



New Reforms & Secondary Education

Ranjith Premasiri

Director Programmes, Advanced Level Education Reforms

Modern world is changing rapidly. This change is not limited to one country or any specific field. Globalisation is making its impact felt even in our country. Sri Lanka, in her path towards progress, should take into account these trends and act accordingly. In this process of change, education holds an important position.

The Existing System of Education in Sri Lanka

At this time, when a comprehensive programme of reforms is being effected in the field of education, it is opportune to take a look back at the educational system of the past. It will enable us to comprehend vital facts and design appropriate plans for the future. The Late Dr C W W Kannangara launched the free education system in the country with the intention of building a national system of education. Through that step, then existent system of education was changed and the foundation was laid for the building up of a new Sri Lankan nation. As an important aspect of this programme, Central Colleges were established in various parts of the country and through them an attempt was made to implement a system of education that can meet the requirements of the country. As a result of the free education from kindergarten to university during the last 50 years, a large number of outstanding men and women including intellectuals, scientists and administrators have been produced in various fields.

In this manner, numerous learned men who have benefited from the free education scheme, have contributed immensely to the nation through their skills. However, the prevailing education system appears to have reached a stage where it is out of step with the changing world and due to that fact, a certain amount of decline seems to be apparent. There is also a qualitative retard. A certain degree of deficiency seems to be present in the development of practical skills among many individuals produced by this system.

National Education Commission

Recognising the importance of formulating a stable, firm educational policy that will not be susceptible to influence exerted from time to time due to political changes, the government appointed a National Education Commission in 1991. The Commission was entrusted with the task of formulating a policy covering all aspects of education and render advice to the government in that regard. During its tenure this Commission carried out many surveys and studies relating to various aspects of education, consulted educationists, intellectuals and other persons interested in the relevant subject, and after obtaining their views through written communications and oral evidence, issued their first report in 1992.

In this report, the Commission presented nine common national goals expected to be achieved through the school level education and five sets of basic competencies that could serve as a foundation for future progress.

Under the new educational reforms, the new curricula is designed in a manner that makes it possible to achieve the above mentioned national goals and basic competencies.

Secondary Education

Under the new educational reforms, secondary level of education is divided into three main stages:

- 1) Junior Secondary
- Grade 6 to 9
- 2) Senior Secondary Ordinary Level - Grades 10 and 11
- 3) Senior Secondary Advanced Level - Grades 12 & 13

Junior secondary stage can be considered as the most active period of a child both mentally and physically. During this time they display a marked preference to act on their own. At the same time, there is a desire to build relationships and friendships with peer groups centered on physical and mental changes. The child also displays willingness to occupy a prominent place in society. By the time a child finishes Grade 9 would have completed 14 years of age.

Hence, several capabilities have been identified that a child should have acquired during this period. They are:

- To be an adult mentally and physically
- To acquire sufficient physical and mental powers to behave as a member of his family.





- To identify national challenges and respond accordingly.
- To be sensitive towards the environment and to contribute towards environmental protection.
- To act towards peace and national integrity
- To be aware and active in the procurement of food from the biological environment.
- To recognise rights as well as duties and behave as a good citizen.
- To be committed to national productivity and social justice.
- To acquire spiritual progress connected to creativity based on the continuous progress of physical and social environments.
- To acquire the qualifications needed to be a balanced human being, and an active member in the Sri Lankan nation.

Provision of resources, facilities and various opportunities to acquire these capabilities is an absolute must.

The child entering the junior secondary stage would have studied to a great extent, an integrated curriculum in the primary cycle of inter connected subjects. This education is organised through environment related activities and is based on direct experiences. At the secondary level stage, the child has to study a curriculum clearly divided into different subjects. During this time, the child is directed towards a process, which allows for more freedom to think. The learning situations are organised to effect student centered education where a child could engage himself in learning in and out of the classroom.

The above mentioned student centered educational programme will be utilised instead of presenting subject matter through lectures inside the classroom. The National Institute of Education has developed curriculum

for secondary education considering all factors referred to above. This new curriculum will be operative in schools as follows :

- Grade 6 Year 1999
- Grade 7 Year 2000
- Grade 8 Year 2001
- Grade 9 Year 1999
- Grade 10 Year 2000
- Grade 11 Year 2001

This plan also includes awareness programmes for parents. Attempts will be made to secure the fullest co-operation of parents for the school educational activities of their children.

School Based Assessment

The school based assessment process can be considered as another important aspect of the new educational reforms. This programme will make it possible to identify strengths and weaknesses of students in the study of each subject. Through that, students with special learning difficulties will be re-identified and the school will take necessary remedial measures to overcome these difficulties. In this regard, the teachers are entrusted with a stupendous task, and the National Institute of Education has provided them with the requisite model assessment tools. According to this programme the minimum level of competencies that should be achieved by every child at each subject will stand at a very high level.

Environmental Studies (Grade 6)

Instead of the two subjects of science and social science that had been taught in grade 6, a new subject named 'environmental studies' has been introduced.

The three elements of social environment, natural (physical and biological) environment and the artificial or man made environment are included under the scope of this subject. The separate individual study units included in the syllabus of this subject have been designed giving more weight to social sci-

ence, or science and technology. Similarly, on the foundation that will be laid by this subject of environmental studies, it will be easy for the student to be directed towards the two subjects of 'social studies and history' and 'science and technology'.

Health and Physical Education (Grades 6-9)

Health and physical education have been taught as two separate subjects in the school curriculum. Under the new educational reforms, they have been combined as one subject. Physical education is necessary to maintain the health of any person in proper conditions. Health and physical education are not two different fields, but they belong to one field connected to each other. Learning stages have been arranged in a way that will facilitate the development of a child's mental, physical and bodily fitness. In the selection of subject matter at grade 6, the basic attention has been directed more towards the imparting of learning experience conducive to the cultivation of healthy habits.

This subject is included in the curriculum upto grade 9. If any student wishes to study this subject further, he can study health and physical education as an additional subject and offer it at the G.C.E. Ordinary Level.

Language and Literature (Grades 6-11) Sinhala/Tamil

In the teaching of language in schools, more emphasis was given to reading and writing. Areas such as listening, speech and appreciation were given less emphasis. Under the new educational reforms their weaknesses have been minimized.

Aesthetic Studies (Grades 8-11)

In grade 6, students will receive aesthetic education in a manner designed to give them a basic understanding





about art, dancing and music. At this stage, it has been planned to give them a basic knowledge about the three subjects as well as enjoyment and creation relating to these fields. Through this system of education, students will be in a position to decide the subject they should select in accordance with their taste and skills. Therefore, students will be in a position to choose one of the three subjects and study it further as from grade 7.

Education and living can be explained as a combined process rather than two distinct areas. But, the teaching learning process in schools is still geared towards university entrance examinations. At the same time, a large majority of youngsters who have not been able to follow higher education live with misgivings about their inability to wade through adult lifehood with ease. This subject is also a new field introduced to the school education system. It will take up for discussion problem of the environment around them as well as the personal problems of the students and the social relations problems of the school. Through this process, they are encouraged to collect strategies for the solution of these problems and arrive at decisions.

Programmes Implemented at G.C.E. Ordinary Level

According to the new educational reforms, G.C.E. Ordinary Level comprises grades 10 and 11 in the context of general education, these grades also can be considered as a landmark stage. During these two years, a student will, while receiving general education will also get opportunities to direct himself for a livelihood of his choice without interfering with his education.

In addition to the programmes listed under grades 6-11 earlier, there will

also be a few special changes at ordinary level.

Statistics reveal a downward trend in the success rate for science and mathematics at G.C.E. Level examinations. Surveys have disclosed the fact that in addition to the poor knowledge of students, certain other factors also have been responsible for this state of affairs. It is also seen that the percentage of failures at G.C.E. (O/L) due to the failure in these subjects is very high.

Scientific and mathematical knowledge of different levels is required for various employments. Knowledge of mathematics that should be possessed by an entrant to a non-mathematical based field is different to the level expected from an entrant to a mathematics based higher education field. A level of proficiency in mathematics expected from a person receiving education in mathematics based higher education is not necessary for other fields. Subject knowledge in science also varies similarly. However, at present, a common question paper is prepared for all these levels.

The attempt to assess everyone by a common question paper results in an increase in the rate of failures. Therefore, taking into consideration all these factors, two papers on mathematics and science at two levels will be provided.

One meant for those who wish to pursue higher education in science and mathematics based subjects and another for other fields in conformity with the standards necessary for the two groups. Accordingly, two papers each for science and mathematics will be prepared for G.C.E. (O/L) as from December 1999.

All students can offer both these papers at the examination. It is named Science I and Mathematics I. Success in these papers will be sufficient to pass the G.C.E. (O/L) examination.

At the end of this chapter there is grouped together a set of further annotations which indicate the linkages of these National Goals with educational activities. These are referred to as Educationally Relevant Goals and are themselves totally consistent with the National Goals. Sometimes they are directly derived from the National Goals.

In the Sections that follow the National Goals are commented on and a series of annotations are made.

For purposes of clarification, a section of the circular containing the specifications for success at these subjects and qualifications to enter various streams at the Advanced Level is reproduced below.

- A pass in mathematics I or mathematics II is a basic requirement for entry into all subjects streams.
- In order to follow physical science stream in the Advanced Level a student must have a credit pass in mathematics II and in addition, a pass in science I or science II
- In order to follow the biological science stream, a student must have a credit pass in science II and a pass in mathematics I or mathematics II.

The G.C.E. (O/L) examination that confers to the new educational reforms will be held for the first time in 2001.

Under the new curriculum for grades 10 and 11, subjects have been divided into two categories core subjects and additional subjects. There are eight core (compulsory) subjects. All students should offer those eight subjects.

Through these core subjects, it is intended to provide a child with a firm,





wide educational foundation. The study of these subjects has been made compulsory.

A child can select a maximum of two additional subjects at grades IO and II. Students who intend to take up further study of these subjects can select them. Periods have been set apart in schools for the study of these subjects and the students have the freedom to choose the subjects of their desire in accordance with the facilities available in the school. Study of these additional subjects is not compulsory. They can be studied only if a child opts to do so.

Core Subjects (Compulsory Subjects)

1. Religion - Buddhism, Christianity, (Roman Catholic & Non-Roman Catholic) Islam, Saivasam
2. First Language
3. English
4. Mathematics
5. Aesthetic Studies - Art, Dancing (Bharatha/Sinhala), Music (Oriental/Western/Carnatic) Drama and Theatre/Literature.
6. Science and Technology
7. Social Studies and History
8. Technical Subject - (Agriculture/Gardening/Animal Husbandry/Marine Biological Resource Technology/ Fresh Water Resource Technology/Food /Science and Technology/Home Economics/Commerce/Handicrafts (Construction) Technology/Electric & Electronic Technology/Arts/Mechanical Technology.

Additional Subjects

In addition to the core subjects indicated above, students can select one or two of the following subjects.

1. History
2. Geography

3. Development Studies
4. Sinhala or Tamil as a second language
5. A modern or a classical language (Latin/French/Sanskrit/Malay/Arabic)
6. Health and Physical Education
7. Literature (Sinhala/Tamil/English/Arabic)

the Advanced Level. It is pertinent to state some of them here.

Nearly 180,000 candidates sit for this examination every year. The percentage of passes in all four subjects is roughly about 50 per cent. But, the number of students that can be admitted to the universities is about 12,000.

Education Reforms in G.C.E.

Advanced Level

Advanced Level Programme has been operational from September 1998. A large number of facts were taken into consideration in designing reforms for

However, the present education system does not pay much to the majority of students who fail to gain admission to the universities after passing the Advanced Level.





National Goals of Education Reforms

- (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 one and 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.**

Foundation for Approaching the NATIONAL GOALS

There is a basic foundation that must be put in place to enable the superstructure of development to be pursued effectively. This foundation is made up of a set of basic competencies which are a precondition for the attainment of the educationally relevant goals.

These basic competencies are outlined below in five sets:

A. COMPETENCIES IN COMMUNICATION

The first set of competencies is made up of three subjects - Literacy, Numeracy and Graphics:

Literacy includes: Listen attentively, Speak clearly, Read for meaning and Write accurately and lucidly.

Numeracy includes: Use Numbers for Things, Space and Time, Count, Calculate and Measure systematically.

Graphics includes: Make sense of line and form, express and record details, instructions and ideas with line, form and colour.



B. COMPETENCIES RELATING TO THE ENVIRONMENT

This second set of competencies relates to the Environments - Social, Biological and Physical Environments:

Social Environment: Awareness, sensitivity and skills linked to being a member of society, social relationship, personal conduct, general and legal convention, rights, responsibilities, duties and obligations.

Biological Environment: Awareness, sensitivity and skills linked to the Living World, Man and the Ecosystem, the Trees, Forests, Seas, Water, Air and Life - Plant, Animal and Human Life.

Physical Environment: Awareness, sensitivity and skills relating to Space, Energy, Fuels, Matter, Materials and their links with Human Living, Food, Clothing, Shelter, Health, Comfort, Respiration, Sleep, Relaxation, Rest, Wastes and Excretion.

Included here are the skills in using tools to shape and form materials for living and learning.

C. COMPETENCIES RELATING TO ETHNICS AND RELIGION

This third set of competencies is laden with values and attitudes. It is essential for individuals to assimilate values, so that they may function in a manner consistent with the ethnical, moral and religious modes of conduct, rituals, practices in everyday

living,, selecting that which is most appropriate.

D. COMPETENCIES IN PLAY AND THE USE OF LEISURE

This fourth set of competencies links up with pleasure, joy and such human motivations. These find expression in play, sports, athletics and leisure pursuits of many types. These are essential for realising mental and physical well being. These also link up with such values as cooperation, team work, healthy competition in life and work. Here are included such activities as are involved in aesthetics, arts, drama, literature, exploratory research and other creative modes in human living.

E. COMPETENCIES RELATING TO "LEARN TO LEARN"

This first set of competencies flows directly from the nature of a rapidly changing, complex and crowded world. Whatever one learns, that learning will need updating and review. This require that one should be aware of, sensitive and skillful in sustained attention, and be willing to persevere and attend to details that matter in a given situation. These are the basic in the competence "Learn to Learn" throughout life. Further, the information revolution makes this an imperative.



to be studied for university entrance examination thereby providing a certain amount of relief to the students.

♦ Students intending to enter universities should follow courses according to the subject combinations specified by the respective faculties of universities. Circulars with detailed information on these subject combinations have been sent to the schools. Advanced Level classes in schools are held in accordance with this subject combination.

♦ Students intending to enter universities should sit a common general paper after sitting for all the papers on the chosen subjects at the Advanced Level examination. This question paper is scheduled for the last day of the examination timetable.

This paper is set by the Special Unit of the University Grants Commission and the examination is conducted by the Department of Examinations. This paper is designed to test the following abilities of a student:

- General Awareness
- Ability to solve problems
- Logical ability (analytical, systematic, statistical and spatial)
- Comprehensive and communication skills

Model question papers have been provided already.

In order to consider the admission of a student to a university he should have the following qualifications:

- I. He should get a minimum aggregate of 140 marks for all the three subjects He should pass in the general question paper.
- II. He should pass in the Common General paper.

For purposes of selection for admission, aggregate marks received by students will be considered on a priority basis. The district based system currently in use for selection of students for universities will be con-

Likewise, the attention paid to the majority who fails the entrance examination is also minimal.

After the Advanced Level, our children have only a very limited freedom of choosing the subjects in keeping with their abilities and preferences from a wide range when they intend to proceed towards higher and tertiary education. One of the major problems that baffle the students who have passed their A Level but have not been selected for the universities is their inability to

select the field that is appropriate for them. The new reform will provide a solution to overcome this problem by facilitating the selection of proper subject combinations from a wide range.

Specific changes that will be effected at Advanced Level under the reforms are listed below:

Programmes Implemented

♦ The number of subjects that should be offered by candidates has been reduced from four to three. This leads to a reduction of the subject load that has





tinued without a change. Pass marks for the Common General paper will be decided on the total level of marks of each district. For admission to a university, a student must get a pass in the Common General paper in his district.

For the Advanced Level, a student's record book and a teacher's record book have been introduced. This student's record book will be maintained in respect of every student. Report relating to the achievement levels attained and the progress of the students in grades 12 and 13 are entered in these books.

Teacher's Record Book

One teacher's record book will be maintained for each of the subjects taught at grades 12 and 13. Once a fortnight, evaluations on theory will be made at class level for each of the subjects and; the marks will be entered (within the fortnight) in the book. These evaluations will make it possible both for the teacher as well as the student to get an assessment regarding the student's achievement level of the subject. Accordingly, the Teacher's Record Book will provide a good understanding on the subject achievement of every student in the class. Students who fail to participate in at least 80% of the theoretical evaluations will not be permitted to apply for the Advanced Level examination. Practical work has been made compulsory for the study of subjects such as Agriculture, Biology, Chemistry, Home Economics, Physics and Aesthetic Studies, and assignments are compulsory for other subjects. Students who do not complete a minimum of 80% of the recommended assignments are not allowed to apply for the Advanced Level Examination.

The evaluation of these practical assignments and projects work will be made at school level.

Schools have been issued with books on practical work relating to those subjects with the practical element. For those subjects without practical work, assignments will be given once a fortnight. These assignments are designed in a way to make the subject matter studied during the relevant two weeks become a practical experience for the student.

Both practical work and assignments will be evaluated once in two weeks and the relevant marks will also be entered in the Teacher's Record Book. Through the assignments the students will get an opportunity to gain experience about the situations where the facts learnt by them in various subjects are practically applied or to undertake a survey to reinforce the facts further or else to make them relevant for further situations. These assignments are designed to cover very small sections of the subjects and therefore, will not take a lot of time of the students.

Student's Record Book

The student's record book is an accurate and a legal report on the educational and personality development of the student. These books are under the custody of the principal of the school. When the student leaves school, the completed book will be signed, certified and handed over to the student.

This student's report book will contain reports on academic reports, reports on the achievement status of the theoretical and practical work or assignments, sports reports, reports on extra curricular activities, activities in school, reports on participation in contests, leadership and activities as a member. At the end of every time, a standardised value of the marks awarded for the theoretical, practical and assignment work contained in the Teacher's Record Book will be entered in the student's record book. In addition, marks gained at the term tests conducted by the school will also be entered there in.

Project Work

Project work has been made compulsory for all students at Advanced Level. They must successfully complete two projects during the two years of their studies. Before applying for the Advanced Level examination, they must submit these project reports.

A student can select any subject for these projects, but, the project topics can be decided upon after discussing with the teachers. One project should be completed as a sole project while the other should be implemented as a group effort.

Norms Programme

For this purpose, regional monitoring panels based on regional education offices have been appointed. These panels will supervise norms all schools with Advanced Level classes at least once a term.

These panels comprise of Directors of Education, and Directors in charge of subjects.

These panels will supervise the maintenance of students' record books, teachers' record books, marks given for evaluation of assignments, practical work etc. Instructions needed for the further development of these activities will also be given by these panels.

Introduction of New Subjects at Advanced Level

New subjects and a technology subject stream have been introduced to the subject streams of Advanced Level. Under this arrangement, the subject of common English will be introduced. This has been allocated for the subject, and the relevant syllabus, teachers' handbooks; a text book and two audio cassettes have

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been issued. The training of Master Teacher's instructors has been completed and the training of teachers on a regional basis is in progress.

Very simple programme is designed to improve the English knowledge of students through this subject. This subject can be offered for the Advanced Level examination. A pass in this subject is not essential for admission to the universities. Similarly, the marks gained for this subject are not added for university entrance considerations.

In addition to common English, two new subjects under the names of "Management" and "Science and Society" have been introduced to the Advanced Level in 1999. These two

also have been accepted for the Advanced Level subject streams by the Universities Grants Commission. Subject of Management has been approved for the arts stream while "Science and Society" has been approved for the commerce stream.

A new technological subject stream will be introduced to the Advanced Level from 2000 onwards. This stream consists of several technological subjects. It will be difficult for us to assess what the progress of

the coming millenium will be. It is certain that our children will be faced with various challenges. However, we believe very firmly that the new educational reforms will provide the courage necessary to face these challenges with confidence and step into a successful future to our children. The honest commitment of persons engaged in this noble task is needed. ■

