

DEPARTMENT OF SCIENCE & TECHNOLOGY

**An Outlook for India's Future
(2000 A.D.)**

INTERIM REPORT

on

EDUCATION

by

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NCST PANEL ON FUTUROLOGY

PREFACE

The Indian educational system has been put to periodic scrutiny several times during the last 100 years since the beginnings of what can be called the modern education. A number of commissions were appointed by the Government from time to time to survey Indian education notable being the Indian Education Commission, 1882, the Commission of 1902, the Sadler Commission of 1917, the Radhakrishnan Commission of 1948, the Lakshmanswami Mudaliar Commission of 1952 and the Kothari Education Commission of 1964. To this one could add, for sheer historical considerations, numerous Despatches starting with Wood's Despatch of 1854, a series of Committees such as, the Hartog Committee of 1929, the Sapru Committee of 1934 and numerous reports such as, the Abbot-Wood Report of 1936-37, the Sargent Report of 1944 right up to J.P. Nayak's 'Charter' of 1975. The periodic deliberations of Central Advisory Board of Education offer yet another current review of the educational system in our own times.

Curiously enough, in all these surveys three common characteristics are visible :-

- (1) They have all expressed dissatisfaction with the prevailing educational system;
- (2) They have all pleaded for speedy educational reforms; and
- (3) They have all shown concern for future.

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The First Commission of the Independent India which was specifically asked to go into the changes necessary in the University education, observed, "The marked deterioration of standards in teaching and examinations and increasing dissatisfaction with the conduct of university administration and elections to university authorities are matters of great concern. The universities as the makers of the future cannot persist in the old patterns however valid they may have been in their own day. With the increasing complexity of society and its shifting pattern, universities have to change their objectives and methods, if they are to function effectively in our national life. A policy of drift in the vague hope that, if the universities are granted full autonomy and are permitted to pursue their own ends with intelligence and imagination, higher education will take care of itself, will be dangerous. Automatic and spontaneous adjustment will not take us to the future we want. We must develop a comprehensive positive policy within the limits of which there should be ample scope for pioneering and experimentation".

Dr. A. Lakshmanswami Mudaliar's Commission which specifically went into the reform of secondary education in India felt that the educational system should continuously adopt itself to the circumstances and conditions of life of a nation. The Commission in its report observed, "India's needs today are different from what they were in the past. India is now free and independent. The educational needs of a free country are different and ought to be different from what they were under the foreign domination". It added, "In a changing world the problems of education are also likely to be changed.

Likewise in the Kothari Commission report while referring to the changing times, the science-based world, the commitment to development, welfare, progress and security its Chairman Dr. Kothari, observed, "It is characteristic of a world permeated by science that in some essential ways the future shape of things is unpredictable. This emphasizes all the more the need for an educational policy which contains a built-in flexibility so that it can adjust to changing circumstances. It underscores the importance of experimentation and innovation. If I may say so, the single most important thing needed now is to get out of the rigidity of the present system. In the rapidly changing world of today, one thing is certain: yesterday's educational system will not meet today's,

and even less so, the need of tomorrow". He further added, our report, only offers, "the first step towards bringing about what may be called an educational revolution in the country".

When the Constitution makers of India, amongst other things, gave their vision of a preferred future, they specifically gave a 'directive' for a state of affairs where free and compulsory education is available for children upto the age of 14. At that time there were less than 50 million children in this age-group. Today, there are over 70 million children in this age-group and we have not yet been able to realise this dream of the Constitution makers. There will be around 120 million children in this age-group by the year 2000 A.D. Are we ready to meet their educational needs?

The dilemma of India is the dilemma of managing a 'large human system' be it for education or for any other human need. Will the conventional means offer a solution to our problems? A rough estimate indicates that following conventional methods we need to open a school every tenth minute for 250 pupil in order to meet the current needs of the children within the age-group 6 to 14. It would also require mobilisation of 1 per cent of India's current population as primary school

teachers. Do we then have the resource and the management capability to attain this goal? As things stand today, we don't seem to have enough resource to fulfil even the minimum goal of attaining 100 per cent literacy.

It is more than clear that we have to take recourse to non-conventional methods. The entire exercise of human resource development (608 million today and 960 million, plus or minus persons by the year 2000 A.D.) is some responsibility. The advantages available because of science and technology and of other modern sophistications that India can today muster, coupled with a certain degree of human dedication, can certainly help us a lot to usher India into a "learning" society which is the hall-mark of the post-industrial society. Is the nation prepared for such a dynamic leap? These and others are some of the basic questions to which the Technical Sub-Group on Education had applied its mind. In addition, it has looked at the basic educational needs of the children, the youth, the special Group like the women, etc., looking for such practical and meaningful solutions whereby on the one hand our educational system may shoulder the task of human resource development and promote rationality and creativity on the other.

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This Interim Report recaptures a variety of the familiar and new points presented by members of the Technical Sub-Group in the two rounds of sessions that this Group had had during the year 1975-76. Some of these ideas were subsequently test-checked by me at the seminars specifically organised at SNDT Women's University, Bombay, IIT Bombay, IIT Madras, University of Madurai and several person to person discussions with all those who happen to be the leading figures concerned with educational change and reform in India - too many to be named here.

This report presents two scenarios - the trend scenario which, if modified, does envisage a state of affair where "appropriate education" shall constitute massive introduction of non-formal education. It should take precedent over the existing formal system. No one denies the fact that educational processes should primarily be committed to attain 'excellence'. But a formal system has embedded in it "time" element and a "cost" element. If such a system creates conditions that fruits of education should be out of reach of the 85 per cent of India's population, one may gently ask for whose benefit and pleasure all this 'formality-for-excellence' - really is?

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The preferred scenario presented here gives a 21 Point Programme of an "accelerated implementation scenario" on which action should commence today. If we are committed to a socialistic society, we are perhaps obliged to have a judicious mix of setting up Centres of Excellence and higher knowledge along with a host of creative, unstructured and innovative experiments to educate millions of Indian citizens. This interim report does not so much offer solutions as it tries to ask: What should then constitute such a creative, experimental, innovative and futuristic system of Indian education? Sooner we find our answers better would it be in the national interest. Inspired with some such commitment for the future and with a humility that the enormity of our problems devolves on all of us I submit this Interim Report for further consideration, discussion, debate and, if possible, for quick and speedy implementation today of some of the recommendations made here.

New Delhi,
Oct. 1, 1976.

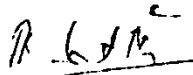

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