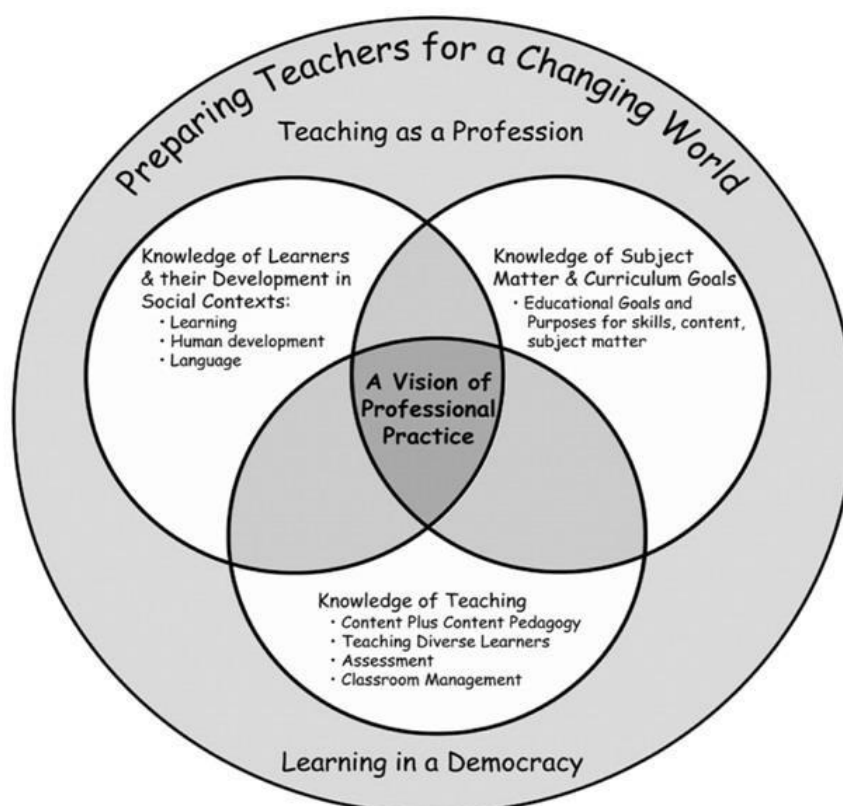
- teachers need to acquire strong skills in technology and use of technology as an effective teaching tool to both optimize the use of digital resources in their teaching and use information management systems to track student learning;
- teachers need to develop the capacity to help design, lead, manage and plan learning environments in collaboration with others;
- last but not least, teachers need to reflect on their practices in order to learn from their experience.

All these imply extensive and intensive teacher development. Some countries address it using innovative materials and approaches to teaching in order to change entrenched concepts about the attitudes towards learning. Innovative approaches also recognize that teacher learning will take place in the company of other teachers, not as a solitary exercise- an acknowledgement of the effectiveness of collaborative learning as part of a professional continuum.

Further review of literature on teacher preparation indicates that there are many ways of representing the knowledge the teachers' may need for the 21st century. For example the Darling-Hammond Model (Figure 2) depicts the core concepts and skills that should be represented in a common curriculum for teacher education which is adopted by the National Academy of Education, Committee on Teacher Education, USA. The model consists of three intersecting areas of knowledge:

- knowledge of learners and how they learn and develop within social contexts, including knowledge development;
- understanding of curriculum content and goals, including the subject matter and skills to be taught in the light of disciplinary demands, student needs and the social purpose of education;
- understanding of skills for teaching, including content, pedagogical knowledge and knowledge of diverse learners, as these are informed by an understanding of assessment and of how to construct and manage a productive classroom.

Figure 2- Relationship of the concepts in relation to preparing Teachers for 21st Century



Compared to the compartmentalized curriculum, the Darling-Hammond model incorporates three domains of knowledge that help teachers to figure out what to do when a given technique or text is not effective with all students or to construct a purposeful curriculum which is effective in the classroom. This requires incorporating content goals, knowledge of learning and understanding of children's development level and needs. Teachers also need to know how and when to use a range of practices to achieve their goals with different students in different contexts. Finally teachers must be able continually to learn to address the problems that they encounter in teaching learning situations and to meet the unpredictable training needs of all their learners. This means that the teachers need to acquire skills of classroom based research and to become expert collaborators who can learn from one another. In implementing this kind of model the practicum component needs to be paid special attention.

Specific features of and measures taken by some countries to improve professionalism of teachers, have some common principles underpinning them such as:

- need for teachers to have a good educational background;
- comparatively attractive remuneration and other benefits;
- providing opportunities for continuing professional development;
- identification of standards for teaching on which the initial and continuing teacher education are based.

Regarding teaching standards, in Australia Teacher Standards are based on 7 main standards. These are based on 4 main focus areas which are graduate, proficient, highly accomplished and lead teacher.

The Department of Education, England reviewed its standards in 2012 which has defined the minimum level of practice expected of trainees and teachers from the point of being awarded Qualified Teacher Status (QTS). The Policy Planning Wing of the Ministry of Education, Pakistan designed their National Professional Standards for teachers in collaboration with the UNESCO and financially supported by USAID. There are 10 standards and each has 3 parts namely, knowledge and understanding (content: what teachers know), disposition (behaviours, attitudes and values), performance (what teachers can do and should be able to do). A specific feature of the set standards used in the UK and Pakistan is the incorporation of cultural values.

Issues of the Teaching Profession in Sri Lanka

Teacher Recruitment

Currently the teacher recruitments in Sri Lanka are based on the following two schemes.

- Formal institution based Pre-service Diploma holders (National Diploma in Teaching at NCOEs) and B.Ed. degree holders.
- Degree or Diploma holders (B.A., B.Sc., NDT, HND, etc.) without having formal pre-service teacher education.

Those in the second category when recruited as teachers do not have any professional knowledge and experience in teaching. Therefore, their performance in their jobs falls short due to their inability to identify the potentials and weaknesses of the students, and failure to create an effective learning environment. Hence the student achievement does not reach the expected level.

In recognition of this the Commission recommends that before recruiting those possessing general degrees and special diplomas be required to receive dual institutional and field-based conversion programmes of 6 months duration.

In the future recruitments should be done only by the Ministry of Education and Provincial Ministry of Education. The present practice of school-based teacher recruitment should be discontinued because it prevents the rotation of more competent teachers through the system. In addition there may be no applicants for isolated schools as such schools would not be attractive.

National level statistics do not reflect the actual ground situation of the shortage of teachers in Mathematics, Science, and English. These shortages are critical as there should be at least one teacher in a school for each of these subjects. These critical shortages should be recognised and targeted recruitments and deployment should be done to address this issue.

Teacher Deployment and Transfers

The current policy on teacher deployment is not implemented properly because of undue interference, resulting in an excess of teachers in urban and semi-urban areas and shortages in rural and disadvantaged areas. There is a tendency for some teachers to remain in one school for long from the time of recruitment. In fairness to all Sri Lankan children the most competent teachers should also serve in difficult and most difficult schools in disadvantaged areas, and this can be achieved by the rotation of teachers through limiting their period of service in any particular school. Therefore, the Commission recommends that: (1) teacher deployment must meet the specific needs of schools; (2) the first appointment should be to difficult or most difficult areas for a mandatory period of 5 years; (3) no teacher should be allowed to stay in any given school for more than 8 years.

Prolonged mismatch between the needs and the actual number of teachers in the system for specific subject areas results in maldistribution of teachers. Hence teachers get placed in positions for which they are unqualified. Such placements put the pupil in jeopardy and hinder the professional development and career progress of the teacher. As a remedial measure the Commission recommends: (1) providing primary grades solely with primary-trained teachers; (2) every secondary school should have at least one teacher each, specifically for Science, Mathematics and English; (3) urgent corrective measures should be taken in the event of insufficient number of teachers.

Pre-service Teacher Education and Training

As at present only two streams exist for providing pre-service teacher education, namely, National Diploma in Teaching at National Colleges of Education and B.Ed. programmes at a limited number of Faculties/Departments of Education in

Universities. The annual output of these two streams is inadequate to meet the requirements of the country. Besides B.Ed. programmes are offered only for the students in the Arts streams.

It has been found that the structure and content of pre-service teacher education programmes in the Universities are inappropriate. The limited number and the scope of subjects offered in the academic component of the B.Ed. programmes do not match the school curriculum. Hence teachers with the B.Ed. qualifications are not adequately competent to teach Science, Mathematics, IT, Aesthetics, Commerce, Technology and other subjects where there is a dearth of teachers. It is also reported that the supervision of teaching practice of B.Ed. students is not well organised and therefore ineffective.

The curriculum of NCOEs consists of an academic component, a professional component and a general component which are implemented over a period of two years. Although the curriculum has been revised recently, it does not match the school curriculum as a result of inadequate consultation with or participation of experienced teacher educators and practicing teachers. Further the NCOE curriculum is criticised that it is not balanced because the practical and pedagogic components are inadequate in comparison with the theoretical components.

It is reported that there is a critical shortage of staff in both NCOEs and Faculties/Departments of Education in Universities, which seriously affects the quality of output. Opportunities for professional development of serving academics of these institutions are lacking.

The policy, the process of recruitment of students to the National Colleges of Education, and the selection criteria seem to have been inconsistent in the recent past. The candidates selected in any given batch have widely varying abilities thus affecting the quality of the output from the batch. Hence, the quality of teachers produced by the Colleges has deteriorated over the years.

To expand the opportunities of pre-service teacher education, the Commission recommends the establishment of Faculties/Departments of Education in all Universities to offer B.Ed. general degree programme which will have course modules in Mathematics, Sciences, English, IT, Commerce, Technology, and other relevant subjects. The NCOEs should offer at least 3 specialised courses, and none of the courses offered by the NCOEs should be changed in an ad hoc manner. Further, the Universities and NCOEs should provide 6 months of dual institutional and field

based conversion programmes in teaching for general degree/diploma/higher diploma holders in any discipline.

Cadre provision of Teacher Educators should be increased in the NCOEs and Faculties/Departments of Education in the Universities. The minimum entry requirement for the Teacher Educator's Service should be an honours degree in B.Ed. or a B.Ed. with 1st class/2nd class upper or merit in PGDE. For promotion to the next level in the service a teacher educator should gain postgraduate qualifications in education. Opportunities should be provided to teacher Educators for short term training, study attachments and collaborative research at local/foreign institutions to upgrade and update their professionalism. A special fund should be set up to support research and development activities of Teacher Educators.

It is recommended that the teacher education curriculum should be restructured with a new holistic model incorporating current trends in teacher education. It should consist of segments pertaining to a strong theory base, pedagogic practicum, research and innovation, as well as personality and character development compatible with the school curriculum. Further the Teacher Education Institutions should be provided with well-equipped Work Rooms, Workshops, and Laboratories for individual and group activities of teacher trainees.

The Commission recommends revisiting the selection process of candidates to National Colleges of Education so that it is based on the academic achievement at G.C.E. A-L and an assessment of extracurricular activities, school records, social commitments and personality at the viva-voce.

In-service Teacher Education

Presently in-service programmes are designed as short-term programmes by NIE and PEAs without a long term perspective. The accepted practice is for the NIE to train ISAs to function as trainers in the provincial and zonal teacher training programmes; and the provincial educational authorities have the responsibility of training teachers in the system. Although some of these programmes are need-based to introduce reforms in the school curriculum, most of the other programmes are not well planned, resulting in waste of institutional resources and valuable time of participants which they could use in the classroom. It is generally observed that the programmes conducted by zonal and provincial authorities are bunched together in the latter part of the year. The reason given is that the necessary funds are not released on time. Information gathered points to in-service teacher training being not identified and implemented as a critically important function.

In-service programmes have been found to be unsatisfactory in the following respects:

1. Lectures are unattractive to participants and fail to meet the requirements owing to a lack of infrastructure and physical facilities.
2. The lectures lack relevance.
3. Travelling and subsistence payments are inadequate to encourage participants.

The Commission recommends that every in-service programme should be need-based and conform to the following procedure.

- At the beginning of each year every teacher should prepare his/her own development plan for the ensuing year. This should be communicated to the ISAs through the principals. ISAs should identify the needs of the teachers and should develop a comprehensive in-service programme. In-service training programmes should be implemented by the zonal education authorities according to the programme.
- School-based teacher development programmes should be promoted at school level to fill gaps in the institution based in-service training programmes. These programmes should be organized by the principals in consultation with ISAs according to an advance plan prepared in consultation with teachers.
- The principals should arrange for senior teachers to act as mentors for teachers with less than five years of service. Such mentoring should be placed on record, and used in the performance assessment of the senior teachers;
- Principals should arrange for the formation of peer groups for teachers with similar interests. These groups should provide mutual support in teaching and self-improvement.

It is the responsibility of Provincial and Zonal directors to ensure the alignment of the advanced plan with the budget, and release funds in time for the actual operation of in-service programmes.

All teachers are expected to be update and upgraded at least once in five years in respect of both content and pedagogy. Institutional arrangement should be made for this purpose by converting training colleges that are being phased out to residential in-service training centres. The Commission recommends that “vacation refresher residential programmes” of two weeks duration for these teachers should be conducted in these centres. The vacation refresher residential programmes should be designed and developed centrally by the NIE and should be conducted by Provincial Education Authorities. In the event of any teacher not having been upgraded in the required manner within 15 years of service immediate steps should be taken to remedy the situation.

The existing Teacher Centres should be expanded and equipped with libraries, laboratories, IT centres, workshops and other facilities to conduct high quality short term in-service Teacher Training Programmes. Since the Zonal Education Director is accountable for the professional development of teachers in the Zone, the management and staffing of the centres is the responsibility of the Zonal Education Director. The role of the Manager of the Teacher Centre to do advance annual planning of Teacher Centre activities based on requests from teachers, ISAs and principals. There should also be a process of eliciting ideas of students as to how the teaching could be improved to meet their expectations.

Continuing Professional Development of Teachers, ISAs and Teacher Educators

Several Institutions such as Faculties/Departments of Education in the Universities (Colombo, Peradeniya, Jaffna, Eastern and OUSL) and the NIE offer Continuing Professional Development (CPD) programmes. These institutions offer programmes ranging from B.Ed. to M.Phil. and Ph.D. Owing to the presence of a large number of un-trained graduate teachers and trained non-graduate teachers in the school system, there is a demand that far exceeds the limited capacity of these institutions.

The curricula of most of the programmes do not match current needs as the curricula have not been revised for a long time. The taught component of these programmes is heavily loaded with theory, and practice teaching is very limited. This is due to the lack of effective partnership with schools in implementing the teaching practice component and a dearth of supervisors.

The other drawback is a chronic shortage of qualified, experienced academic cadre which makes it necessary to conduct programmes with less qualified academics. Opportunities for upgrading the professionalism of the existing academic cadre are few. As a result the quality of CPD programmes is declining drastically. Universities and the NIE must collaborate to meet this national need as part of their future mandate.

Teachers, ISAs and teacher educators find it difficult to participate in CPD programmes because of difficulty in getting released from their workplaces as well as finding funds. Furthermore, they face difficulties in obtaining references and other resource materials for their research activities. There should be organized guidance and arrangement for free or subsidised online access to published sources.

Since continuing professional development should be supportive of career advancement of Teachers, ISAs and Teacher Educators, opportunities for CPD should be expanded by establishing Faculties and Departments of Education in all national universities. The curricula of CPD programmes should be redesigned to match contemporary needs of the education system. Programmes should be

designed in such a way as to enhance research and innovations skills of participants. Also all CPD programmes should have a supplementary component for enhancing English and ICT skills of participants. Staffing for CPD programmes should be in keeping with norms laid down by the relevant authorities and comparable with international norms to maintain quality. A scheme of peer evaluation should be adopted for purpose of quality assurance.

Every university should device procedures and arrangements to support practicing teachers to improve subject knowledge and develop innovative teaching practices. Academic Departments should have persons engaged in the study and research of teaching of subjects in their specializations on how to educate persons in specific subjects. For instance, academics in Mathematics should study how Mathematics should be taught and learned at all levels. The contribution made by academics in all disciplines in this regard should be given due recognition in their own career advancement.

Teachers, ISAs and teacher educators in the system should be encouraged to follow CPD programmes by granting necessary leave and with subsidised course fees.

Teachers' Service Conditions and Prospects

Present service conditions and career prospects of teachers are defined and described through the Service Minute. The present Teacher Service Minute has been in force for more than 10 years. Therefore, it needs revisiting to incorporate clauses that are necessary to accommodate the role of the teacher as identified in these policy proposals. Salary scales as given in the Minute are inadequate in comparison with scales applicable to other parallel services.

Generally, a teacher should have at least one free period a day to plan and prepare for lessons, prepare teaching aids, correct assignments and exercises, interact with colleagues and consult with students. However, most of the schools do not have space for teachers to engage in such work. It is proposed that a suitably partitioned, furnished and well equipped staff room is established in each school.

It is insufficient to merely declare teaching as a profession. Such declaration implies that teachers regulate and manage their own activities in a dignified manner. To enable this there should be legislation supporting the formation of a professional body or a council. The professional body will be responsible for specifying, maintaining and controlling academic and professional standards, and the ethics and discipline of teachers. The licence for practicing as a teacher will be issued by this professional body, based on performance evaluation. The proposed professional body should have autonomy to function without government or other interference.

Policy Proposals

Recruitments

57. Teacher recruitment should be based on the following qualifications:
 - Diploma in Teaching
 - Bachelor of Education
 - Either National Diploma or Higher National Diploma or a General Degree in any relevant subject combination, and 6-months dual training in an institution and field.
58. Teacher recruitment should be done either by the Ministry of Education or by the Provincial Ministry of Education.
59. Subjects with critical shortage of teachers should be recognized; and targeted recruitment should be done to address the issue.

Deployment and Transfers

60. Teacher deployment must match the specific needs of schools
61. The first appointment should be to difficult and most difficult schools in disadvantaged areas for 5 years.
62. A teacher should not be allowed to serve in any particular school for a total of more than 8 years.
63. Primary grades should be provided with teachers trained for primary education.
64. Every secondary school must have teachers for English, Mathematics and Science. In the event of inadequate teachers to satisfy the requirements, urgent corrective measures must be taken by providing conversion programmes of short duration.

Pre-service Teacher Education

65. Universities in the country should establish Faculties or Departments of Education to expand opportunities for pre-service teacher education. They should provide B.Ed. honours and B.Ed. general degree programmes. Course modules for the B.Ed. general degree programme should include at least two of the following: Mathematics, Science, Sinhala, Tamil, English, Social Sciences, Technology, IT, Commerce and Accountancy.

66. Universities and National Colleges of Education should provide 6 months dual institutional and field-based conversion programmes in teaching for general degree/diploma/higher diploma holders in any discipline.
67. Selection of candidates to National Colleges of Education should be based on academic achievement at G.C.E. A-L and an assessment at the viva of extra-curricular activities, school records, social commitments and personality.

In-service Teacher Education

68. At the end of each year every teacher should prepare his/her own development plan for the ensuing year. This should be communicated to the ISAs through the principals. ISAs should identify the needs of the teachers and develop composite in-service training programmes. The in-service training programme should be developed according to need as identified.
69. School-based training programmes for teacher development should be organized by the principals according to the advanced plan prepared in consultation with teachers.
70. Funds for in-service training programmes should be accurately determined and allocated by the Zonal Directors of Education in time.
71. The training colleges that are being phased out should be converted to residential in-service training centres. The two-weeks" vacation refresher residential programmes" for teachers should be conducted in these centres.
72. The existing Teacher Centres should be expanded and equipped to conduct high quality in-service Teacher Training Programmes.
73. Management and staffing of the Centres should be done by the Zonal Education Director (ZED). The ZED is accountable for the professional development of every teacher in the Zone.
74. In-service programmes should be recognized for performance appraisals, increments and promotions

Continuing Professional Development of Teachers and Teacher Educators

75. Relevant institution-based professional development programmes such as B.Ed., PGDE, M.Ed. and M.Phil. should be developed.

76. Opportunities should be provided to enhance the English and Second National Language proficiency of teachers.
77. Support and resources should be provided for conducting Educational Research and enhancing ICT skills.
78. Accreditation and quality assurance of CPD programmes should be done jointly by the Ministry of Higher Education and Ministry of Education.
79. Course fees should be subsidised and grants be provided for CPD courses.
80. CPD programmes should be supportive of career advancement of Teachers and Teacher Educators.

Institutional Arrangements for Teacher Education

81. Cadre provision of Teacher Educators should be increased in the NCOEs and Education Faculties/Departments of Universities
82. Teacher Training Colleges should be converted for use as residential facilities for short term in-service programmes
83. Teacher Education Institutions should be provided with well-equipped Workrooms, Workshops and Laboratories for individual and group activities of teacher trainees.
84. The NCOEs should offer at least 3 specialised courses, and the courses available at a given NCOE should not be changed in an ad-hoc manner.
85. Teacher Education institutions should be provided with special funds for supporting research and development activities of teacher educators and senior students.
86. Teacher Education Curriculum should be restructured to include a theoretical foundation in current trends in teacher education, as well as pedagogic practicum, research and innovation. This should be compatible with the school curriculum.
87. The minimum entry requirement of the Teacher Educators' Service should be a B.Ed. honours degree or degree with merit or distinction in PGDE. For promotion to the next level in the service they should gain a postgraduate degree in Education.

88. Teacher Educators should be provided with opportunities for short term training, study attachments and collaborative research at local and foreign institutions to upgrade and update their professionalism.
89. Teacher Educators should be subjected to annual performance appraisal based on a self-assessment report submitted to the President of the College.

National Council for Teaching Profession

90. A National Council should be established to uphold the dignity of the teaching profession.
91. Standards of teaching should be defined and appraisal schemes should be developed according to standards set by the Council.
92. A Code of Ethics should be developed and implemented by the Council.

STUDENT ASSESSMENT

Introduction

Assessment in the context of education refers to the process of gathering purposeful information from multiple and diverse sources and interpreting it in order to develop a deep understanding of what the students learn, understand and do as a result of their educational experiences with a view to promote learning. Assessment can be divided into two main forms as formative and summative, based on the use made of the information generated by the assessment.

Assessments carried out during an ongoing educational process are usually referred to as “formative assessments”. These refer to activities that teachers and students undertake to gain information that can be used diagnostically to improve teaching and learning. Formative assessment may include teacher observation, oral questioning, classroom discussion, portfolio assessment, performance assessment and analysis of student work including homework and tests. Assessment becomes formative when the information generated is used to adapt teaching and learning to meet student needs.

Formative assessments are designed to assess the learning progress and provide information to teachers and students to enable the teachers to diagnose and resolve learning difficulties. Providing feedback is a key feature in formative assessment. In principle formative assessments can be done on a daily and weekly basis in classrooms by teachers and students. Students are encouraged to engage in self-assessment as a part of this process. The information generated by a formative assessment goes no further than the classroom. It is not used for grading students, or for any rank ordering process. Too often classroom instruction has failed to take advantage of the wealth of formative assessment information that can and must be gathered during every lesson.

The assessments carried out usually at the end of a unit, year, term or course is called “summative assessments”. These provide teachers, students and parents with information they may use to draw conclusions on how well a student has attained the learning targets in the curriculum. Summative assessments are typically used to assign grades, evaluate pupils and to award certificates or recognition.

It is worth noting that assessment information derived from summative assessments can also be used for several formative purposes. These include, monitoring system performance (e.g. the progress of schools, zones, provinces and the education system) improving the curricular material, and improving teaching practices.

Both formative and summative assessments are necessary for the teacher to know if the student has attained the targets laid out in the curriculum. While summative assessments are intended to verify learning, formative assessments are intended to be used to improve learning.

While emphasizing that the main purpose of assessing is to improve student learning, three distinct but inter-related purposes of assessment have been defined in recent literature: assessment *for* learning (AfL), assessment *as* learning (AaL) and assessment *of* learning (AoL).

Assessment *for* learning occurs throughout the learning process. It is designed to make each student's understanding visible, so that teachers can decide what they can do to help student progress. In assessment *for* learning teachers use assessment as an investigative tool to find out as much as they can, about what their students know and can do, and what confusions pre-occupations or gaps they might have.

Assessment *as* learning focuses on students and emphasizes assessment as process of meta-cognition (knowledge of one's own thought processes) for students. Assessment *as* learning emerges from the idea that learning is not just a matter of transferring ideas from someone who is knowledgeable to someone who is less knowledgeable, but is an active process of cognitive re-structuring that occurs when individuals interact with new ideas. Within this view of learning, students are the critical connectors between assessment and learning. For students to be actively engaged in creating their own understanding, they must learn to be critical assessors who make sense of information, relate it to prior knowledge, and use it for new learning.

Assessment *of* learning is summative in nature and is used to confirm what students know and can do, to demonstrate whether they have achieved the curriculum outcomes, to certify proficiency, to make decisions about student's future programmes and occasionally, to show how they are placed in relation to others.

The order (*for*, *as*, *of*) is intentional, indicating the importance of assessment *for* learning and assessment *as* learning in enhancing student learning. Assessment *of* learning should be reserved for circumstances when it is necessary to make summative decisions.

One way to differentiate among the three types of assessment activities is that classroom assessment is mainly about assessment *for* learning or *as* learning while tests, examinations and system level assessments are mainly about assessment *of* learning. In other words, formative assessments are assessments *for* or *as* learning and summative assessments are assessments *of* learning.

Trends in Assessment Practices

Learning is not just about subject knowledge that collects from prescribed texts and the teacher's notes. It is more about methodology and how to apply knowledge in real life. A well designed assessment methodology is the means to break this time honoured myth.

Commonly used standardized summative tests such as essay type, multiple choice and matching, dictate the curriculum as the tail that wags the dog. Until those tests go away or are transformed the teachers will not understand the skills that should teach students to prepare them for their future. Hence teachers need to make sure that the classroom assessments are aligned with the skills which students will need in the future. It is expected from teachers to become part of a 'New Wave' of assessment in the classroom-assessment that includes authentic and performance-based measures. Such methods of assessment should not be limited to usual tests but include new modalities that require students to demonstrate their problem solving skills as well as their skills in analysing and synthesizing information.

Developed countries such as USA, UK, Canada, Scandinavian countries and Australia are using authentic assessment methods to strengthen assessment and evaluation practices in schools.

The idea behind authentic assessment is to have students demonstrate their knowledge in ways that are much more applicable to life outside the school. While standardized testing can serve a role in the assessment outcome, authentic assessment offers other advantages as well. In the traditional assessments, teaching is limited to prepare students for tests. An authentic assessment method assesses student mastery through the completion of real world tasks in which the student applies knowledge and skills acquired in the educational process. Authentic assessment may include writing assignments, completing individual or cooperative projects, portfolios, teacher observations, performance or demonstration assessments or any other tasks that will provide evidence of mastery.

New assessment measures such as portfolio has become increasingly popular. An educational portfolio is more than just a group of projects and papers stored in a file folder. It includes other features such as teacher's evaluations, rubrics and student self-reflections. Portfolio assessment gives an overall picture of student progress using a variety of student work and related material over a period of time. It can be used to measure students' progress over the entire student career.

There are several ways in which a portfolio can be used in education. The type of portfolio created depends on its ultimate use. Some types of portfolio that are used in the classroom are developmental, proficiency and showcase portfolios.

When a teacher documents a student's improvement in a particular competency throughout the school year the document is referred as a developmental portfolio. Such a portfolio provides specific documentation that can be used for student evaluation as well as in the parent meetings to discuss student performance. A proficiency portfolio is used to prove mastery in a specific subject area while a showcase portfolio documents a student's best work accomplished during a school year or an entire educational career. It can include art work, science experiments, research papers and other outputs that best represent the student's skills and abilities.

Among the emerging best practices of internationally accepted standards for National Level Examinations is achieving a high degree of transparency in examinations. It is a growing trend, which is currently well established in Ireland and British Columbia in Canada, where schools practice pre-scrutiny of examination results by sending the marked script to each candidate. This offers total transparency of the process and persuades the entire examination machinery to adhere to standards and thereby minimizes subjective errors in marking. As a result complaints are few, examinations are transparent and public confidence is assured. Such practices are spreading to other countries. Examination Departments/Boards in Australia— especially Queensland —Hong Kong and New Zealand are introducing similar changes. These concepts could be used to increase transparency of our examinations as well.

The trend in School Based Assessments and national examinations in the developed countries is the certification of minimum rather than maximum competence. 'Minimum Competency' is applied to SBA and national examinations. One paper (Paper I) in any subject at national examination is a 'Minimum Competency Test', qualification in which is sufficient for a student to pass the subject at the examination. The content needed to certify minimum competence is identified from the syllabus and competencies. The other paper (Paper II) for the subject at national examination aims to assess higher order abilities and competencies. Grades in SBA and Paper I are used to certify a 'Pass' for a candidate while the Paper II marks decide the grade that the candidate gets.

Another trend in assessment and certification of completion of school education in developed countries is to evaluate student participation and performance in school-

based-co-curricular activities. This is essential for the overall development of the child. This is an effective way to develop and assess multiple intelligences. It is also a way of ensuring emotional maturity through participation in service projects and sports. It helps to reduce heavy examination orientation and empowers school education. School based co-curricular activities such as sports, performing arts and school leadership programmes such as societies and clubs, cadetting and guiding and community oriented services contribute immensely to total personality development of the child. Students instead of being passive observers become active participants to develop psychomotor skills.

Schools in the U.S. and Canada and all American and Canadian International Schools have set minimum performance standards for every student. For example, a student is expected to participate in at least two sports activities and two community projects. This promotes emotional and physical fitness as well as contributes to better cognitive performance.

Issues of Assessment Practices in Sri Lanka

Quality of Public Examinations and Heavy Examination Orientation

The General Education System of Sri Lanka has three public examinations namely: the Grade 5 Scholarship Examination, G.C.E. O-L (at the end of Grade 11) and G.C.E. A-L examination (at the end of Grade 13). These examinations demand excessive attention of students, parents and schools and education authorities. The degree of arousal of students, combined with parental pressure to enthuse the student to perform at each of these public examinations has placed the students under intense stress.

The Grade Five Scholarship Examination is conducted for two purposes: to provide bursaries to talented students from economically disadvantaged families and to select students for secondary education in prestigious schools. However, owing to the unnecessary attention given by the media and the enthusiasm created by the authorities to recognize a few students who reach the top, the whole exercise has turned out to be detrimental to the psycho-emotional development of the vast majority of students. The predictive validity of the examination is, however, questionable as there is no correlation between the performance at this examination and the later performance of scholarship winners.

The G.C.E. O-L Examination was originally intended to certify the subject-wise achievement of children after the end of education at the Secondary Level. Some students leave the school after this examination, others need to qualify to continue their education in the G.C.E. A-L class. A matter for concern is that still there are still

many children who fail in all the subjects at this examination after being in school for 11 years. Even more worrying is the high failure rate in Mathematics which is a compulsory subject.

The G.C.E. A-L Examination also serves a dual purpose: it is a measure of achievement at the end of the school education at the Senior Secondary level and a criterion for selection of students to universities. University admission is highly competitive and the future of a student depends on the performance at this examination. As a result students resort to cramming and once again private tutors step in to prepare children for the examination. This high level of competition is socially unhealthy and it is necessary to have an alternative mechanism to select candidates for university admission.

Heavy examination orientation and the inadequacies of testing through public examinations have adversely affected the total development of the child. In schools teaching has been reduced to preparation of students to answer examination papers; and the development of student personality is seriously neglected if not ignored by students and parents, with students forgoing co-curricular activities and social activities at school, home and community to attend coaching classes. Consequently the school system has failed to ensure the total development of the child as envisaged by its broad goals and objectives as defined by the National Education Commission.

Shortcomings in Question Paper Formats and Test Items in Public Examinations

The Framework for 21st Century Learning emphasizes the skills, knowledge and expertise that a student must acquire to succeed in work and life. The question paper formats and test items in the public examinations are criticized for the lack of balance between the three educational domains, namely cognitive, psychomotor and affective. As the curriculum and examinations continue on the outdated models more weightage is placed currently, for memory based, Lower Order Thinking (LOT) questions in the classroom testing and public examinations instead of Higher Order Thinking (HOT) questions which promote creativity and high cognitive ability. Consequently students obtain high grades by memorizing facts learned in the school and the tuition classes.

Question paper formats need to be reviewed and revised with special attention to balanced learning outcomes in all the three domains that contribute to the holistic development of students. Test items should also be included to test both lower order and higher order cognitive abilities. Facility level should be considered in the

preparation of test items to enhance examinee friendliness. A Test Item Bank is proposed to be developed in the Department of Examinations.

Weaknesses in the present Formative Assessment Methods

Two aspects of formative assessment, namely assessment for learning and assessment as learning, suffer insufficient recognition in the system. The aim of formative assessment is to monitor student while learning, and provide valid and timely feedback to the teacher to improve teaching and to the student to improve learning. More specifically formative assessment informs teachers where the students face difficulty and calls for urgent attention to problems; and guides students to identify their strengths and weakness and to target areas that need attention.

At present, formative assessment has descended to a level where the teacher administers tests and compiles the marks for adding to a total for a summative assessment. Formative assessment practices in schools should be strengthened and its full potential should be exploited to improve students' learning. The NEC recommends the introduction of a matrix with a set of basic competencies identified earlier by the NEC with a set of identifiable behaviours that would help the teachers to plan and conduct more comprehensive formative assessment. This matrix should be embedded with lesson plans to implement the specified curriculum.

Tacit knowledge and the range of abilities gathered by students during practical learning engagement and through informal learning should also be acknowledged and taken into account when planning formative assessments.

The child leaves a learning situation with several demonstrable abilities and potentials. The NEC recommends that a student is provided with a formative assessment comprising the following three components: record of curricula and extra curricula performance; student portfolio; and a personnel profile at every level of schooling.

Weaknesses in the Implementation of SBA

Currently the responsibility of implementation of SBA rests with the provincial authorities under the purview of the Department of Examinations, which provides instructions and model test items for Grades 10 and 11, while the National Institute of Education provides instructions and model test items for Grades 6 to 9. Despite the claim in the SBA Circular of the Ministry of Education that the programme will help to bring the results of existing public examinations to a satisfactory level, reduce the drop-out rate and convert the school into a place where students are offered enjoyable learning experiences, the reality is otherwise. Teachers continue

with 'pen and paper' tests that are in the summative mode despite availability of several better options.

Reporting of results is also very unsatisfactory with negligible impact on student development. Teachers are critical of handling a surfeit of paperwork with no meaningful feedback for both themselves and students.

Guidelines provided by the Department of Examinations require the assessment to be simple, and easy for the teacher to implement in the classroom without additional burden. It should be possible to conduct the assessment without frequent reference to books, assessment criteria and scheme of awarding grades. The assessment procedure should be transparent for the students and parents to understand easily, and be easy to monitor by relevant external parties.

The NEC recommends a review and rectification of the current SBA to make it a simpler, feasible and coherent programme which ensures consistency in teacher judgment and comparability of reported SBA results. SBA should include varied modalities of testing, such as: observation, effective questioning, practical tests, assignments, surveys, concept mapping and portfolio assessment, in addition to written tests. SBA should be a continuous assessment of a student's progress and ongoing improvement. As such an improving trend should be considered more important than the final mark. Hence, the cumulative mark of SBA should not be added to the marks of summative evaluation.

Lack of Assessment Skills in Teachers

It is reported that a majority of teachers are not adequately competent to assess student effectively. Although the PGDE, B.Ed., Dip. in Teaching programmes have an assessment component; they do not enable the teacher to satisfactorily assess a learning student. Currently, even a teacher who is designated as a trained teacher has no proven skills of test item writing or of assessment. As a result, student assessment does not enjoy the priority it deserves in the school.

Well-planned, systematic student assessment practices should be implemented for the professional development of teachers, ISAs, teacher educators and relevant education officers. Teachers should also be encouraged, trained and guided to carryout classroom based action research relating to student assessment.

Changes made to the assessment practices of the school system should be concurrently disseminated to institutions such as the Universities and National Colleges of Education which are responsible for the professional development of teachers.

Non-use of Assessment Information in System Improvement

The most important outcome of the general education system is the educational attainment of the student and the indicator of this is student performance. Assessment is the means to gather information on student attainment. The wealth of information that can be derived from student assessments both formative and summative should be effectively used for a variety of purposes ranging from helping the student to improve learning achievement to monitoring of system performance and policy level decision making.

The information received should carry messages for the development of the child as well as the improvement of the education system. In recognition of the educational principle that 'In education everything matters' the information should be used to develop all aspects of the system. The assessment information should prompt everyone directly or indirectly connected with the child to ask himself/herself the question "How have I contributed to the students' performance".

The teacher should diagnose the uniqueness of the set of abilities of each child, and must pay equal attention to both well performing and weaker students and encourage them to improve their performance. Further, the information gathered from assessment can further be used to enhance students' motivation to learn. Students should be non-intrusively encouraged and guided to achieve self-learning, self-assessment and peer assessment.

Individual differences of students should be recognized and special provision made for students with special educational needs (SEN) to enable them to demonstrate their full potential in their assessment.

The curriculum generally reaches the teachers as a document. The teacher as the main agent of delivery of the curriculum to the students should interpret it in operational terms. Assessment information enables the teacher to continuously improve his/her interpretation and to provide a rich learning environment to students.

Parents and potential employers are important stakeholders of the education system. Hence programmes should be developed to enhance their awareness on assessment practices that are in current use, and delivered effectively using both printed and electronic media to ensure that correct information is conveyed about the Education System and to establish dialogue with stakeholders to get feedback for improving the system.

The Commission proposes that the Assessment Information should be used primarily by the Provincial and Zonal authorities to improve the school system by paying special attention to poorly performing schools. The principle of equity should be upheld without discrimination in the process of school improvement, especially in matters of provision of teachers, basic infrastructure and quality inputs for effective delivery of curriculum.

Misuse of assessment information

There appears to be a tendency among teachers to stratify a class as high performers and low performers. The Principal is responsible to ensure that, assessment information is not misused by the teachers and that every student is treated fairly. Both schools and parents engender a competitive spirit among students. This wrong tendency can adversely affect the attitude of young students who need to be encouraged to cooperate and collaborate.

Policy Proposals

Public Examinations

93. The Grade Five Examination should be for National Assessment of Schooling rather than to promote competition among students. It should test Linguistic, Mathematical and General Abilities and have an adequate number of questions for it to be valid.
94. Special Aptitude Scholarships should be given based on school records and achievements in different fields such as Aesthetics, Sports, Creative Writing, Technical Skills, Inventions etc.
95. As the G.C.E. O-L Examination is no longer the final school leaving examination since most students proceed to G.C.E. A-L, its competitiveness can be reduced by ascribing weightage to SBA.
96. Six core and two optional subjects should be tested at G.C.E. O-L examination. Second National Language, and Health and Physical Education should be assessed as portfolio assessment.
97. Two papers should be prepared for G.C.E. O-L Mathematics test. Paper I will assess 'Minimum Competency' and its content and the competencies should be identified in the syllabus. Paper II will assess the 'Higher Order Abilities and Competencies'. A candidate who gets pass marks for Paper I should be deemed to have obtained a pass in G.C.E. O-L Mathematics.

98. G.C.E. A-L should be the terminal school examination. Selection of students to university should be by the universities, based on criteria determined by them, from among those who perform well at the G.C.E. A-L Examination. The curriculum of G.C.E. A-L (proposed Grades 11 and 12) should be made more relevant to the needs of the country and the G.C.E. A-L Examination should be made less competitive.
99. The Common General Paper should be continued at the G.C.E. A-L and should include the mother tongue with a short essay.
100. General English should be taught and tested appropriately at the G.C.E. A-L.

School Based Assessment

101. School Based Assessment (SBA) should be strengthened as the principal means of formative and summative evaluation in schools with the concept clearly re-formulated to reduce the unnecessary work load for the teacher, while retaining the essential characteristics of SBA.
102. The diverse new SBA assessment modalities should be used by teachers to capture characteristics such as practical skills, life competencies and emotional skills which cannot be assessed by paper and pencil tests.

Assessment Skills Development

103. A comprehensive In-service Teacher Development Programme on Assessment should be implemented alongside training of supervisory staff for monitoring. Zonal monitoring panels should be set up to guide teachers and to effectively monitor the Programme.
104. The assessment component of Pre-service Teacher Education Programmes at National Colleges of Education should be upgraded and strengthened.

Test Item Bank / Question Papers

105. Examination instruments should be prepared to emphasise key competencies over a surplus of factual knowledge; questions should emphasise application rather than recall of facts.
106. Item banks of questions should be developed, maintained and updated regularly, and used for public examinations.

107. A team of competent executive staff should be recruited and trained to become assessment specialists who would provide technical assistance to the developers of assessment instruments so as to ensure quality and fairness of assessment.

Reporting Mechanism

108. Schools should maintain a student profile where findings on SBA assessments can be entered by the teacher along with other achievements, and individual profiles made available to employers for use at interviews for employment.

QUALITY ASSURANCE IN EDUCATION

Introduction

Quality is a concept which has made inroads to every sphere of life including education. Quality is a much more complex term to define than it appears because a variety of perspectives such as the customer's perspective and specification-based perspective need to be considered. The market-oriented definition of quality as 'meeting or exceeding customer expectations' is based on an earlier definition of quality as 'fitness for intended use'.

In the field of education the term 'quality' has been attributed multiple meanings such as 'exceptional', 'excellent', 'fitness for purpose', and 'enhancement or improvement' reflecting different ideological, social and political values of diverse stakeholder groups. However, effectiveness, efficiency, equity, relevance and sustainability may be considered as the five dimensions of quality. Another set of dimensions specific to education are learners, environment, content, processes and outcomes.

While the differences in definition and relevant dimensions imply the absence of a universally accepted singular definition for 'quality' in education and represent varied, and even conflicting views of diverse stakeholders, they also suggest that quality is multi-dimensional in nature and even whimsical, based on the perspective of the stakeholder. Thus any approach used to assess quality of education needs to be holistic with due consideration to all relevant dimensions and perspectives.

Quality Assurance models are developed based on the perceived definition of 'quality'. QA activities depend on the existence of the necessary institutional mechanisms preferably sustained by a solid quality culture. Usually QA is carried out by agencies which have been established either internally or externally or both. The QA process involves three steps, Self-evaluation, Peer review and Reporting.

From a national perspective, quality of education is reflected in the degree to which Sri Lankan nationals are able to live together in peace and harmony. The workings of the current education system that engenders a spirit of fierce competition in our students from an early age is contrary this general principle, and educational reform should address this issue as a matter of priority.

The person produced by the education system should be able to put his/her educational attainment, as manifested in terms of personal competencies, to work for the national good and the wellbeing of the Sri Lankan people, and not solely for

personal gain. In operational terms, this requires the alignment of educational objectives with the National Goals as spelt out by the National Education Commission.

Quality Assurance mechanisms need to be an integral aspect of all arrangements and processes in the national education system. Essentially, every person working in the school and the larger system should have a 'quality orientation' that aligns and motivates him/her. This is not an ideal or abstract statement, but can be put to work effectively in the field of education. It could also become a model as well as a breeding ground of a nation-wide quality movement.

The school is the main location of activity in the General Education System. It is where the classrooms are situated. Interaction between the student and the teacher which is the central activity in delivery of the curriculum occurs in the classroom, and should provide an environment that is healthy, safe, protective and non-biased. Adequate facilities and resources should be provided for teaching, learning and life support.

The school also provides the personnel, spaces/rooms, facilities and resources that are required for the delivery of curriculum. It also supports other activities of the students and teachers that are intended to provide a well-rounded education to the students and also to promote the professional development of teachers. Furthermore, it is essential that the school undergoes ongoing improvement as an institution both as educational service provider and resource centre for its community.

While the school should be the main focus of attention within the General Education System and all other offices and institutions in it are intended to serve the needs of the school in fulfilling its mission, each of these also has to maintain quality in its operations. Every workplace, workstation and work-person in it must have criteria and indicators of acceptable performance.

Figure 1 in the introductory chapter identified the roles and functions of institutions and agencies that support the school in being an educational service provider to its community. Roles and functions of each person in this complex organization are linked chain-like to those of others. That is, to produce a required output a person needs inputs in the form of materials and information. Some positions may besides require funds and specific items of equipment. The personnel form chains with interrelationship between positions. Clearly identified "client and service provider relationships" are necessary to ensure quality of performance of such chains.

A service provider should be sensitive to the requirements of the client and work towards meeting the requirements. He/she is responsible to find from each client the specific requirements of the client and arrange to deliver what is required in quantity, quality and time. Satisfaction of requirements means that the item delivered to the client carries all required details in the required format, meets the standards and specifications provided in advance by the client, and is within the time constraints specified by the client. Since a service provider requires inputs from others, he/she is in turn a client who has to communicate his/her requirements to the respective service provider.

The General Education System has the students as its primary clients, and would have a string of supply chains that deliver or provide a number of identifiable services to enable each student to be educated and served in other relevant ways up to the point of leaving school including the supply of a specified set of documents that the student is entitled to. As such there would be a number of “supply chains” that converge on the student throughout schooling. The Quality Assurance process of General Education is implemented to ensure that all supply chains function as expected and in a timely manner to the benefit of every Sri Lankan child.

The most important operational aspects of Quality Assurance in the General Education System are:

1. Quality monitoring should generate current/fresh data and information regarding the function of every member and workstation in the supply chains linked to the schools
2. Each member should be able to state clearly how his/her role, functions and related activities directly or indirectly support the schools to function productively as an education service provider and a resource centre to its community
3. Each member should be able to identify and state in clear qualitative and quantitative detail, firstly, what the clients expect from him/her and, secondly, what he/she as a client expects from service providers outside and inside the System.

Trends in Quality Assurance in Education

Although QA has been long known to hold schools and education institutes accountable to the public, a systematic quality assurance process is still a novel concept even in some developed countries. In every country where school QA is practiced there is an agency responsible for QA. In many countries the main responsible agency is the government while the private and non-governmental organizations may also be involved in quality assurance exercises. There are QA

frameworks which specify standards and processes to be adopted in the practice of QA.

In **India** general education is provided by the state sector as well as the non-governmental sector. QA in general education in India encompasses all sectors involved in the provision of such education. Curricula, assessments and evaluations in schools that are governed by different boards, namely Central Board of Secondary Education (CBSE), Indian Council of Secondary Education (ICSE), International Baccalaureate Organization (IBO) and Delhi Government Schools are compared. Private educational institutions are governed by ICSE, and International Schools by IBO. Over 30 different boards are approved by the Government of India. Emphasis on the components of the curriculum, delivery of curriculum, examinations and assessments vary widely among the different boards and demand careful consideration in drawing indicators for quality assurance and accreditation.

The CBSE which is the main QA agency for about 11,000 government schools published a Manual on School Quality Assessment and Accreditation (SQAA) in 2011 for use as the QA instrument for schools under its purview. There has, however, been no initiative to bring primary education under School Quality Assessment and Accreditation (SQAA).

The approach and instrument of the SQAA of the CBSE are holistic and cover all aspects of the functioning of a school, namely its Scholastic and Co-scholastic Domains, Infra-structural Areas, Human Resources, Management and Administration, Leadership and Beneficiary Satisfaction. The seven domains identified by the CBSE concern the above seven areas and the holistic development of the capabilities of the school. The domains are further divided into sub-domains which address the different aspects of each domain. Each sub-domain has a number of indicators under which benchmarks have been developed with weightage in the range between 0 and 7.

The SQAA process comprises three steps namely, internal self-evaluation, external assessment, and peer review, each of which will enable sustained quality enhancement and reporting. The CBSE has since 2012 been conducting SQAA in selected schools on a pilot basis for use in accreditation of schools, providing quality benchmarks, establishing and running effective systems within the institutions. It is mandatory for all schools to be accredited once in three years. While there are no plans to rank schools based on SQAA, the purpose is to ensure that schools meet CBSE standards and to make the public aware of the quality status of each school.

Singapore has freed education from government control since 1988 and subjected the education system to several innovative reforms under themes such as “Autonomous schools” “Integrated programmes” “Thinking schools and learning nation” and “Innovation and enterprise” to address the needs of the stakeholders, and is now adopting the theme “Teach less learn more”.

With greater independence for schools, maintaining quality education became a key issue. A system of ranking schools introduced for the purpose in 1992 was replaced by a comprehensive quality management system in 2000. The ‘School Excellence Model’ (SEM), a self-assessment model adopted from models used by European Foundation of Quality Management comprising 9 quality criteria. Based on evidence provided by the school, Master Plan Awards are offered at three levels, the highest being the School Excellence Award.

QA education in Singapore concerns two types of systems with different criteria of assessment. Nearly all of the 1000 private schools in Singapore are regulated by the Council for Private Education. A voluntary certification scheme (EduTrust) exists to award certification to private schools if stipulated standards are met.

New Zealand has a robust quality assurance system regulated by government agencies at all levels. Two agencies are responsible for QA in education: one for early childhood services and schools; and the other for secondary and tertiary education.

The Education Review Office (ERO) evaluates and reports on the education and care in primary school and early childhood services. ERO reviews concern student learning and ways in which school performance contributes to student engagement, progress and achievement. The reports are accessible to parents, teachers, early childhood managers, school principals and trustees, and to government policy makers.

ERO conducts a variety of reviews and evaluations: education reviews, home-school reviews, cluster reviews of educational institutions and services, contract evaluation and national evaluation on educational topics. On average early childhood schools and services are reviewed every three years.

The New Zealand Qualifications Authority (NZQA) covers secondary and tertiary education, and administers the National Certificate of Educational Achievement (NCEA) for secondary school students. It is also responsible for quality assurance of non-university tertiary training providers. Key indicators include school governance

and management, curriculum management and quality of teaching, school safety and hygiene, internal evaluation, discipline and pupil-teacher ratio.

In the USA, accreditation is a voluntary method of quality assurance designed primarily to distinguish schools adhering to a set of educational standards. The decentralized and complex accreditation procedure is carried out by private non-profit organizations and there are no federal government list of recognized accreditation agencies for primary and secondary schools. Furthermore, there are no specific Federal Laws or regulations governing the recognition of associations that accredit primary and secondary schools, and the U.S. Education Department has no oversight role with respect to school accreditation.

Public schools in the USA are governed by a set of criteria stipulated by each state, while requirements for private schools have considerable variation in different states, and accreditation is by private non-profit organizations.

There are six regional accreditors in the U.S. that have historically accredited elementary schools, junior high schools, middle schools, high schools and higher education institutes. Schools that possess accreditation and state approval by authorities recognized at the state level are considered to be recognized schools in the education system of USA. In addition, private schools accredited by other associations recognized by the Federal Department of Defence, Homeland Security and States are also considered to be recognized.

The Secretariat of the Pacific Board for Educational Assessment (SPBEA) lists seven compulsory QA standards for accreditation of schools in the Pacific Region, namely Assessment Policy, Governance and Management, Personnel, Physical and Learning Resources, Learner Information and Support, Development, Delivery and Review of Programmes, and Assessment and Moderation. Before May each year, schools have to develop their own accreditation manuals meeting the above standards, and conduct self-evaluation. The accreditation process is completed by October and in November the schools receive the Board decision and prescriptions for the preparation of courses for the following year.

Quality Framework for UNESCO schools consists of 35 core elements clustered into five categories, namely School Policy, School Curriculum, School Organization, Quality Assurance, and Communication. This framework is a tool to monitor the quality of the UNESCO school programme. Schools may use the Framework to guide programme evaluation within the school or to use their evaluation as part of

peer exchange with other schools. The purpose of this self-evaluation is to outline recommendations for strengthening the school's UNESCO programme.

The account above of some models of QA in general education in different countries indicates a number of common features as well as features unique to each model, which are to be expected as QA models are based on a perceived definition of quality which may vary between institutes/schools and countries.

Commonality derives from the tools or the guidelines used for QA being holistic in nature with common core features of the definition of 'quality'. Furthermore in all countries QA, which is a pre-requisite for accreditation, is carried out by independent agencies and the process involves three steps, namely self-evaluation, peer review and reporting. These features should be considered in improving the QA framework for general education in Sri Lanka.

Issues in the Present Quality Assurance System

The Management and Standards Unit of the MoE has developed guidelines for internal and external evaluation of schools; prepared standards, indicators and criteria for evaluation of schools; and published documents specifying procedures for conducting internal and external evaluation and developing a School Educational Quality Index (SEQI).

The following eight domains were identified for the assessment of the quality of education provision of a school.

- General Management
- Physical and human resource management
- Systematic curriculum management
- Co-curricular activities
- Student achievements
- Student welfare
- School and community
- Student development for knowledge based society

Twelve National Educational Standards, each with a set of specific indicators, totalling 220 indicators, have been developed to cover the above domains. The extent to which each indicator meets the respective National Education Standard is assessed based on a number of criteria relevant to the standard and a score ranging from 1 to 5 is assigned to each indicator.

The quality assurance system is collaborative and comprises an internal evaluation component and an external evaluation component. The external component is made up of teams of external reviewers selected and informed/trained for the purpose by the Divisional Education Office. Generally the team comprises education officials, zonal directors, principals, vice-principals, sectional heads and senior teachers.

The internal evaluation team comprises school teachers appointed by the principal of the school in consultation with the School Management Committee, and is usually headed by a Sectional Head, Vice Principal or a senior teacher. The team of 8 teachers is assigned the responsibility of covering the 8 domains, preparation of the self-evaluation report, and compiling supporting evidence pertaining to each domain. Members of the internal evaluation team are advised of the purpose of the Quality Development of School Education Process, the aspects to be reviewed, and the nature of the supporting evidence to be compiled. Some of the team members, especially the team leader would have received QA training at Divisional/Zonal Level.

Currently the review process is carried out annually in government schools. Schools are informed in advance of the intended visit and prepare the necessary documents for the visit. The site visit usually lasts one day and the visiting team of reviewers, examine the supporting evidence presented by the school and the self-evaluation report, and determine the quality of education based on the score assigned for each domain in terms of the status of the indicators in relation to National Standards. The team of reviewers holds a meeting with the school staff to state its assessment of the status of the school in each domain and to suggest ways of addressing deficiencies.

There is general agreement that the QA system as practiced has contributed to improving the quality education in schools. The Guidelines have helped to improve and formalize documentation practices of the schools, and has persuaded school authorities to improve facilities in schools. There are, however, some problems in the guidelines and the review procedure that remain to be rectified.

Excess of Indicators and Incomprehensibility of Guidelines

Although the scope of the eight domains used in assessing quality of general education in schools is comprehensive and multi-dimensional, the framework is too broad and has too many indicators (220) which make assessment difficult. Another problem is the excessively broad and lengthy nature of the guidelines which hinders comprehension. It has been found that most officials and teachers did not fully understand the eight domains. It is proposed that the number of criteria/indicators are reduced and the procedure simplified.

Equi-weighting Inapplicable Criteria/Indicators and their Inflexibility

There is much room for improvement of the indicators. A notable concern is the presence of some indicators which are not applicable across all classes/levels and perhaps not to all schools equally owing to the diversity of schools. This situation can be overcome by identifying a set of core indicators usable across all primary or secondary schools at each level. That will help to compare schools in a particular category. Other indicators can be auxiliary and be used as relevant to the school assessed.

Such approach would, besides easing the burden on schools in preparation for evaluation, improve confidence in the quality assurance process, especially among less developed schools, and the evaluators would be comfortable in conducting their task. Besides, it would enrich the guidelines by adding an element of flexibility.

The appropriateness and feasibility of auxiliary indicators should be ascertained before their inclusion. This would require a comprehensive stakeholder consultation and it will be imperative to discuss the issues with officials at provincial, zonal and higher levels, and school principals, vice-principals, sectional heads and teachers in different settings.

As schools would be desirous to demonstrate their potential through evidence of auxiliary indicators, a school undergoing evaluation should have the right to propose additional standards and evaluation criteria for quality improvement by pointing to other likely indicators that reflect its unique strengths and weaknesses. Flexibility to adopt additional standards and evaluation criteria aiming at quality improvement would encourage schools to come up with innovative and constructive ideas. A flexible QA model encompassing different sets of criteria and indicators from among which the most appropriate can be chosen by a school would help to bringing all general education providers under the QA framework on a more equal footing.

The outcome could be further improved by using differential weightage (higher weightage to core indicators and appropriate weightage to auxiliary indicators) instead of equal weightage to all indicators as at present.

Greater Weightage to Management Aspects

A close scrutiny of the indicators in the QA guidelines and the mark allocation to different domains would reveal that most of the domains, indicators and criteria used for QA in schools concern the management of schools. Even the indicators and criteria pertaining to co-curricular activities, student welfare and school and

community relations lean heavily on management. Approximately 775 marks out of the 1100 assigned are for management aspects. While efficient management of physical and human resources is certainly important to quality education, other determinants of quality of education such as content, learning environment, teaching-learning and assessment methods, student feedback, and desired student learning outcomes deserve due consideration in any QA exercise.

Furthermore, the extent to which indicators and criteria for curriculum management touch on aspects of content, learning environment, teaching-learning and assessment methods, and student feedback is rather limited, calling to question the adequacy of weightage to the learning environment, teaching-learning and assessment methods in the 8 domains and 220 indicators of QA. Overall it appears that the present Guidelines are designed to improve the efficiency of management and the use of human and physical resources, while concern for improving the quality of education as a whole is inadequate.

This situation may have been the result of using industry relevant aspects of quality to evolve the conceptual framework for QA guidelines. It is recommended that this deficiency is overcome by resorting to education quality dimensions to evolve the conceptual framework for QA guidelines. This would give due weightages to all identified domains as well as simplify the guidelines and align the QA in general education with QA in tertiary education.

Problematic Indicators and Criteria

Certain domains of the QA guidelines use indicators and criteria that are hard to implement. For example, several indicators and criteria in the domain '*Student Development for Knowledge Society*' are difficult for schools to implement without support from higher authorities and some curriculum revision. Furthermore, precise assessment of student attitude, which is a difficult task for teachers, would be even more difficult for the external review team to achieve in a single day.

Repetition of Criteria under Different Standards and Domains

Repetition of certain indicators and criteria overlapping different standards and domains consumes time and could be a source of misunderstanding. These indicators and criteria would have different emphasis in different domains and if only the most appropriate evaluation domain is identified it will lighten the load of the QA process.

Non-targeting of Well-rounded Student

Indicators and criteria in the domain '*Student Achievements*' primarily consider completion of grade examinations, results of school tests and national level examinations. The three major national level examinations emphasise subject matter knowledge with little or no emphasis on skills and attitudes. The degree to which examination performance contributes to the desired attributes of a well-rounded student personality is not considered. Owing to this, and quite understandably, parents and teachers push the children to achieve excellence in examinations, and parents are inclined to seek for their children schools producing good results at national level examinations. Thus, without amending the mode of evaluation to reflect better the skills and attitudes, QA will have very little influence on the expected outcome.

Procedure Related Problems

The composite and broad nature of the guidelines makes it necessary to collect and compile a variety of supporting evidence, which is time consuming. The teachers while engaged in regular teaching responsibilities have little time for it during normal school hours when there have to conduct classroom teaching and related activities according to timetable. Thus the assigned teachers have to work after hours to prepare the documents and supporting evidence for the site visit, and the situation is worse in understaffed schools. In this context it would be desirable to reduce the number of indicators and criteria so that the teachers can use their time more efficiently.

Deficit of Formal Support Mechanisms and Non-commitment of staff

Another problem faced by the teachers in internal QA is that despite nomination of quality circles the teacher in charge of the domain often has to do all the work. Many teachers have identified this as a problem and emphasized the need for a formal support mechanism to facilitate and sustain QA in general education. An adequate number of supervisory staff with light teaching load could carry out such functions.

Inadequate Awareness of Teachers about QA

Despite the efforts of the MoE a sizable proportion of teachers are inadequately aware of the objectives and procedures of QA in the school system. The success of a School Quality Assurance requires greater involvement of teachers and a well-organized far-reaching awareness programme. Teachers involved in the QA process often view their role as one of collecting the necessary documents and relevant files to produce for QA review but unconscious of the accompanying quality

improvement process that transcends the indicators of outcomes of student performance.

Awareness programmes emphasise the external QA component more than the internal although the effectiveness of any QA programme depends primarily on internal QA. Thus awareness programmes at the teacher level need to pay greater attention to this aspect. However, some schools adopt innovative methods to create awareness and implementing QA mechanisms. Sharing such good practices among schools could lead to effective strategies.

Short Duration of Site Visit

Generally the site visit by the review team lasts one day owing to logistical and financial concerns. But it is impractical to evaluate the quality of a school by examining all relevant criteria, inspecting all support evidences, and meeting the relevant stakeholders within a day. It is unfair by the teachers and schools who have spent much time to prepare for the external review to receive an inaccurate judgment based on inadequate study of data. The duration of the site visit needs to be extended to more than a day depending on the scale and complexity of the task.

Subjective Allocation of Marks and Inaccurate Evaluation

Owing to individual differences in understanding and interpretation of the criteria in context of national standards, marks allocation can be subjective. Although any review will have a degree of subjectivity, having to consider a large number of indicators in a short period with a considerable proportion of indicators that are open to varied interpretations aggravates the problem and could lead to inaccurate judgment.

Desire to Prove Rather than to Improve

This is another common human weakness. School authorities consider it necessary to obtain a high School Quality Index and make every attempt to secure a high index by creating a supernormal situation on the day of the review visit. As a result the index assigned may not be a true reflection of the situation in the school, and does not help to improve the quality of the school performance.

Disregarding Student Feedback

Students are the major stakeholders of the general education system. But their views are rarely taken in to consideration in both internal evaluation and external evaluation.

Lack of Follow-up and Accountability

Despite conducting QA reviews of schools annually, there seem to be no follow up action to provide necessary support to overcome the deficiencies identified and support the school. There is no established mechanism to communicate the QA findings to the school community.

Too Frequent Review Cycles

In the context of limited resources and time for follow up, annual external reviews seem to be too frequent. But in case of schools which are identified as below certain standard follow up visits should be taken up more frequently.

Policy Proposals

Quality Framework for General Education System

109. The Quality Assurance System should cover not only the school but also all the other Departments, Organizations and Offices that support the functioning of the school as an educational service provider to its community.
110. There should be a QA network with the MoE as the main node, linking PEAs, ZEOs, DEOs and schools, and the NIE, DoE and DEP. DEOs should take full responsibility to implement QA procedures at school level and to send signals to all partners in the network for the purpose of QA in their respective operations.
111. QA guidelines should be revised to make them simple, clear, comprehensible, feasible and practicable, with criteria balanced across domains and free of overlaps and gaps across the standards and domains redefined as: management of schools; curriculum implementation and assessment; co-curricular and other activities.

Performance Indicators

112. The number of indicators should be reduced and student learning and outcome related aspects strengthened and made more relevant.
113. A set of Core Indicators mandatory to all schools and other relevant indicators which may be called Auxiliary Indicators should be identified as such, and appropriate weightage should be assigned to Core and Auxiliary Indicators.

- 114. Core Indicators should be used to compare the levels of achievement in the provision of general education; Auxiliary Indictors should be used to recognize differential strengths, creativity and innovation in different schools.
- 115. The aim should be to produce well-rounded students through the implementation of QA guidelines by incorporating standards and criteria pertaining to all desirable attributes of student performance, besides examination performance.

Awareness about QA

- 116. All stakeholders and the general public should be informed of the QA system before its establishment.
- 117. Frequency of external reviews should be planned so that schools which need more support are visited more often.

Follow-up and Accountability

- 118. QA results should be used not only for recording purposes but for improving the status in three domains: management of schools; curriculum implementation and assessment; and co-curricular and other activities.
- 119. A school does not work in isolation and therefore QA results of schools have direct implications for the QA results of other organizations of the network to which schools are connected. As such each of those organizations should take corrective action based on their respective QA results.

EDUCATION PLANNING AND MANAGEMENT

Introduction

Education planning is the application of rational systematic analysis to education development with the aim of making education more effective and efficient in responding to the needs and aspirations of students and society. It would result in the creation of a future that draws on enlightenment from the past. Planning is a continuous process, concerned not only with where to go but with how to get there by analysing alternatives to select the most beneficial route.

The methodologies should be sufficiently flexible and adaptable to fit situations that differ widely in ideology, level of development and government policy. Depending on the circumstances, practical methods of developing plans may range from the simple to the highly sophisticated; however, they should conform to universally accepted norms and principles.

There is a misconception that educational planning exclusively concerns quantitative expansion of education by making things bigger but not different. This arises from excessive reliance of educational planning on extensive use of statistics. Although the statistics provides the foundation for planning, qualitative aspects are as important to develop the features of the future education system as envisioned. Thus planning should be made an integral part of education management and help decision makers at all levels to make informed decision.

Planning is a cyclic process, and effective planning should address its own implementation: lessons learned, and unforeseen obstacles and risks and efforts to overcome them. Plans cannot be inflexible or unchangeable but need to be changed and adapted as occasion demands. Planning should be nourished by feedback from the past as well as be anticipatory and provide for future development.

A grasp of the state of the society, its goals and the educational requirements to achieve them in the context of the current state of knowledge and the status of art and technology of education should precede any futuristic recommendation. Not least of all the policy makers should take into account the innate ability of the educational system to examine critically and take intelligent action to improve its own performance on an on-going basis.

Trends in Education Planning and Management

The society is in the midst of a rapid and ceaseless technological transformation process. It is said that in this scenario schools must provide students with a broad set of skills described differently as soft skills, life skills, key skills, inter-personal skills, work-place skills, non-cognitive skills and so on. However, under the circumstances, learning to learn and life-long learning comprise the path to success.

Technological changes are occurring under two key influences, namely automation and globalization. This trend will have a profound impact on the lives of people, the workplace, social relationships and personality development.

Automation has changed not only the nature of work, with machines increasingly dominating production in workplaces, but also changing the nature of relationships among workers. While all routine work can be automated there are still functions that machines cannot perform. These are identified as “expert thinking” necessary to solve unexpected problems and “complex communication” requiring interaction with other parties. As a result of automation, blue collar and routine type of jobs are shrinking, and service occupations requiring higher level skills are expanding.

Globalization, on the other trend, tends to break down economic, social and intellectual borders between nations. With the emergence of the Internet geographical distances have become irrelevant. A new set of business practices have evolved such as off-shoring, outsourcing and supply-chaining or shifting from vertical production to longitudinal collaboration. As a result there is global mobility and working in teams located in different countries. Also, competition among experts has intensified further.

Socially, work teams comprise people from different ethnic, religious and cultural backgrounds, and it is necessary to respect diversity and learn to live together. In a multi-cultural country like Sri Lanka such attitudes are important since national harmony is crucial to national development.

In this context, educational planners need to take cognizance of the nature of future manpower needs and the social skills conducive to inter-personal relations in preparing their long, medium and short term plans. Education planning at national level should be linked to overall national planning. All children should complete their primary and secondary education successfully without being disadvantaged by their socio-economic background, gender or ethnicity.

Issues in Education Planning and Management in Sri Lanka

Lack of delineation of powers and functions between the Ministry of Education and Provincial Education Authorities.

With the enactment of the 13th Amendment to the Constitution and the establishment of Provincial Councils the powers of the Ministry of Education are shared with the Provincial Education Authorities. Although the 13th Amendment defines the powers and functions of the Ministry of Education and the Provincial Ministries of Education, even now some of the devolved subjects are handled by the MoE. The lack of understanding and adequate co-operation between the Centre and the Provinces in policy implementation is another drawback. When Subject Directors at the Centre participate in the implementation of provincial level activities, not all schools at the provincial level get due attention, making devolution ineffective.

The current management structure is complex and needs to be redefined logically with the powers and functions of Central and Provincial Ministries stated accurately.

Weaknesses in the provincial structure and their adverse impact on schools.

The Provincial Education structure comprises the Provincial Ministry of Education, Provincial Department of Education, Zonal Education Offices, Divisional Education Offices and schools. Zonal education offices were established in consideration of the impracticability of providing services to the schools by the Provincial Department of Education. However, owing to the large number of schools in each zone (approximately 100 schools), the service provision by the Zonal Office was unsatisfactory. Divisional education offices were subsequently established to strengthen the services. Each division has 30 to 40 schools under its purview. But the Divisional Offices are lacking in facilities and staff: the building facilities are poor and a single officer is left in charge with inadequate support staff. A lack of transport facilities is another drawback. As a result an effective service is denied to the schools.

This sole logic that drives the entire administrative edifice outside the school should be to support every school to function as the educational service provider to its community. Thus the functions of provincial, zonal and divisional level offices should be revisited and defined properly in order that firstly the Divisional Education Offices are equipped with the required staff and necessary facilities, and secondly the principal is relieved of mundane responsibilities to enable him/her to effectively manage the school and provide sound academic leadership.

Lack of inter-agency communication and coordination at central level

The Central level structure comprises the Ministry of Education, the Department of Examinations (DoE), the Department of Educational Publications (DEP) and the National Institute of Education (NIE), a statutory body established by Act of Parliament. Immediately external this structure is the National Education Commission that has a monitoring role and reports to the President.

The Department of Examinations is under the Commissioner General of Examinations who is responsible for conducting school and other public examinations. He is guided by the Public Examinations Act in the conduct of examinations. The DEP is responsible for the production and distribution of school textbooks. The NIE is responsible for developing the national curriculum, providing professional development for educational managers, teacher educators and teachers, and conducting educational research and development. The National Institute of Education Act further empowers it to award degrees and diplomas related to education.

Strong coordination between the functions of MoE and the three institutions mentioned above is essential for the general education system to function for the benefit of the students. The MoE as an umbrella organization should take the leadership, coordination and supervision role to ensure the consistency, efficiency and productivity of the General Education System as a whole. Owing to a long standing lack of coordination, significant mismatches have developed between curriculum specifications and textbooks as well as between curriculum specifications and public examinations.

There are also overlaps of functions of the Ministry of Education and the three institutions. Duplication in functions mandated to institutions results in waste. The roles, functions and responsibilities of institutions have been precisely defined and specified in a complementary manner in the relevant Acts of Parliament. There has, however, been a tendency for institutions to exceed their mandate without due consultation or authority, resulting in duplication as well as confusion among personnel responsible for implementation of policy. It is important that the Ministry of Education through a process of consultation and planning acts to ensure that each organization confines itself to its boundaries and limitations in the interest of effective functioning of the General Education System.

The NEC recommends the establishment of a high level Performance Review and Co-ordination Committee (PRCC) to address system-wide issues and to strengthen inter-agency communication and co-ordination. The Committee will comprise the

heads of the relevant agencies and key officials of the Ministry of Education, with Secretary, MoE as the chair.

Lack of competent personnel in central level institutions

Each institution suffers internal malfunctioning leading to the lowering of quality of deliverables. This is due to a critical shortage of competent professionals to carry out the functions as well as of formed active inter-organizational links. In respect of the staffing issue all organizations have a need to recruit qualified professional staff who will also be adequately remunerated. Job specification and scheme of recruitment should be as defined; and career paths and professional development opportunities should be assured.

Inadequacy of capacity development programmes in Education Planning and Management

Training in Education Planning and in Education Management is needed by officers of the Sri Lanka Education Administrators Service (SLEAS) and Sri Lanka Principals Service (SLPS). A total of around 15,000 are in these services, the vast majority of whom are in the SLPS. Inadequate training opportunity for Education Management is a burning issue in the education system, and needs to be addressed urgently.

Provision of professional development for this category is only by the NIE, at the central level. Thus there is need for training institutes at the provincial level. Furthermore, there is shortage of competent personnel at the NIE to train the trainers.

Lack of proactive and future-oriented planning with multi-sector approach

In developing future-oriented educational plans there is need for coordination and collaboration between sectors that impact on school education such as health, housing, social welfare, sports, media, culture, agriculture and industry. Presently there are no links with these at the planning stage, except for a few active links with health, sports, and media. This adversely affects the implementation of educational plans as the necessary support is mostly unavailable.

Information on the education system not reaching decision makers on time

Education management information system (EMIS) can be a versatile tool in taking education into the future. It is relevant in contexts where the use of technology is identified as a key global trend in education planning.

Greater use of technology would facilitate efficient management of the MoE and its agencies. The main role of the Data Management and Research Branch (DMR) is to collate and present data expeditiously. One of its main activities in this regard is

conducting and processing the school census. Although the process has been computerized, still there are delays in finalizing and publishing the data, whose value depends on its availability on time for use in decision making.

Availability of a comprehensive database helps officials to access instantly the data they require. At present the DMR is preparing the data base of teachers. Meanwhile, several branches of the MoE are developing their databases in isolation so that effort could be duplicated, leading to wastage. Hence, the current data management system is not very effective for use in education planning.

The MoE should develop a comprehensive database accessible to all interested parties to gather the information they need. The database should be regularly updated, with an IT specialist responsible to maintain it. All information relating to educational policy, planning, management structures and school data should be available in this database.

All personnel need to be trained in ICT-assisted educational administration to help reduce unnecessary paperwork and delay. The level of awareness among the general public about the initiatives of the Ministry of Education needs to be strengthened. Further, the competence of teachers and other education officials in the use of ICT needs to be improved.

Insufficient empowerment of schools to develop as distinct entities

Most principals lack the confidence to play the role of Chief Executive and take responsibility for the successful running of the school. Delay in filling vacancies at the top management level in schools results in acting appointments. Thus a large number of schools are headed by “acting principals” appointed on considerations other than competence.

There is no regular scheme to provide resources to schools and school authorities are unaware of the availability of resources when making school plans. Also schools are not provided with support staff to attend to administrative work, and community involvement in the management of the school is minimal.

Sri Lanka has currently adopted “a balanced control model” under the PSI, which has existed for nearly a decade. It is therefore time to take stock of the situation, update the PSI, and make plans to strengthen the concept and its implementation over the next decade, and thereby empower the schools.

Issues in the current school structure

The present school structure is heterogeneous. As the schools were established by various parties – the government, denominational bodies and private individuals – there was no planning in the setting up of schools. There are various types of school: primary schools conducting classes from Grades 1-5 or Grades 1-8' junior schools with classes from Grades 1- 11; secondary schools with classes from Grades 1-13 or 6-13. Attempts to rationalize schools have been in vain and besides the school system has got bi-polarized between very small and very large schools. Small schools are getting increasingly smaller until they are finally closed down. The large popular urban schools are expanding without control to become unmanageable. Classrooms in these schools are overcrowded, sometimes with more than 50 students in a class. In small rural schools, the number of pupils is low, making them uneconomical to run. At present, there are 1652 schools with fewer than 50 pupils. In such schools teachers are demoralized and the quality of education is poor, and the school environment is not conducive to the total development of the child.

The scheme of developing at least one secondary school per administrative division with all the streams and the necessary facilities with a cluster of feeder primary schools seems the only way to provide equity in education at minimum cost. Locations of secondary schools should be identified based on the results of a planned school mapping of actual needs.

Another issue in the school structure is sectarian considerations which hinder social cohesion. Although schools are named as Sinhala, Tamil, Muslim or Buddhist, Catholic, Hindu or Islamic, all are government schools. Furthermore, most schools are monolingual. Schools are organized on ethnic lines even in areas which are multi-ethnic. Such sectarian considerations should not be encouraged in the future restructuring of schools in a pluralistic country like Sri Lanka in order to assist social cohesion.

Issues in the structure of the Ministry of Education

At present the Secretary of Education holds two portfolios, namely Secretary to the Ministry and the Director General of Education. This has led to a work overload for him. As Secretary he is responsible for the general administration of the Ministry and is the Chief Accounting Officer responsible for financial management. As Director General he is the chief operations officer who takes decisions on educational matters. As most Secretaries are appointed from the Sri Lanka Administrative Services, the Director's institutional memory is limited to the duration of service in this post.

To resolve this issue the National Education Commission recommends separating the post of Director General of education from that of Secretary, Ministry of Education, and the restructuring of the Ministry of Education accordingly.

Lack of rationality in cadre provision for Educational Services

The cadre of officers in the SLEAS, SLPS, SLTES and SLTS has not been determined on actual needs. It is necessary to identify the numbers required for each service based on actual need and take action to fill the positions.

The ISAs are a group of professional advisors who mentor the teachers in schools but at present their service is not adequately recognized, despite favourable ruling by the Cabinet of Ministers. This has given rise to a long standing grievance. It is necessary to prepare a scheme covering their appointments, job-description, promotions and service conditions. In order to ensure that they do not lose their professional touch they may be required to work in a school for a couple of years periodically. Their promotion to the next higher grade can be tied to such a condition. To obtain a better service it is recommended to have a separate service for ISAs.

Although recruitment should be carried out annually, in practice there are delays. As a result there are many vacancies at any given time and “acting” persons are appointed to attend to the work of vacant positions.

There is no clear policy on appointing SLEAS officers as principals of schools. While some officers function as principals of large popular schools others are assigned as deputy principals of secondary schools. Appointing principals of schools as directors of education later in their career leads to problems as they are compelled to learn office administration anew. Likewise, persons who have spent several years as administrators without classroom exposure will find it difficult to adapt to the school environment. Therefore, transferring administrators as principals and vice versa should be discontinued.

Policy Proposals

Structure, Powers and Functions

120. The management structure should be redefined logically, with the powers and functions of Central and Provincial Education Ministries defined clearly and unambiguously in terms of the 13th Amendment to the Constitution.

121. The functions of provincial, zonal and divisional offices should be revisited and defined properly, and strengthened with required personnel and other resources.
122. A high level Progress Review and Co-ordinating Committee (PRCC) should be established and made to function regularly to co-ordinate the work of the MoE, DoE, EPD and NIE.

Capacity Development Programmes

123. The staff recruited by the MoE, DoE and EPD should be trained in education management. Those already in service should be encouraged to gain further qualification and experience in education management.
124. The NIE should recruit academics with postgraduate qualifications in education and other relevant disciplines. Incentive should be given to the present staff to gain further qualification and experience.
125. The MoE needs to develop a plan to provide educational management orientation and training for all educational administrators through the NIE and the provincial centres over a period of 5-7 years.
126. The NIE in collaboration with university faculties of management should develop a pool of trainers for provincial level educational management training programmes. Provincial Education Authorities should plan and conduct these training programmes for SLEAS officers and principals.

Use of ICT

127. The MoE should develop and regularly update a comprehensive database of all information relating to educational policy, plans, management structures and school data, which will be available in time for policymaking and other purposes.
128. ICT should be used as an effective management tool in gathering, analysis and presentation of data, and all SLEAS officers and Principals need to be trained in the use of computers in administration.

Cadre Provisions for Educational Services

129. The scheme of selection of Principals should be reviewed to ensure the appointment of Principals with managerial capability and leadership.
130. Allocation of non-academic staff to schools should be based on the needs of each school.

131. There should be a scheme of developing at least one secondary school with all the streams and necessary facilities per education division with a cluster of feeder primary schools. The locations of secondary schools should be identified based on the results of a planned school mapping exercise based on actuals.
132. The Ministry of Education should be restructured and a post of Director General of Education established to undertake operational functions of the MoE.
133. The Ministry of Education in consultation with the responsible agencies should clearly determine the cadre for each service and take action to fill vacancies regularly.
134. A separate service for In-service Advisors should be established with a scheme covering their appointment, job-description, promotion and service conditions.

LEARNING ENVIRONMENT

Introduction

The concept of learning environment gives an idea of place and space, room to move and explore and general access and resonates best with a vision of knowledge as a meaning constructed by interaction with one's environment. A constructivist definition for the learning environment is *"A place where learners may work together and support each other as they use a variety of tools and information resources in their guided pursuit of learning goals and problem solving activities"*. An essential feature of this definition is that the learning environment is seen not only as a physical or virtual place or space but also as a human community forming a supportive, interactive network.

The learning environment plays a central role in the education of a learner as it provides the platform through which the learner acquires knowledge, skills and attitudes which results in life-long learning. Thus the learning environment is considered as the totality of the internal and external circumstances and influences surrounding and affecting a person's learning.

The design of a learning environment is complex as it has to address the needs of many learning orientations. For example the highly motivated and committed learner (the transforming learner) requires a loosely structured mentoring environment which is challenging, while the conforming learners who like routine, structure and stability in the learning environment, require a safe and simple environment with low risk learning goals ordered in a linear fashion. To fashion such learning environments it is pertinent to look at the constituent parts of a learning environment.

Learning environments always have a physical, social (intellectual/psychological), technological and didactic dimensions. The social dimension of a learning environment refers, for example, to the group's role and interaction, as well as an atmosphere of mutual respect, co-operation and enjoyment. The physical atmosphere is typified by the layout of desks and chairs, the lighting and comfort of the seats and the significance of the physical environment generally. The teaching applications reliant on various technical and multimedia tools demonstrates the technological dimension, whose criteria include user-friendliness of the tools, their reliability, beneficial nature, their speed and their human orientation. The didactic atmosphere or the learning environment refers to the didactic approach on which the instruction and learning relies. Any environment contains the first three elements, but only the didactic dimension makes it a learning environment. Being

associated with didactic objectives that support learning, the living room becomes a learning environment.

Trends in the Learning Environment

Models such as Lewin's Field Model, Walberg's Productivity Model and Gardiner's Model of Conceptual Systematic Change are used in studying learning environments. Gardiner's Model comprises overlapping circles of physical environment, social environment, which show the outcome of individual interactions with others in the environment, and in the man-made environment. The most complex component of the system according to Gardiner is the students in the middle. Gardiner's model has been adapted by Zandvliet and Straker to study the environment in technology rich classrooms to represent the two dimensions, namely physical and psychosocial in IT rich environments.

The question whether the learners should adapt to the learning environment or whether the learning environment should adapt to them is often debated by researchers and designers. This question is arguably wrong and the right question is: How does the environment shape the learner and how does the learner in turn influence the learning environment? Learning environments in the 21st Century are planned as places where the learner is engaged in self-directed learning and cooperative learning activities, and the physical environment is planned so that it can be routinely re-organized to mediate learning in contrast to the 20th Century constructivist perspective which views the learner as active and environment as passive.

There are four essential elements of effective learning environments: learner-centred, knowledge-centred, assessment-centred, and community-centred which might provide the base for evaluating the learning environments in our schools. In the learner-centred learning environment teachers take the knowledge and prior experiences of individual learners in to account in their teaching and try to accommodate the learner's strengths and interests. In a knowledge-centred learning environment, teachers direct learning activities towards developing students' deep understanding which is necessary for learners to apply knowledge in a given situation and to transfer it to new ones. In an assessment-centred learning environment, teachers provide students with multiple opportunities to make their thinking visible and with feedback on their efforts. In a community-centred learning environment, students need not only feel safe to ask questions and to reveal their ideas and difficulties they have in understanding the subject matter, but also to develop norms of behaviour that contribute to successful learning in that learning environment.

The challenge for the global initiative to this domain is to recognize their importance as a major factor in enhancing learning and to reach agreement on a relatively short list of variables and accompanying indicators for measuring their quality across cultures, ideologies and political boundaries. For countries with limited material resources it is suggested that they:

- fulfil the national commitments to provide quality education for all through accelerated efforts to meet the basic requirements for learning environments in EFA strategy (Education for All strategy),
- adopt a “bottom up” approach that affords countries and regional networks increased opportunities to provide inputs the global initiative meet the above basic requirements,
- involve parents and community members in the re-vitalization of local (and/or indigenous) knowledge and communication systems that can inform the design and social climate of learning spaces,
- conduct on-going reflective, participatory research using customized methods and tools for conducting assessments that can inform teachers, parents and learners on the quality of the classroom climate, including its psycho-social dimension, with emphasis on equity and inclusion of females and learners with special needs,
- use the findings of classroom and school-based research to develop effective strategies to address pervasive problems that threaten the health of the learning community, such as high levels of repetition and drop-out, school-based violence and gender discrimination,
- encourage the education system to establish links between stakeholders in school improvement and research communities actively involved in producing evidence based studies of school effectiveness and learning environments,
- assist in the development of context specific, system wide guides and tools to improve schools, based on processes of internal self-evaluation,
- create an international, multi-lingual electronic clearing house to share research, tools and good practices in the measurement and improvement of learning environments,
- develop a practical guide to research that would enable conditions of learning using mixed methodologies,
- incorporate prime examples of theory and practices from the international body of knowledge on learning environments, and research on teacher education curricula and professional development programmes.

Examining the literature related to this particular area shows that there is insufficient research of quality or depth on the relationship between pedagogy and design of learning environments. Such research should be developed with classroom teachers

to ensure its relevance to learning. The design process must be the focus of environmental change in schools so that teachers and learners might experience motivational and perspective changes with benefits beyond the specific problem solved.

A study providing evidence-based analysis of twelve innovative learning environments from across urban and regional Victoria concludes that it was the impact of policy and neighbourhood environments that disrupted the internal capacities to manage change in school. Innovative learning environments require attention to be paid to spatial practices (use of architectural space etc.), temporal practices (time allocated for research etc.), structural practices (from minimal structure, looser coupling, and more networking on a contingent basis within the organization and externally but seeing schools as nodes), communication practices (sharing experiences etc.), social practices (leading teaching and learning as a collective endeavour) and semiotic practices (discourses and the language that are mobilized to inform changing practices). These studies offer to other school systems ways of undertaking fundamental reforms based on how environments create the conditions, suggest processes, identify supports, and encourage the professional dynamics and synergies that produce imaginaries most conducive to innovative practices in teaching and pleasurable student learning.

General education equipped with best practices of learning environments upholds child's right to education mentioned in CRC (1989) and fosters development of children to their full potential. Safe, caring, participatory and responsive school systems and homes support children to grow up to be healthy democratic citizens. Developed countries strive to provide learning environments safe, participatory and responsive.

School design has an important role in implementing student-centred interactive teaching learning methodologies in the learning environment, (OECD). Research evidence on the connection between physical environment and learning outcomes in some countries are as follows:

- Capital investment in school buildings has the strongest influence on morale, pupil motivation and effective learning style (UK).
- New school environments with integrated ICT can improve the students' rate of progression through the grades (France).
- Improving the physical environment leads to a marked improvement in students' performance (USA).
- Pupil performance, achievement and behaviour are better in well-designed schools than in poorly designed schools (USA).

- Students with the most natural day light in their classrooms progress quicker on school tests in one year than those with the least natural light (USA).
- Improved test scores and child behaviour are experienced in schools with more than 100 sq. feet (9m²) of area per child, a result more noted with children with special learning needs (USA).

Therefore, students have to be provided with inspirational spaces, furniture, storage systems and communication facilities that improve their experience of learning. Hence, the school buildings of the future have to be designed to be permissive rather than prescriptive.

To facilitate learning the OECD suggests that schools should have flexible spaces for group learning, individualized learning, and open areas and spaces for specialized activities. Spaces for group learning will not only facilitate group work and cross curricular learning but also cater to students with different learning styles. Spaces for individual learning are the areas allocated for students to engage in personal study. Open areas serve for social purposes while specialized areas are used for sports, vocational training and performing arts. Spaces such as these could be adopted in Sri Lankan schools to facilitate harmony among different ethnic groups.

Environment in a school should be safe and well-structured for students and teachers to focus on academic achievements. Physical structure and appearance of a school sends strong messages. A well maintained school with well-kept premises conveys respect for the school community. Besides, schools should also provide physical safety, academic safety, and emotional safety. Strategies to improve structure and safety are:

- Invest in school maintenance;
- Create a disciplinary system with clear expectations and consequence;
- Clearly and briefly state school rules;
- Promote academic security by encouraging and rewarding participation by all students;
- Empathize with constructive criticisms;
- Work towards a policy that is fairly conceived and fairly applied to everyone.

Besides physical facilities, safety provisions are also important to healthy learning environments. Many countries have laid down guidelines to ensure safe environments for students. Minimum standards, chemical safety, food safety, drinking water, noise, outdoor air quality, energy efficiency as well as possession of dangerous weapons are some aspects that are looked into by governments and school authorities to ensure a healthy learning environment. According to the New

Hampshire Education Department in the USA, all school staff including custodians, maintenance workers, food service workers, teachers, support staff and administrators shall receive training on their respective roles in maintaining clean, healthy school facilities and on the importance of quality indoor air (ED306 Minimum Standards for Public Schools). In the Guide to Minimum Standards and Other Requirements document, the Victorian Registration and Qualifications Authority of Australia states that school buildings, facilities and grounds must comply with any law that will apply to the school, including local laws and building, planning and occupational health and safety laws for school registration. Sri Lanka can adapt these good practices to suit its context and make all the schools including International Schools provide safe and healthy learning environments for our school children.

The climate of the school environment is influenced by a broad range of factors, from disciplinary policies to instructional quality, to student and teacher morale. Four accepted major components to improve school environment are caring relationships, academic environment, structure and safety, and participatory learning.

Relationship among teachers can be promoted through common planning time, inter-disciplinary work teams, and collaborative work opportunities. The innovative leadership programme followed by the Grand Street Campus in New York, once regarded as one of the most dangerous high schools, has resulted in significantly decreasing school violence incidents.

Interpersonal relationships with teachers and peers determine the quality of care provided in school. Some of the strategies to promote student teacher connectedness are:

- Reviewing students' cumulative files and use the information therein to support students;
- Assign academic work that encourages students to talk about themselves such as creating an autobiography, developing portfolios, writing essays or poems about topics that are important to them;
- Have a regular time slot each day or week to share thoughts and concerns;
- Ask questions only when you can devote time to listen to the answers;
- Continually diagnose students' learning strengths and weaknesses;
- Schedule times to be available for students and parents outside of class throughout the year;
- Welcome new students and families and make a special effort to connect with them;

- Treat students with respect by giving public complements and private criticism;
- Empathize with and coach students when they face problems;
- Elicit and act on students' recommendations for activities in class;
- During class minimize "teacher talk time" and increase "student talk time" by incorporating peer review, group work and student to student discussions;
- Set a goal to highlight positive student contributions daily so that students know you notice their positive attributes;
- Give students a chance to correct their mistakes to show that you have faith in their capabilities; and
- Develop family ties through communicating regularly with families regarding students' successes and challenges.

These practices will enhance teacher-student relationships as well as student to student relationships. Such practices can be adapted by Sri Lankan schools.

Positive behavioural intervention and support (PBIS) has proved as a best practice in creating safer and more academic schools. PBIS includes a code of conduct, social skill building, rewards, evaluation and mentoring. According to Blum his approach enhances educational capacity through a framework that enables each school to design, implement and evaluate student specific, school-wide discipline plans.

Involving students and parents in decision making and planning is a good practice. Schools should provide opportunities for students, parents and teachers to contribute to the school's success. The following strategies are suggested to foster participatory learning.

- Involve teachers, parents, students and community members in decision making,
- Create opportunities for contribution and responsibility.

Following these best practices Hudson High School in Massachusetts has developed a civic engagement programme that featured a core civics class for all nine graders, service learning experiences integrated into many high school courses, innovative school wide governance structure that includes a cluster structure, town meetings and community council including students in leadership roles.

Academic environments not only focus on excellence in teaching and learning but also communicate the objective to students, teachers and parents. In an academic environment there should be academics well committed to the notion that all students are capable in mastering essential skills and creative instruction which

design class work that is relevant to students' lives and captures their interest. The following strategies are suggested for encouragement of academic excellence:

- Demonstrate through word and deed that academics are the focus of the school: Free teachers from trivial non-academic tasks; remove obstacles to teaching; reward innovation; provide teachers with in-service training; reward students for academic achievement.
- Develop high expectations and support for learning: Eliminate tracking which communicates low expectations; hold students responsible for work completion; provide support for attaining academic goals; engage students in their future.
- Improve and diversify teaching methods: Encourage a variety of teaching techniques; sensitize teachers to use effective teaching strategies with all students; select material that suits students interests and developmental needs; offer interdisciplinary and applied projects as well as service.

Balanced curricula, teacher qualifications, and teaching and learning methods that offer opportunities for active learning are essential parts of the academic environment in general education. A balanced curriculum educates the whole child, prepares students for success in school and in life, includes all subjects as opposed to only the subjects tested, and creates active participants rather than passive observers, and allows children to use the whole brain.

Best practices in teaching and learning promote discussion between teacher and learner. For teaching and learning to be effective, it should address the needs of the learner. The following list of interlocking principles stated under three main clusters will help us to identify what is best in the teaching-learning process for our children.

Student-centred Experiential Holistic Authentic Challenging	Cognitive Developmental Constructivist Expressive Reflective	Social Collaborative Democratic
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These clusters show how the academic learning environment could be organized to be student-centred. Learning becomes more powerful when children develop a true understanding of concepts through higher order thinking associated with various fields of inquiry and through self-monitoring of their thinking. They emphasize that learning is always socially constructed and therefore teachers need to create classroom interactions that scaffold learning.

Disciplining methods used by teachers also affect the psychosocial environment of the school. There should be a comprehensive school-wide plan in relation to disciplining children. This plan would comprise developing self-discipline, preventing misbehaviour, and re-mediating and responding to serious and chronic behaviour issues.

To develop self-discipline, schools should consider infusing lessons and activities for developing self-discipline throughout the existing curriculum, such as in Social Studies, Literacy and Health Education. Schools should also provide multiple opportunities for students to apply skills of social and moral problem-solving and responsible behaviour. The school-wide Positive Behaviour Support (PBS) model that is implemented at three levels in schools in 46 states in the USA is a good example for positive disciplining. This model is implemented at the following three levels.

- Primary: Universal rules, routines and physical arrangements for all students, designed to prevent initial problem behaviour.
- Secondary: Small group or individual responses for students at risk of problem behaviour, using mentoring programmes and staff support teams.
- Tertiary: Intensive intervention tailored to meet the specific needs of individual students with patterns of problem behaviour.

Technology has changed the traditional classroom learning environment. By bringing technology into the classroom, the teacher creates new learning conditions which require adjustment to the goals, objectives and style of course-delivery. No matter where this technology-supported learning environment is created, the teacher has in mind learning objectives concerned with “futuristic” educational imperatives.

Teachers use ICT to transform their role from that of a primary source of information to one that provides students with structure and advice, monitors their progress, and assesses their accomplishments. This has led to a drastic change in learning environments of modern classrooms. There are four central factors that obstruct implementing technological innovations. They are namely: (i) the context (ii) the innovator (iii) the innovation and (iv) the operator. Of these factors the first, the context, is directly linked to learning environments. Within the context organizational culture, human infrastructure and technology, weak infrastructure can hinder the success of technology in the classroom. However, diplomacy in the classroom, leveraging simulation in the classroom and social networking have worked well in overcoming most of the barriers.

Issues in the Learning Environment in Sri Lankan Schools

Overcrowded and underutilized classrooms

A marked feature of the school system in Sri Lanka is its polarization, with a few congested and overcrowded large schools and a large number of underutilized and neglected small schools. Of the 9931 government schools over 3000 schools have enrolment less than 100 pupils and 200 schools have enrolment of approximately 2500 pupils or above. The big schools situated in urban areas are popular with high demand for admission and the classrooms are overcrowded, sometimes with more than 50 students in a class. It is reported that this situation has affected the teaching-learning process, quality of output, discipline, and efficiency of management. Teachers in these schools have complained about lack of resources, large classes, and time consuming record keeping and evaluation tasks. On the other hand, in a large number of Type 2 and Type 3 schools the number of pupils per class is small and the schools are considered as un-economical units. An NEC study (2003) found that most of these schools had adequate buildings and trained teachers, with nearly 55 percent of the buildings not utilized for educational purposes. It was also found that the teachers in these schools were de-motivated and demoralized. To remedy this situation, it is proposed that the class size and school size are limited to a manageable level.

Disparities in the provision of physical Infrastructure facilities

The MoE has proposed a set of norms for schools based on student enrolment and subjects offered at the primary and secondary levels. The proposal classifies the requirements under: (1) Classroom Accommodation; (2) Special Facilities (Science Rooms, G.C.E.(O.L) Science Laboratories, Technology Workshops, G.C.E. A-L Science Laboratories, Geography Rooms, Aesthetics Units, Home Science Laboratories, Libraries, Social Science Rooms, English Room, Agriculture Laboratories); (3) Furniture; (4) Sanitary Facilities; (5) Administration Spaces

However, the MoE does not have an accurate record of facilities available in schools and details of schools lacking in such facilities. The National Strategic Plan for the Education Sector, however, gives the percentage of schools lacking in basic facilities as follows.

Facility	Percentage
Sanitary Facilities	42
Water	15
Electricity	13
Telephone	69
G.C.E. O-L Science Labs	72
G.C.E. A-L Science Labs	11

Libraries	64
Computer Labs	42

The above data confirm that most of the secondary schools lack facilities such as science laboratories, libraries and computer rooms. This situation violates government policy of providing free and equitable education facilities for every student. It is proposed to re-visit the distribution of educational facilities among schools, and take corrective action to enforce the principle of educational equity.

Facilities for Primary Education:

Under Primary Education Reforms it was proposed that physical facilities of the school and classroom be improved in order to make the school an attractive place and conducive to activity-based learning. Accordingly it was stipulated that the classroom be enclosed in order to keep children's finished work displayed in the classroom safely, that the classrooms be colour-washed and the furniture painted, have a book corner and a sand corner for activities, a worktable to suit the height of student, with an attached sink and pipe-borne water if available, a wall blackboard that can be used by children and a play area in the garden. Currently most schools do not have internal and external learning environment as indicated, owing to the items not been supplied or to lack of maintenance.

Also the furniture in the primary classes needs to be arranged in different formations to suit the instructional process. A drawback has been the heavy iron frame furniture supplied to schools. As such it is preferable to have lighter wooden furniture for the convenience of young students.

Classroom composition and classroom arrangement in secondary schools:

Most Sri Lankan school buildings are open halls with un-separated and unprotected classrooms. A few schools have screens to separate classes, but it does not solve the problem of noise penetrating from adjoining classes. Furthermore, most schools do not have the recommended classroom facilities to match student numbers and to suit the teaching-learning process. In future the schools should have permanent buildings with separate, secured, well ventilated and adequately illuminated classrooms which protect the users from the elements.

The Teaching-Learning Process:

Although expected to be activity-based, student-centred and inclusive, in order to facilitate holistic development of students, in reality the teaching-learning process in the classroom it is not so. The teaching-learning process mostly tends to be a passive one-way process. Students who are weak in studies are at risk of dropping out

owing to negative experiences such as punishments, ridicule and discrimination, and lack of attention from teachers. The unfavourable attitude of many teachers is attributed to the social distance between teachers and students.

Examination-oriented student behaviour has created an excessive academic bias. Also coaching for examinations among students, almost throughout the school career, has encouraged an undesirable competitiveness. The time of the students is taken up mostly in being coached, at the expense of development of social skills. The expected goal of total development of the student is hindered owing to the exclusion of main areas in the social environment that involve the practice of social skills related to leadership, team work and building mutual trust among diverse ethnic, cultural and religious groups.

Quality Inputs for Teaching and Learning:

The government instituted a system to provide a grant to schools to supply the material required to improve the quality of the instructional process in schools. A manual was provided to guide school authorities on the use of the grant. However, the funds provided under Quality Inputs were not fully utilized by the schools owing to excessive regulation under the provisions of the manual and the fear on the part of school authorities to utilize funds in view of the heavy responsibility placed on the Principal. As a result, Quality Input Funds remained unspent and the Quality Inputs did not materialize. Owing to cash flow restrictions the provincial authorities also could not release funds to schools in time. To remedy this, the MoE empowered School Committees to utilize the funds more freely, but again cash flow restrictions limited the flow of funds.

School Discipline:

The United Nations promulgated the “Convention on the Rights of the Child” (CRC), which has been ratified by almost all member countries including Sri Lanka, which has recognized the rights of children and elaborated on them comprehensively. However, in Sri Lanka some teachers still resort to corporal punishment and other forms of degrading punishments, and it is time that such practices are completely prohibited in schools. This does not mean neglect of discipline in schools, but its further strengthening through more humane strategies.

School organization should be directed at promoting student discipline. All students should be made to feel that they are a part of the school, and that the school belongs to them. Further, the school authorities should create opportunities for students to participate in school activities and to be involved in the decision making processes of

the school. If students recognize their responsibility, the sense of alienation which leads to violence or apathy can be eliminated.

Policy Proposals

Physical Environment

135. The number of students in a class should be limited to 35 and the number of parallel classes per grade should be not more than 6 to limit the school size to a manageable level.
136. All schools should be provided with basic facilities, classroom space, and special spaces in keeping with the norms established by the MoE. These norms should be revised periodically in keeping with advances in technology.
137. School infrastructure must be designed to facilitate student-centred, interactive teaching-learning methodologies. Permanent buildings should be constructed with separate and secured classrooms.
138. Furniture supplied to schools should be suitable for arranging the classes in different formations in a flexible manner.
139. The school environment should be safe for children and hazard free.

Psycho-social Environment

140. The psycho-social climate of the school must be protective, caring and conducive to student participation.
141. Corporal punishment and other degrading forms of punishment should be eliminated from schools and corrective strategies need to be adapted to maintain discipline in schools.
142. Quality Input Grant should be provided to all schools during the first term of the school year.
143. Regular maintenance of school infrastructure is a necessity. An annual maintenance grant should be given to every school.
144. All students should be provided with opportunity to participate in decision making on school matters concerning them.

INVESTMENT IN EDUCATION

Introduction

To satisfy the three principles of adequacy, efficiency and equitability investment in education should fulfil the following conditions: (1) the amount invested must be sufficient to provide the required minimum educational facilities; (2) the resources invested must be used efficiently; and (3) education facilities must be available for all citizens with no discrimination. In addition, transparency of financial management is essential.

Adequacy implies that the financial allocation for education is sufficient to meet intended needs. Traditional measures of adequacy are education investment expressed as a percentage of GDP, and the total government expenditure on education. There are world-wide accepted norms. Education expenditure to GDP ratio is accepted at 6 percent and education expenditure to total government expenditure ratio at 20 percent. However, there is no known rule or any statistical or philosophical foundation for such norms. There is no general agreement on the thresholds for those measures either. However, these measures can be used to compare between countries. Another measure that enables easy calculation and interpretation is the per-pupil expenditure on education. Besides statistics on financial allocation, facilities available in schools are also measures of adequacy of education finance.

The criteria stated at the outset are only preliminary indicators of adequacy of financing; and other measures are also required that are based on education inputs such as teachers and other resources and outputs such as age specific enrolment rates and percentage of pupils completing specific targets, such as G.C.E. O-L and A-L.

Among broader criteria of productivity of the educational system are effective allocation and efficient use of financial resources. As conventional measures like Cost-Benefit Ratio (CBR) and Cost Effectiveness measures are difficult to use in education financing, measures such as failure rate, dropout rate and delay in progress can be used as indirect measures of school performance.

Inequitable resource allocation among social, economic, geographic and demographic sub-groups is a major concern. Disparities in resource allocation among districts, schools and disadvantaged areas and lack of positive discrimination for such areas lead to inequity. Most striking among them is the disparity in allocation of resources to popular urban schools and the disadvantaged rural schools.

Efficiency of resource utilization is hardly discussed in social fora, but it is a key concern of policy makers. Reducing wastage and mobilising alternate resources have been side-lined in the pursuit of enhancing free education.

Issues of Investment in Education in Sri Lanka

Inadequacy of financing

Investment in education has been on the decline in the recent past and fell to 1.86 percent of the GDP and 8 percent of the government expenditure in 2014. Besides, the allocation made is not always accessible owing to restrictions on disbursement. The above figures fall well below the average for the lower-middle income country group to which Sri Lanka belongs, which on average spend about 4.5 percent of the GDP on education.

Large number of uneconomical schools

There is a widespread network of schools reaching even the most remote village. With the population growth of the country reined and a growing tendency for students to seek urban/popular schools, student population in some schools has declined to uneconomic levels. The issue is that a growing number of uneconomic small schools need to be maintained with the need to provide a quality education.

Lack of basic requirements in schools

There are several schools lacking in basic requirements such as water, sanitation, and other requirements such as playgrounds, telephones and electricity, science laboratories, workshops/activity rooms, libraries, computer facilities and living quarters. During the last decade, some of the schools received facilities such as water and sanitation, but many schools still need science laboratories, libraries and workshops/activity-rooms and computer facilities.

Disproportionately high expenditure on emoluments

In absolute numbers there is an oversupply of teachers, and the present teacher-pupil ratio is 1:18. But there are problems of deployment. A lack of a proper policy on recruitment and deployment has led to overstaffing of urban schools and understaffing of remote schools. There are also shortages of teachers in subjects such as Science, Mathematics, English and Second National Language (Sinhala/Tamil).

Clerical grade support staff is recruited on an ad-hoc basis as clerks, management assistants, documentation assistants, planning assistants and project assistants. As adequate numbers are not available in several of these categories the positions need to be rationalised and combined in to one service. The situation is similar with regard to minor employees as well.

Delay and non-release of funds for Quality Inputs

Part of the capital budget and the recurrent budget is allocated to schools for purchase of education quality inputs. This is desirable, but schools do not receive their entitlement owing to a shortfall in funds released and the delay in receiving whatever is available. Schools need money to purchase quality inputs from the beginning of the school year, but the grants are received only towards the end of the year with some schools not receiving any funds.

Inadequacy of maintenance grant

Schools require a grant for maintenance on three bases: routine maintenance and repair, emergency and unexpected repairs, and rehabilitation. There is no system of inspection planning by zonal and provincial authorities. Hence there is no system of fund allocation for maintenance, repair and rehabilitation of physical assets of schools in the general education system.

Disparities among schools in resource allocation

There is inequitable resource allocation among schools, based on categories such as national and provincial, urban and rural, state and plantation. This affects the provision of equitable quality of education, and is a clear violation of constitutional rights. Therefore concerted effort should be made to rectify this inequitable situation.

Disparities among schools in generating funds

In the generation of funds at school level, the big schools are far more successful than remote rural and disadvantaged schools. Big schools have been able to raise funds to construct swimming pools and purchase vehicles, while small schools lack money to repair the roof or construct a toilet. The funds that the school can collect from the parents are the School Development Society (SDS) membership fee and the facilities fee. Even here, the poor families could be exempted from payment on recommendation by the Grama Niladhari so that the small schools suffer further disadvantage in generating funds at school level. This could be rectified by replacing the scheme of exemption with one of state subsidy for poor families.

Low Efficiency of Financing

The bulk of the state allocation on education goes towards the payment of teacher salaries. Next come student welfare services such as school textbooks, school uniforms and midday meal. There is considerable wastage due to the large excess of teachers and the existence of many schools with very small classes. Welfare services are provided for all, and not targeted so that a fair number of students who do not need or deserve these services also receive such benefits.

Policy Proposals

Adequacy of Investment

145. The allocation for education needs to be raised to 6 percent of the GDP or 10 percent of the Annual Budget, whichever the higher.
146. Schools should be provided with the required minimum basic facilities such as classrooms, drinking water and sanitation appropriate to school size. Other facilities should be provided to schools without sector-wise discrimination such as national vs. provincial, urban vs. rural, state vs. private and rural vs plantation.
147. The quantum of educational quality input grant should be increased and provided to schools at the beginning of the school year.
148. A repair and maintenance grant for infrastructure should be given to all schools on a norm-based unit cost structure. The grant should be computed based on minimum allocation to all schools to which the norm-based formula will apply. This would benefit small and disadvantaged schools.

Efficiency and Equitability

149. Wastage in teacher appointments can be avoided by adopting a proper teacher recruitment and deployment policy based on actual need.
150. Wastage in maintaining schools with unacceptably small class sizes should be reduced by restructuring schools based on a school mapping exercise.
151. Schools should not be allowed lavish spending on functions with no educational value.
152. Schools should be encouraged to generate funds at school level without burdening parents without means. The funds so generated should be used with transparency and due accountability.
153. Each school should maintain one school bank account to which all receipts are credited.

CAREER GUIDANCE IN SCHOOLS

Introduction

Career guidance refers to services and activities intended to assist individuals, of any age and at any point throughout their lives, to make educational, training and occupational choices and to manage their careers. Such services may be found in schools, universities and colleges, training institutions, public employment services, the workplace, voluntary or community sector and the private sector. Career guidance plays a critical role in preparing students for the world of work by equipping them with the skills to remain competitive in the global economy and lead meaningful and productive lives. School career guidance programme can have a positive impact on students' educational and career decisions and their academic performance.

Career guidance and counselling is a very important aspect of schooling, especially under circumstances where jobs are not easily available. A large number of learners will not be able to find their occupational pathways or higher learning or training opportunities owing to lack of career guidance at schools. Proper career guidance would have assisted many of these students with further education and training, selection of career paths at an early stage, and with more career options. Career guidance facilitates the acquisition of attitudes, skills and knowledge to help students better understand themselves, explore viable education and career options, make informed decision and develop plans to achieve their career aspirations. Guidance is necessary for selection of subjects and course streams and finding appropriate job placements. Career guidance will allow learners to select subjects that are in line with their future plans. Moreover, career guidance could go a long way in giving the learners the confidence to decide where they want to be in the future.

Career guidance helps people to reflect on their ambitions, interests, qualifications and abilities. It helps to understand the labour market and the education system, and to relate this to what they know about themselves. Career guidance teachers teach students to plan and make decisions about work and learning. Based on that knowledge, one can access the information about the labour market and educational opportunities by organizing it, systematizing it and retrieving it as and when required. Career guidance would help students to make transition to the working world. Availability of career guidance facilities can improve the efficiency of the education system by enabling those who complete education to find labour markets. As a result, unemployment among youth could be lowered since the process can match individual talents and qualifications with the skills and qualifications

demanding by employers. With a good understanding of students' abilities, career guidance teachers can direct their students to most suitable educational avenues so that the Career Guidance Programme could help to reduce the drop-out rate of students.

Career guidance counsellors should provide necessary advice to the school community to identify their strengths, weaknesses and information regarding the job market in order to develop the competencies required. The term competency indicates each personal characteristic generally utilizable in the workplace, in school or in ordinary life regardless of the nature of work or level of performance achievable through its use. Professional goals can be achieved by taking three large groups of factors into consideration:

- A clear personal understanding of oneself, one's attitudes, abilities, interests, ambitions, resources, limitations and their causes.
- Knowledge of the requirements and conditions of success, advantages and disadvantages, compensation, opportunities and prospects in different lines of work.
- True reasoning of the relations of these two groups of facts, the idea being that there is a co-relation between specific personal traits and success in particular roles and vocational fields, and that professional goal should also be chosen on the basis of such characteristics.

Career guidance is widely recognized as an essential component in the education system in Sri Lanka. It has been identified as a key focus area in the efforts to address the mismatch between the needs of the labour market and the output from the educational and training system. Even from the State Council period beginning in the 1930s the educational authorities recognized the importance of skills training through the schools and practical activities were introduced to the curriculum. Career guidance, formally introduced to the school system by a circular issued in 1957, laid down the general pattern of the guidance programme and emphasized vocational guidance as the focal point of the school guidance scheme. Besides strengthening the teaching of technical subjects, a scheme for maintaining cumulative records giving details of students were introduced; it was not carried out continuously and the system went to abeyance after a few years.

In the 1970s technical education was transformed with the introduction of pre-vocational subjects. That too was given up after some time. In 1983 the Evaluation, Guidance and Research Unit was established at the Ministry of Education; and guidance and counselling programmes commenced in collaboration with the National Youth Services Council. Initially programmes were started in Colombo and later extended to provincial towns.

Presently the guidance and counselling activities are governed by the provisions of Circular No. 16 of 2006 as amended in 2013. The “School Guidance and Counselling Programme” now covers not only personal guidance and counselling but places emphasis on preparation of students for the future labour market and creating awareness among parents.

Career Guidance Units have been established in large secondary schools under a teacher trained in career guidance. Such units are expected to build databases on available vocational and technical training courses in their areas and also on available and potential job opportunities.

Trends in Career Guidance

Among best practices in career education, Nottinghamshire, UK has taken effective steps for schools to provide a balanced and broad-based curriculum which prepares pupils for the opportunities, responsibilities and experiences of adult life. Career education and guidance programmes make a major contribution to this broad aim. It is a statutory requirement for schools to offer a planned programme of career education and guidance for all students in Years 7 to 11.

The Republic of Korea has a wealth of experience in career guidance. In 1990 Departments of Research in Career Guidance were established in all municipal and provincial offices of education. In 1994, student guidance departments in schools at all levels were renamed ‘Career Counselling Department’ with broadly re-organized functions. Textbooks in career guidance were revised. In 1996, the Ministry issued a directive to municipal and provincial offices to strengthen career guidance education by:

- Promoting lifelong career guidance and career information
- Conducting vocational aptitude tests for students in all grades in middle and high schools
- Establishing an office of career information
- Strengthening research on teaching career guidance
- Established a model school for career guidance education

Further improvements have been made in research on career guidance, training of career guidance teachers, disseminating career guidance material, and improving the management of ‘Career Days’. Government intervention and policies are crucial to the implementation of a comprehensive career guidance programme in the educational system in any country.

In the USA, school-to-work transition systems integrate career orientation and academic and occupational orientation with high and post-secondary schooling, work based learning and skills development. These systems are developed through partnerships between schools, employers and trade unions and are decentralized to the community level. The three main components are:

(i) School based learning:

- High school teaching that meets national standards,
- Career exploration and counselling
- Initial selection of a career path by students
- Instruction that includes both academic and occupational learning
- Coordination between education and training
- Constant evaluation of students' progress, personal goals and learning requirements

(ii) Work based learning:

- Recognition and certification of on-the-job training and work experience
- Broad instruction in all aspects of industry
- Workplace mentoring

(iii) Connecting activities:

- Activities to encourage employers and trade unions to participate in the transition system
- Matching students with work-based learning opportunities
- Assistance in integration between school and work-based learning
- Liaison among students, parents, employment office and employers
- Assistance to graduates to find appropriate jobs or additional on the job training
- Monitoring progress of participants

In Australia, a report on career services emphasized comprehensive, current and accurate career information and recommended that counselling and guidance are linked to local labour market opportunities.

A range of career information products are also available throughout Australia. A Job Guide is disseminated to all schools, which provides an in-depth look at a range of occupations and their education and training pathways.

Career information publications should be such that the information contained is:

- up to date
- easily accessible, using community resources to distribute when feasible
- available on a self-service basis wherever feasible
- reproducible inexpensively and in large quantities
- conscious of the literacy level
- accompanied by training for the career guidance practitioners who will be distributing it.

Australia's national career website contains information about courses of education and training; labour supply and demand at regional level; contents of occupations; and sources of funding for study. Students can explore their personal interests and preferences, and relate them to educational and occupational information. This approach is popular among students and job seekers in Australia.

The Jamaica Labour Market Information System (LMIS) supports the operation of an efficient, well-functioning economy by improving the availability of labour market information and facilitating coordination among data providers and between providers and users. Beneficiaries include policy makers, employment and education programme planners, prospective investors, employers and jobseekers.

The Barbados Labour Market Information System is an online information system comprising a source of labour market information offered through electronic means. It is managed by the Manpower Research and Statistical Unit of the Ministry of Labour and Social Security and has four components.

- (i) Electronic Labour Exchange: This facility allows job seekers to review vacancies by occupational area, industry category or job title and to apply online. Employers can also review job seeker curriculum vitae online. A job matching component assists job seekers to locate the occupations for which they are most qualified.
- (ii) Industry profile: Cross-sectional profiles of various industries in Barbados, including types of technology used, associated occupations and required qualifications, occupation specific wage and salary ranges, and industry prospects.
- (iii) Job occupational profiles: They contain selected job descriptions taken from the Dictionary of Occupational Classification for Barbados. Full job descriptions include job tasks, skills, knowledge and abilities needed, and qualifications required.

- (iv) Education and training databases: They provide information on local and overseas educational and training institutions, including summary overviews of courses of study and information on sources of finance for study.

Issues of Career Guidance in Sri Lanka

Although career guidance has been functioning in the school system for over half a century, the concept is not fully rooted in the system. There has been no continuity and progress has depended on the interest and enthusiasm of the persons in charge. The following issues have been identified as needing attention.

Lack of a clear policy on career guidance and career education

Career guidance activities have been carried out on periodic guidelines issued by the Ministry of Education. The distinction between career guidance and psycho-social counselling has generally not been well understood and both tend to be treated as one. In a national policy, activities under both areas as well as under educational guidance can be delineated.

Absence of Career Information

A mechanism is necessary at national and provincial levels to feed schools with the necessary career information and requires an organizational structure at school level to gather, update and display information in a user friendly manner.

Inadequacy of commitment and resources for an effective career guidance programme

Although the circular provides for a full-time teacher for counselling and career guidance, most schools do not have a teacher dedicated for the subject. Some principals are unaware of the importance of career guidance services, and the work is entrusted to a teacher, in addition to normal teaching duties. As a result the teacher can neither develop specialist knowledge on the subject nor find time for career guidance activities. Most schools do not have career guidance units to retain the necessary data and to provide career guidance services.

Absence of a cadre of trained teachers in career guidance

No special cadre of teachers exists for career guidance in schools. Most teachers doing career guidance work have received only short-term training, which is inadequate furthermore many teachers are unsatisfied with their training. There are also teachers without any training who are assigned for the purpose.

Insufficient engagement of parents

Parents are keen about the employment aspirations of their children but are unaware of the aptitudes of the children and of the kind of job opportunities available. Thus they tend to persuade children to seek traditionally preferred professions.

Lack of coordination with other careers education agencies

Although there are government agencies such as the TVEC, VTA, Universities, Department of Labour, and employers organizations such as the Chambers of Commerce and Industry which are interested in promoting careers education, there is little coordination between them and the schools.

Policy Proposals

Commitment and Resources for Career Guidance Programme

154. Career guidance should be part of regular school activity. Accordingly, all secondary schools should have a purposefully established Career Guidance Unit equipped with necessary information on career opportunities and a Career Guidance Teacher in charge.
155. A Career Guidance and Educational Counselling Unit should be established at the Ministry of Education to facilitate overall implementation of Career Guidance and Educational Counselling, which will be networked with similar units at Provincial/Zonal Education Offices.
156. The Unit at the MoE will be the main node serving three functions, namely gathering information from the relevant organizations and potential employers at the national level; analysis and preparation of material for dissemination; and monitoring of implementation.
157. Officers in charge of career guidance at the Provincial and Zonal level will be responsible for implementing career guidance at school level, and will guide schools to establish links between schools and community organizations to gather information and facilitate placements.
158. Organization of career guidance at the school level should be structured with the roles and responsibilities of the principal, the career guidance teacher and other teachers clearly defined. The School Career Guidance Unit should have a database with information about students in the G.C.E. O-L and G.C.E. A-L classes.

Capacity Building and Awareness Programmes

159. Career Guidance and Counselling should be a mandatory component of all teacher education programmes. Teachers in charge of career guidance and counselling in schools should be specially trained and regularly updated through in-service programmes. They should be guided to update information on career and higher educational opportunities through relevant publications and access to data bases.
160. Awareness programmes for parents should be conducted by schools on the aptitude of children, educational guidance and available career opportunities. National level programmes should be conducted through the print and electronic media by the Ministry of Education in collaboration with national level agencies such as TVEC, Universities and Chambers of Commerce and Industry.

MEDIUM OF INSTRUCTION, NATIONAL, SECOND NATIONAL AND INTERNATIONAL LANGUAGES

Introduction

Use of language is central to human survival and development both as individuals and as society. Language competence is essential for development of thought, and language education has been a key aspect of formal school education. Sinhala and Tamil are mother tongue to the overwhelming majority of the population and are recognized in the Constitution of Sri Lanka as National Languages.

In our tradition, it is believed that language learning starts from the prenatal stage. However, it is some months after birth that infants vocalize meaningful sounds. The child acquires language skills and communicates in the mother tongue with persons around him/her well before entering formal school. In the first two years of schools, Sri Lankan children develop the ability to recognize letters and start writing in their mother tongue; formal learning of languages starts from third year at school.

Before colonial rule, education in Sri Lanka was in the hands of religious institutions or laymen trained in such institutions. Students were encouraged to learn classical languages such as Pali, Sanskrit and Arabic besides the mother tongue. Thus, Buddhist students had exposure to Pali and Sanskrit, Hindu students to Sanskrit and Muslim students to Arabic. The aim of learning classical languages was to familiarize with the scriptures and as well as texts related to traditional medicine and astrology. Formal education was, however, limited to a few. Linguistic studies flourished following the revitalization of the Pirivena education system at the end of the 19th century. English also entered the Pirivena curriculum, but was not compulsory. In modern sense, this state of affairs can be considered a multi-lingual education system in a limited sense.

In the island-wide school system which evolved under British colonial rule, the medium of instruction in most schools was either Sinhala or Tamil, but English in urban elite schools, as the government of the time aimed to produce a class of persons capable of working in English to man the public sector and the emerging commercial sector. Basic education in the native languages for the general population was part of the commitment of the government in keeping with the liberal philosophy emanating from the humanitarian movement in Great Britain.

The “Kannangara Report” of the Special Committee on Education in 1943 comprised the first attempt to formulate a policy on the medium of instruction. The Report declared that “the mother tongue is the natural medium of education and the genius

of a nation finds full expression only through its own language and literature". However, in consideration of the then prevailing constraints and the multi-lingual nature of Sri Lankan society the Committee recommended that the mother tongue should be the medium of instruction in the primary stage of education, although the mother tongue of 99 percent of the population was either Sinhala or Tamil, the mother tongue was defined as follows:

- (a) Where both parents are Sinhalese or Tamil then Sinhala or Tamil as the case may be,
- (b) Where the parents belong to different communities, the home language, i.e. the language mainly spoken by the parents and the children,
- (c) In the case of all others, it could be English, Sinhala, Tamil or Malay as the parents desired.

The Committee, recognizing the role of English as a world language and the need to use such a language for higher education and communication with the outside world, was of opinion that it cannot dispense with English and pointed out that "it should be universally taught so that apart from other reasons, by becoming a common second language it may cease to be a badge of class distinction and become a means of common understanding". In the prevailing context, the Committee recommended that in the lower segment of the secondary schools the medium of instruction should be the mother tongue or bilingual (meaning Sinhala or Tamil, and English); and in the upper secondary segment it should be English, Sinhala, Tamil or bi-lingual. It also recommended that English should be a compulsory second language from Grade Three upwards in all Sinhala and Tamil medium schools and that Sinhala or Tamil is taught to all children in English medium schools. The translation of this policy in to action took nearly two decades because teachers had to be trained and textbooks and reference books had to be translated. The proposal on bilingual education was, however, not implemented.

Two historical events in mid-twentieth century influenced the medium of instruction in schools. Firstly, the Free Education Act of 1947 and, secondly, bringing the whole education system under government control in 1960's. Concurrently, the demand to switch the medium of instruction to the national languages, Sinhala and Tamil, strengthened, and in 1970 the government decided to gradually do away with instruction in the English medium by stopping the English medium in the Grade One class from 1971, and eliminating it class by class in succession. By 1983 no English medium classes existed in government or private schools.

Consensus of opinion in the 1950s was to promote the national languages. Consequently, the medium of instruction in schools from primary to university entrance level switched to Swabhasha (Sinhala /Tamil). Students, parents and

teachers considered education in Sinhala/Tamil medium to be a special privilege following independence. English was thought of as the language of colonial rulers and there was tendency to neglect it. The implications of this neglect became clear after two decades. Most of the scholars who filled high positions in the government sector lacked a working knowledge in English.

This proved to be a setback for the individuals concerned and the society at large. The government, educators and the public noticed the vacuum created by the neglect of English, and the promotion of English in the recent past is a consequence of this change of perception. Now the education system actively promotes programmes to enhance the working knowledge of English among students. The Bilingual Education Programme implemented recently in some government schools is part of this process, under which selected subjects are taught in English at the Secondary Level.

“The achievement of National Cohesion, National Integrity and National Unity” is stated as a major goal in the very first report of the National Education Commission published in 1992. It explored the adaptation of school education to promote peaceful living and coexistence in a multi-ethnic and culturally diverse country like Sri Lanka with a citizenry speaking two main languages. This was further emphasized in the policy framework on General Education submitted by the Commission in 2003.

For the attainment of the above goal and to afford opportunities for the use of national languages and mutual appreciation of cultures, the teaching of a second national language from Grades 6 to 9 was initiated in 1999 and second national language was made an additional subject for Grades 10 and 11 from 2001. The second language was introduced in 2003 for Grades 3, 4 and 5 as well, and oral teaching of second language commenced in 2007 for Grades 1 and 2.

Currently students learn their First Language (Sinhala or Tamil), Second National Language (Tamil for Sinhala students and Sinhala for Tamil students), and a link Language (English). The medium of instruction in the primary and secondary stages is the mother tongue. However, a minority of students in the secondary stage study some subjects in the English medium, and are said to be having bilingual education.

Trends in the Medium of Instruction

An important initiative of medium of instruction in a language other than mother tongue is to adopt the Content and Language Integrated Learning (CLIL) as a model. CLIL has been defined as “situations where a subject or parts of subjects are taught

through a foreign language with dual focused aims, namely the learning of content, and simultaneous learning of a foreign language". It is widely used in OECD countries as a means of teaching second languages.

Recently, within a decade, Malaysia introduced two major policy changes regarding the medium of instruction. The first concerned the switch from Bahasa Malaysia to English for Mathematics and Science in the primary school in 2003. This was reversed in 2012 to result in the new policy 'to uphold Bahasa Malaysia and to strengthen English language'.

Hong Kong, a colony of Britain until 1997 and now a Special Administrative Region of China, has witnessed four different policies on the medium of instruction: a *laissez faire* policy prior to 1994, streaming policy during 1994-1998, compulsory Chinese medium of instruction policy during 1998-2010, and the "Fine tuning medium of instruction policy" since September 2010. English enjoys a high status in Hong Kong, while Cantonese is the native dialect of most people in the community. For primary education, Chinese (Cantonese dialect) is generally used as the medium of instruction. Among secondary schools some are English medium instruction schools and others known as Chinese medium instruction schools include English only as a taught subject.

Post-independence studies found that university students who studied in the Chinese medium had lower English language proficiency than those who studied in the English medium, and the policy was changed in September 2010 to "Fine tuning medium of instruction policy" permitting schools flexibility to offer English and/or Chinese medium classes provided that certain criteria are met.

In Pakistan, in 2009, the government of Punjab (Pakistan's most populous province) introduced English as the medium of instruction in Mathematics and Science for Grades 1 to 12 in all public schools of Punjab. Implementing a policy of English medium at primary school level supports the education system, as higher education and most of worldwide research and academic knowledge is accessible in English. This policy change was supported by the Punjab's Schools Reform Roadmap, launched in 2011 which triggered major improvements in both access to school and the quality of instruction. Over a million additional children have enrolled in the Province's schools, and facilities have improved, thousands of new teachers have been hired, new and improved teaching materials have been provided, and teacher attendance has climbed sharply. However, a study undertaken by the British Council found that:

- 62 percent of private school teachers and 56 percent of government school teachers lack even basic knowledge of English, including the ability to understand and use familiar every day expressions and simple phrases.
- Most of the remaining teachers received scores that placed them at beginner's level in English. Even in English medium schools, 44 percent of teachers scored in the bottom band of the Aptis. In all 94 percent of teachers in English medium schools have only pre-intermediate level English or lower.
- Younger teachers had a much higher level of English than their older colleagues, 24 percent of teachers aged 21-35 scored in the pre-intermediate categories compared to 7 percent of those aged 51 and over.

These findings concern English medium instruction, and suggest that teachers in Punjab are ill-equipped to deliver the English medium policy.

In the language of education policy of Singapore, English is called L1, the medium of instruction, whereas mother tongue called L2 which is taught as either a first or second language depending on the ability grouping of the student. Many of the school children of Singapore, especially those from low income families, do not speak English as the dominant home language. However, English is very much part of the linguistic ecology and is one of the four official languages besides Mandarin, Malay and Tamil, and is spoken at varying levels of quantity and quality in nearly all Singaporean homes.

Issues of Medium of Instruction, National, Second National, and International Languages

Lack of Language Teaching Competency of Sinhala and Tamil Language Teachers

There is considerable dissatisfaction about the competency of language teachers in both national languages. Some of the Sinhala and Tamil teachers are not proficient enough to teach their own language. Language teachers need a basic knowledge of linguistics to teach language effectively. No arrangements exist in teacher education programmes to develop language teaching skills of the teachers through introducing psycholinguistics and the pedagogy of teaching the two national languages.

Therefore, the NEC recommends that the proficiency and competency levels of teaching of languages should be enhanced and upgraded in the pre-service stages of language teachers.

Shortage of Second National Language Teachers

Teaching of a Second National Language requires skills of teaching a Second Language. However, the school system does not have adequate teachers in both language streams. At present only one National College of Education offers a diploma programme in teaching, specifically for Second National Language; and the annual output is only 60 diploma holders, which hardly meets the requirement of the system. It is learnt that some of the teachers in both media seek to become Second National Language teachers by undergoing short term training programmes. Studies point to the failure of such efforts, with no evaluation of the subject knowledge or teaching skills of these teachers who have been assigned the task only as a make shift measure for want of an option.

Unsuitability of Curricular Material for Teaching Second National Language

The present curricular material (syllabi, teacher guides and textbooks) is not based on sound principles of teaching a second language. There is a lack of logical interconnectedness among syllabi, teacher guide and textbooks. Topics of lessons are not lined up in a manner that promotes incremental acquisition of language skills. Thus the material does not meet the requirements of students and learning of the second language is a difficult exercise for students.

Furthermore, Teacher Guides have failed to equip teachers with the teaching methods and theories needed for teaching a second language.

The textbooks of Second National Language are not designed for self-study by students. Explanatory notes in the child's mother tongue should appropriately be embedded in lessons for the purpose.

Textbooks essentially concern the written language, and students are not made aware of grammatical differences between the spoken and written forms. Hence students fail to communicate correctly in the second national language.

Discrepancies in Implementing Bilingual Education Policy via MoE Directives

While some schools followed MoE directives on bilingual education as given in the MoE circulars, others did not. For example, some schools conducted bilingual education from the Primary Level. While some schools had all students (including those studying some subjects bilingually and those studying all subjects in the mother tongue) together in bi-media classrooms, other schools segregated students in monolingual and bilingual classrooms, hampering the smooth functioning of language policy for school education.

Lack of Competent Teachers for Bilingual Education

Schools that offer bilingual education find it difficult to provide more than two subjects in English medium owing to the lack of competent teachers. Teachers of bilingual classes tend to use both languages in instruction whereas the reason for the use of two languages in instruction is to teach vocabulary and explain and discuss meaning. In most cases, owing to the severe lack of capable and suitably qualified bilingual teachers to teach subjects in the English medium, schools assign English language teachers to teach subjects such as Geography, Science etc. in the English medium. This is bad practice as English teachers lack subject knowledge to teach other subjects.

It has also been observed that some teachers of bilingual classes are not capable of explaining the subject matter in English. Instead they either read out the notes in English as found in the Teacher Instructional Manual and textbooks or explain in the mother tongue.

Deficiencies in Textbooks and Other Learning Material in Bilingual Education

The usual practice in preparing textbooks and other material for bilingual education is to translate text from Sinhala to English. Translators are often persons not conversant in the subject matter. Therefore, in the final product, the technical terms are imprecise, language is unsuitable, and meaning is distorted.

In addition, supplementary reading matter to match the syllabus is not available. Hence the expected benefits of bilingual education do not accrue to the students.

Contradictory Performance of Students in Bilingual Education

It appears that students in bilingual classes have increased their language competencies in English. They perform well in examinations in the English medium subjects. But they do not use English in everyday speech. Thus it appears that they have developed reading and writing skills only. Besides, their examination performance is poorer in the mother tongue. This state of affairs creates a problem because it is known that linguistic skills gained through one language can easily be transferred to another language, if students had developed essential language skills. This may be because good performance in examinations may not be the correct criterion to measure a student's language skills, or because the teaching methods, evaluation system and student attitude influence this contradictory performance.

Unsatisfactory Teaching of English Language

The teaching of English Language in school is not done as teaching of a Second Language. This is clearly why large numbers fail in public examinations. Even those who pass are unable to use English for practical communication purposes and in employment.

Language acquisition, especially of the second language, requires neither extensive and conscious use of grammatical rules nor strenuous linguistic drill. Instead it requires meaningful interaction in the target language – natural communication – in which the speakers are concerned less with the form of what they say than with the message they need to convey or comprehend.

To rectify this situation listening and speaking skills should be developed very early, and before starting grammar.

Lack of Exposure to English from an Early Age

There is general consensus that the medium of instruction in primary education should be the mother tongue. However, English needs to be made accessible at this stage to develop familiarity and for formally learning later to read and write. Currently two programmes are available to achieve it. The first is Activity Based Oral English (ABOE) and the second is English as a Second Language taught from Grade Three onwards. It is reported that the ABOE component is not successfully implemented owing to lack of proper preparation of primary teachers for the purpose. Both programmes need to be strengthened and continued.

Policy Proposals

Medium of Instruction

161. The medium of instruction at the primary stage of education should be the mother tongue. Activity Based Oral English (ABOE) from Grade One and formal teaching of English from Grade Three has to be continued and further strengthened.
162. The medium of instruction at the secondary stage also should be the mother tongue. Bilingual or English medium teaching may be introduced at the beginning of this stage for those who opt, only if the necessary resources are available. It is the responsibility of a school to continue the bilingual or English medium education throughout the secondary stage if it has been introduced it at the beginning.

Learning Materials and Teacher Recruitment

163. Textbooks and other learning material should be prepared concurrently in all three languages by expert panels comprising subject specialists, language specialists and textbook designers.
164. Recruitment of Teachers of Second National Language (2NL) should be based on annual needs identification. The number of NCOEs preparing teachers for 2NL should be increased to match the increase in demand for 2NL teachers
165. Textbooks and other learning material for 2NL should be prepared in conformity with the principles of second language teaching. Explanatory notes in the mother tongue of the students should be included all 2NL textbooks and material.
166. All pre-service and in-service teacher capacity development programmes for language teachers should include course material in psycholinguistics and pedagogy to develop their language teaching skills.
167. All teacher trainees at the NCOEs should be fit to teach in both the mother tongue and the link language.

SPECIAL EDUCATION

Introduction

Special Education, also called Special Needs Education, is the education of children who differ socially, mentally or physically from the average to such an extent that they require modifications of usual school practices. Special education serves children with emotional, behavioural, or cognitive impairments or with intellectual hearing, vision, speech, or learning disabilities; gifted children with advanced academic abilities; and children with orthopaedic or neurological impairments.

All children have a fundamental human right to access education irrespective of gender, socio-economic status, ethnicity, language or ability/disability. The Universal Declaration of Human Rights of the United Nations as well as its subsequent declarations such as the Convention against Discrimination in Education (1960), the International covenant on Economic, Social and Cultural Rights (1966) and the Convention on the Rights of the Child (1989) have further strengthened the concept of Right to Education irrespective of any differences. The World Declaration on Education for All (Jomtien, 1990) further called upon the world community to work for the achievement of Education for All Goals within a specified time frame. The UN Standard Rules on Equalization of Opportunities for Persons with Disabilities (1993) stipulated the provision of education in both “integrated school” and “general school” contexts. The recognition of the principle of equal rights of disabled children has been laid down in no uncertain terms by the international community and Sri Lanka as a member country is bound to promote and implement this principle.

The Constitution of the Democratic Socialist Republic of Sri Lanka in its Chapter on Directive Principles of State Policy and Fundamental Duties pledging to establish a democratic socialist society enumerates the objectives of the State, and one of which is “The complete eradication of illiteracy and the assurance to all persons of the right to universal and equal access to education at all levels”. The Sri Lankan State is committed to provide equal opportunities in education for all children.

In addition to the right to education another initiative that has emerged in the recent past is the move towards inclusion. Inclusive education promotes the assimilation of children with special needs into the regular classroom, with necessary environmental and pedagogical accommodation made to help the students access the mainstream curriculum.

The move to adopt inclusive educational policies is rooted in the rights based disability movement that promotes the ideology of right to education for all. Internationally, this ideology and movement have gained in strength from cross cultural conventions including the Salamanka Statement and Framework for Action on Special Needs Education (1994) and the United Nations Convention on Rights of Persons with Disabilities (2008). Article 1 of this Convention states that, "Persons with disabilities include those who have long term physical, mental, intellectual or sensory impairments, which in interaction with various barriers may hinder their full and effective participation in society on an equal basis to others".

This stresses the right of all persons with disabilities to "full and effective participation in society" which includes an end to exclusionary teaching contexts in favour of inclusive educational facilities.

Trends in Special Education

Many countries in **Europe** have moved to adopt a more 'educational approach' focusing on the outcomes of disability. This process has been strengthened by the passing of appropriate and progressive legislation regarding Special Education within mainstream schools in many European countries. Also, some countries have made necessary adjustments to their funding systems while others are acutely aware of the need for adequate funding to promote inclusive education.

However, even within resource rich countries of Europe they are said to be, 'currently struggling with practical implementation of this philosophy of inclusion'. Individual education programmes have been the key tools in determining the implementation of appropriate education for children with disabilities. In Scandinavian and Southern European countries around 1 percent of children with special needs are accommodated in special schools, in other countries the percentage of children in such schools go up to 6 percent. The current trend in Europe is towards a two track system; a comparatively bigger provision of special education systems alongside mainstream school placements with a continuum of services in others. In Norway and Italy many of the state run special schools are being converted to resource centres.

Another challenge to the establishment of inclusive education is the tension between the inclusion of vulnerable students and state-wide school performance measured by 'league tables' in U.K. This measurement of success via school output has undermined the expansion of inclusive education.

In Germany children with disabilities are offered both separate and inclusive early years educational placements in special kindergartens or supported kindergartens as

well as integrated kindergartens. Beyond kindergarten, children with special education needs can access mainstream schools if all necessary adaptations and support mechanisms are offered. Special education teachers are deployed to support students with special needs within the mainstream classroom. Support is offered within or outside the classroom. "Transitional schools are to offer remedial support for students with speech or behavioural difficulties, and are to be placed back in a mainstream setting when the difficulties have decreased to an acceptable level. In addition, vocational training is also offered in separate or inclusive settings. If enrolment in a standard occupation is impractical, these students are to be offered individualized training, catering to their competencies and level of skill to work in specific workshops for persons with disabilities and to be as independent as possible.

India has taken positive steps towards formulating an inclusive education policy. The past three decades have seen the emergence of many relevant policies and legislation such as the Persons with Disabilities Act of 1995 and the National Policy for Persons with Disabilities in 2006 as well as government initiatives including the Project Integrated Education for the disabled in 1987, "Sarva Shiksha Abiyan" or Education for All Movement in 2001 and the Action Plan for Inclusive Education of Children and Youth with Disabilities of 2005. However in implementation these legislative provisions have failed to get all children with disabilities to receive opportunities for education.

In Japan the cultural values which are central to its way of life may explain the reluctance of Japanese schools to fully embrace a western model of inclusive education. The Japanese education system has remained largely unaltered by western philosophies of education. It continues to perpetuate a more traditional 'collectivist' cultural perspective, paying little heed to individual diversity in favour of collective effort. Therefore all students are seen as having the potential to excel academically with the offering of any extra support as discriminatory. Connected to this concept of all children possessing equivalent abilities to succeed is the perception of self-discipline honed by hardship. There is also an emphasis on social and emotional growth via formulating peer relationships. The Japanese example questions the wholesale employment of inclusive approach, without adequate consideration for cultural sensitivity and relevance.

Hong Kong is experimenting on a programme for hearing impaired children. Here about 1000 are reported to have three diverse options: a mainstream approach offering an oral approach, or a Deaf school offering a sign language approach or a mainstream school adopting a bi-lingual approach. This has been highlighted in UNESCO International Bureau of Education database as an example of good

practices for inclusive education. It uses a bi-modal learning environment focusing on bi-lingual language acquisition, incorporating sign language to enrich both sign and spoken language development. Parents are keen to offer their children this mainstream bi-lingual experience. However this remains unacknowledged by the government.

African countries adopt 'whole class' teaching practices based on the assumption of student homogeneity, that all children in the group possess a similar ability. This is evident in the detailed teaching guides offered to teachers in Malawi. Inflexibility of curricula and rigid pedagogy has also been reported from Botswana where the dominant positivist views of curriculum knowledge as uncontested facts disregards pupil heterogeneity. South Africa too has espoused traditional theories and practices of pedagogy.

Issues of Special Education in Sri Lanka

Lack of clear Guidelines on the Implementation of Special Education Programmes

Although the Ministry of Education and many other government agencies such as the ministries of Social Services, Child Development and voluntary organizations and NGOs are involved in providing services for children with special education needs there is no common set of guidelines for these agencies to follow. In general the concept of inclusion is accepted, but variations are necessary with regard to those with specific disabilities such as Autism, Downs Syndrome. There are others who need to be accommodated in orientation centres before they are integrated in normal classes. Special programmes for gifted children are not available at all.

Negative Attitudes in the Society

In traditional societies children with disability are treated as those who deserve the sympathy of others, but their rights are not recognized as for other citizens. Their right to education is not accepted. As a result when such children are integrated in normal classes there is antipathy from parents of normal children. Awareness programmes need to be conducted at national, local and institutional levels and in this regard the mass media can play a big role. There should be special programmes for parents of children with different abilities to take care of their children.

The existence of segregated schools for the disabled

Before the concept of inclusion came in to vogue there were separate schools not only for those with disabilities but among the disabled themselves such as deaf and blind children. There are 25 such schools which continue to exist which are assisted by the government. It may not be feasible to convert these into normal schools in order to make them inclusive. But these children will experience problems in

integrating with society. It is necessary to provide opportunities for these children to move with children in normal schools.

Access to education of marginalized children

Now most children with disabilities get enrolled in schools. But still there are children from marginalized families who fail to attend a school due to the incapacity of their parents to provide the facilities. These children also need transporting to schools far away. Assistance needs to be provided to such families or else residential facilities should be provided to accommodate such children.

Lack of Resources

Children with disability need equipment, which are expensive and these are beyond the capacity of most parents of such children. Deaf children need hearing aids which are expensive, blind children need Braille writers and those with physical/ multiple disabilities need facilities such as wheel chairs for mobility. More resources are required to provide these facilities to needy children. In addition the teacher pupil ratio in special education classes is one teacher for every five children. There should be an adequate number of schools with special resource centres for children with disabilities in each education zone and at least one residential school for those who are severely disabled.

Professional Development of Teachers and Supervisory Personnel

All teachers require a basic training in identifying children with special education needs to identify such children and their disabilities so that special assistance can be procured where necessary. Teachers in charge of special education centres should have a deeper understanding of different kinds of disabilities so that they can guide the teachers in integrated classes as well as the parents. The supervisory personnel too should have a thorough understanding of the needs of these children for them to advise and guide the teachers.

Gifted Children and Mentally Retarded Children

The current education systems cater to the needs of average children and neglect both the gifted children and the mentally retarded children. The Special Education Unit of the Ministry of Education has provided training to a limited number of teachers on how to treat mentally retarded children. But that is not adequate. There are no programmes to identify gifted children and assist them to develop on a fast track basis. Both these are essential.

Policy proposals

Guidelines on the Implementation of Special Education Programmes

168. Different categories of disability among the differently-abled student population should be identified and clarified; and guidelines for designing and implementing programmes should be formulated accordingly.
169. Social awareness should be created through the mass media and relevant institutions to understand and respect the rights of the differently-abled segments of the population.
170. Inclusive education should be promoted to cater to the differently-abled children and slow learners by introducing inclusive education practices to at least three primary schools and one secondary school in an educational division. Infrastructure, physical facilities and special education teachers should be provided to those schools.
171. A special school should be established in each education zone to cater the children who are severely disabled and cannot be admitted to normal school for inclusive education. Where necessary residential facilities should be provided for such children. This school should be built and operated through a partnership of the Ministry of Education and the Ministry of Social Services.
172. Social interaction should be developed among the Special Schools run for children with different disabilities and impairments to work together with children of normal schools in the neighbourhood.

Access to Education

173. Disabled children in marginalized families should be identified and provided with necessary equipment or grant to cover the expenses so that the children can be sent to school.
174. Allocation for Special Education should be increased to provide the necessary facilities for special education classes and to develop infrastructure.
175. A Special Education and Counselling Centre should be established in partnership with the Ministry of Social Services in every education zone.

176. Capacity development of special education teachers should be strengthened, and an awareness component on special education should be included in all teacher education programmes.
177. Attention should be paid to take care of the needs of mentally retarded children and relevant programmes should be implemented. Attention should also be paid to the needs of exceptionally gifted children and their specific needs.

NON-FORMAL EDUCATION

Introduction

Non-formal education (NFE) has been defined as “any organized educational activity outside the established formal system, whether operating separately or as an important feature of some broader activity that is intended to serve identified learning clientele and learning objectives”. NFE programmes are learner centred as learners play an active role in their learning and are customized to the circumstances. The curriculum is flexible and can be changed from one programme to another. The human relationships in the process are more informal depending more on reciprocal learning. The curriculum focuses on practical skills and knowledge, and targets youth, women, the poor and the marginalized. Community participation is very much greater, management is decentralized, and organizational structures are flexible.

The publication of UNESCO Reports, “Learning to Be– 1972” and “Learning the Treasure Within– 1993” had a tremendous impact on the popularization of the concept of life-long education. Knowledge is changing rapidly and to keep pace with this phenomenon it is imperative that the world should usher in a learning society. Learning to learn is an essential competency for modern individual. The only way that opportunities can be provided for the communities to keep pace with new learning is through non-formal education.

The importance of NFE came to be recognized as a tool for development all over the world owing to its advantages of delivering results within a short period unlike in formal education which takes a long time to deliver its products. Another factor is that it is more cost-effective than the formal education programmes and is conducted to meet the needs of specific target groups. It has also facilitated skills education, targeting particularly the disadvantaged groups in society.

The World Conference on Education (Jomtien, 1990) by its Declaration on Education for All called upon the international community to work for the realization of the goal for education for all within a prescribed time frame in order to ensure the right to education enshrined in a number of UN declarations commencing with the UN Charter on Human Rights 1948. The World Summit on Children (2000) adopted the Millennium Development Goals, one of which was the achievement of Universal Primary Education by 2015. NFE is one of the easiest strategies that can be followed to achieve these goals. Hence by the turn of the century NFE has been recognized as an important strategy in education.

In Sri Lanka, NFE was formally recognized in the 1970s with the establishment of the Janatha Education Branch at the Ministry of Education in 1972. Prior to that there were many programmes which resembled the present day NFE programmes such as the extension programmes of the Ministries of Agriculture, Health, Co-operatives, Rural Development; Vocational Training by the Ministry of Labour; and the Night Schools organized by the Department of Education. There are also programmes conducted by voluntary organizations and NGOs such as the Lanka Mahila Samithi, the Sarvodaya movement, and organizations in the health sector.

The NFE branch of the MoE initially had three programmes: vocational training programmes for school leavers; general education including literacy programmes for out of school children and adults; and the weekend English schools for school leavers. In 1977 the Adult Education programmes were strengthened by the appointment of Adult Education Officers at divisional level to organize and supervise general adult education programmes.

During the following decades, the NFE branch strengthened and expanded its programmes to cover other areas as well. Instead of Adult Education Officers who were selected on an ad hoc basis, young graduates were recruited as NFE Project Officers and deployed in all divisions. The programmes conducted by this branch at present are:

- Functional Literacy Centres for non-school going children and adults
- Community Learning Centres: These centres conduct different kinds of programmes for adult target groups such as unemployed youth, housewives, awareness programmes on social issues, short-term income generation activities
- *Nenasarana* Centres for Street Children where homeless children are cared for and provided basic education
- Vocational training programmes for school leavers
- Orientation programmes for women going out for foreign employment
- Entrepreneurship training for school leavers
- Orientation programmes for non-schoolgoing children to prepare them for placement in formal education.

The National Institute of Education too started a Department of Non-formal Education in 1989. Its purpose was to focus on NFE as a tool in development and was concerned with providing training for personnel engaged in NFE and carrying out research in the area. One of the important activities was to develop the concept of an “open school” to cater to the needs of the youth who have dropped out of the school without completing secondary education.

Trends in Non-formal Education

NFE programmes are popular in developing countries as a strategy for development. In Thailand formal, non-formal and informal education strategies are recognized as instruments to achieve knowledge based learning society. The National Education Act states that Thai education should be a lifelong education resulting from the integration of formal, non-formal and informal education so as to build capacity in the development of continuous lifelong learning for promotion of peoples' quality of life. Non-formal education is flexible in determining the aims, modalities, management procedures, duration, assessment and evaluation, conditional to its completion. The contents and curricula for non-formal education shall be appropriate and responding to the requirements and meet the needs of individual groups of learners. Informal education enables learners to learn by themselves according to their interest, potentialities, readiness and opportunities available from persons, society, the environment, the media and other sources of knowledge.

The Office of the Non-Formal Education Commission (ONFEC) in the Ministry of Education has been established to be in charge of NFE. The main tasks of the ONFEC are to provide and support the services of non-formal and informal education to promote lifelong learning among out of school target groups and those having completed basic and higher education to continue with lifelong learning. It also extends its services to the underprivileged who were denied opportunity for basic education. Its activities are in three main areas:

- Basic Education: Functional Literacy programmes, Hill Area Education Project, and Continuing Education programme
- Vocational Education and Skills Training: Interest Groups, Short-term Vocational Courses, Vocational Certificate Curriculum, and NFE Occupational Certificate Curriculum
- Information Service: Public Library, Community Learning Centres, Education Radio and Television Programmes, and the National Centre for Science Education.

This shows that the Thai NFE programme is comprehensive and covers a wide area.

In South Korea the demand for continuing education is very high owing to the competition to reach higher level positions in the occupational hierarchy. As a result private education had stepped in to provide opportunities for those seeking to acquire higher qualifications. In order to contain this trend the government initiated its own programmes for continuing education.

Accordingly the following programmes were started by the government:

- **Adult Education:** The Social Education Promotion Act was enacted to meet the demand for alternative educational opportunities, particularly of employed youth and adults who have not been able to attend and complete education in regular schools. These programmes provide support for the promotion of life- long education which meets the needs of employees.
- **Para-Schools:** There are civic schools (elementary), civic high schools (middle), industry-attached schools, school-attached evening classes, air and correspondence high schools, and industrial universities which provide courses equivalent to formal schools.
- **Distance learning Institutions:** The Korea Air and Correspondence University offers courses leading to Bachelor's degrees using the distance mode. It conducts via a distance education system using distance modes such as satellite TV, CD ROMs, video conferencing, the Internet, printed materials, radio and audiocassettes, providing access to an open, flexible education environment. The majority of the students enrolled are workers in industries, government officials, soldiers and teachers.

In **India**, NFE concentrates on providing a second chance to those children who are out of school. These students include drop-outs, push-outs, and pull-outs from school owing to economic, social and cultural compulsions.

It provides an opportunity to fulfil the Indian Constitutional goal of providing compulsory and free education to rural children who are not able to attend a full time day school. NFE has evolved as an alternative to the formal system.

Since 1988 NFE activities have been strengthened to achieve the goal of Universal Primary Education. Although formal education is considered to be the better mode for imparting general education India cannot provide opportunities to cover its vast population, particularly deprived segments of the population. Recognizing this need, the Ministry of Human Resource Development (MHRD) established a full-fledged Department of Non-formal Education under the National Council of Educational Research and Training (NCERT). From 1988 to 1995 the Department was responsible for overseeing education to Scheduled Castes and Scheduled Tribes. In 1995 the Department was re-designated as the Department of Education in Non-formal and Alternate Schooling. This Department is poised to play a significant role in the achievement of Universal Basic Education which has been a national goal.

Issues in Non-formal Education in Sri Lanka

Although the Non-formal Education sector has during the last four decades made creditable achievements in the fields of functional literacy, vocational training and creating awareness in the area of promoting the quality of life of the people, there are several gaps to be filled and the sector has to be strengthened to fill these gaps. In the present context the following issues need attention for the development of NFE.

Lack of coordination in the non-formal education programmes

Within the education sector there is no coordination among different agencies. At the Education Ministry itself there are two branches, the Non-formal and Special Education Branch and the Education for All Branch handling similar work. According to the 13th Amendment to the Constitution Non-formal Education is a function devolved to the provinces. Hence, they also conduct NFE programmes in the provinces. To eliminate this duplication it is proposed that, as stated in the 13th Amendment, the NFE functions should be fully devolved to the provinces. However, there is a need for monitoring and reporting on these activities to the Central Government. For this purpose the monitoring and reporting function should be entrusted to the Education for All Branch in the MoE. The present Non-formal and Special Education Branch should be renamed as Special Education Branch and entrusted to coordinate and monitor the special education activities at the general education system.

Issues in the implementation of the 'Open School' programme

The NIE has developed the concept of the 'Open School' and curricula for various courses to be conducted for out of school youth. Also at present, it conducts training courses for Open School. The Commission recommends that the NIE should develop curricula, models and programmes and handle capacity development of trainers for the Open School. Furthermore, the implementation of Open School Programmes should also be entrusted to Provincial Education Authorities. The related monitoring and reporting function should be under the purview of the EFA branch of the MoE.

NFE programmes for vocational training are not need based

The NFE programmes conducted by the NFE branch of the MoE do not meet the current needs. Its vocational training programme is ineffective in training youth for employment. There are better organized need-based programmes conducted by the Ministry of Vocational Training and other agencies. All vocational training programmes presently conducted by the NFE branch of the MoE should be discontinued.

Unfeasible Programmes in the functional literacy centres

Functional Literacy Centres were established as the numbers of non-school going children in villages were inadequate to constitute a literacy class. However, programmes in the Functional Literacy Centres are not feasible because they are situated far apart. The non-school going children are found isolated in villages and are not in a position to attend a Literacy Centre by travelling long distances. The programmes should be re-organized for small groups at suitable locations in villages.

Lack of staff at Community Learning Centres

The Community Learning Centres are inadequately staffed and lack resources to conduct effective programmes. They should be strengthened to provide continuing education for different target groups in the community.

Lack of training of NFE project officers

NFE project officers are not trained properly to conduct continuing education programmes for adults. As they have no promotional prospects in the service, they are frustrated. Most of the capable officers have left to join other organizations with better prospects.

Inadequate Financial Resources

Financial resources provided for the NFE are inadequate. NFE training centres need better facilities including modern ICT equipment and trained personnel. Costs could be reduced by utilizing physical resources in the formal sector for NFE programmes in the afternoons.

Policy proposals

Devolving of NFE Functions to Provinces

178. The functions of the Non-formal and Special Education, and Education for All Branches of the MoE, NIE and of the provincial authorities should be clearly delineated
179. NFE functions should be fully devolved to the provinces as stated in the 13th Amendment to the Constitution, and the monitoring and reporting function should be entrusted to the Education for All Branch of the MoE.
180. The present Non-formal and Special Education Branch at the MoE should be renamed the Special Education Branch and entrusted to coordinate and monitor the special education functions of the General Education System.

Curriculum Development and Training of Trainers

181. The NIE should be responsible for curriculum development, training of trainers and conducting research for the Open School.
182. Vocational training programmes should not be conducted under NFE programmes.
183. Functional literacy centres have outlived their purpose as there is no concentration of non-school going children in any given location. All such children should be accommodated in locations suitable to provide appropriate group instruction.
184. Community Learning Centres should be strengthened by providing modern ICT equipment and other facilities. This programme should be expanded by the provincial authorities to cover as many villages as possible.
185. The service conditions of NFE Project Officers need to be regularized. Professional training in adult education should be provided to NFE Project Officers.
186. Financial provision for NFE should be increased.