

Educational Development In India; It's Problems, Future And Contribution To Economic Growth

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PART—I

Educational Development in India; It's Problems

The present system of education has often been criticised by many persons in the country. The inadequacies of the system, they say, are reflected in the lack of creative thinking amongst the students, an atmosphere of dissatisfaction and indiscipline and a growing fear of unemployment situation in the country. A reappraisal of the whole system has been proposed from time to time by various reformers, thinkers and educationists as well as by the Education Commission set up by the Government of India.

What are the purposes of education then and what role the education system is expected to play in the training of an individual and also in the development of a society and a nation? Education pervades in so many different ways that it is difficult to quantify its impact on the individual and the society. In this connection the report of the Indian Education Commission (1964-66)¹ defining the objectives of University education may be useful ; which states :

‘to seek and cultivate new knowledge, to engage vigorously and fearlessly in the pursuit of truth, and to interpret old knowledge and beliefs in the light of new needs and discoveries ;

to provide the right kind of leadership in all walks of life, to identify gifted youth and help them to develop their potential to the full by cultivating physical fitness, developing the powers of the mind, and cultivating right interests, attitudes and moral and intellectual values ;

to provide society with competent men and women trained in agriculture, arts, medicine, science and technology, and various other professions, who will also be cultivated individuals, imbued with a sense of social purpose ;

to strive to promote equality and social justice and to reduce social and cultural differences through the diffusion of education ;

to foster in the teachers and students, and through them in society generally, the attitudes and values needed for developing “the good life” in individuals and society’.

The definition though long emphasises the important aspects of an education system which shape an individual towards "the good life" he is expected to live. The role of education in fact is to equip people with the knowledge and skill for doing the tasks of tomorrow so that each can take his share in contributing to the prosperity of the nation. Before we discuss the present education system in India, it may be worthwhile to trace it's historical development.

Development of Education in India

The Indian educational system is essentially British in structure. Before the British arrived in India no formal schooling existed in the country. A few elementary schools existed here and there to impart education in rudimentary knowledge of reading and arithmetic. Higher learning was restricted to the learning of Sanskrit for religious purposes. As a result of Muslim rule in India, a few Muslim Centres also existed catering to the teaching of Arabic and Persian.

The indigenous gurukul system - the Indian form of liberal arts education was designed to enlighten and ennoble rather than to provide career training. This was relatively inexpensive and was meant only for Brahmin priests. Students generally lived with the gurus and identified with them psychologically and philosophically. This humanistic and self-disciplinary results of the system were culturally pervasive and through this system traditional Indian culture was preserved for centuries.

There was a time when society was almost static in It's vision. Children followed the occupation of the parents and transmitted their knowledge to their children. There was little change from one generation to next generation. Indian peasants during the beginning of this century had the same aims of life and same environment like his ancestors, three thousand years ago.

It is only in the seventeenth century that human mind thought of progress and during the next two centuries Europe became the centre of great intellectual activity in the field of education and culture. These movements were then accelerated by the French Revolution and the Industrial Revolution.

As the East India Company became a political and commercial organisation, it required a large number of people to run the government machinery and who could speak and write English. In 1845 Sir Charles Wood who was then the President of the Board of Control urged upon the Government of India the task of creating a proper system of education

from primary school to university. A pattern of secondary and higher education was evolved. College and university was modelled after London University.

This new system of education no doubt brought the Indian people nearer to the outside world. The country attained reasonable progress in science, technology, commerce and humanities. As a result a new class of Indians emerged. During the nineteenth century the demand to acquire English education increased while attempting to preserve Indian culture. Many Indians took interest in the education system notably G. K. Gokhle, Ram Mohan Roy, Maulana Azad, Rabindra Nath Tagore, Arobindo Ghose and Mahatma Gandhi. Tagore's ideas got expressions in his school at Santiniketan and University of Viswabharati. Mahatma Gannhi's ideas developed over many related to Basic Education Programme. Gandhiji wanted to remove the gulf between mind and hand and emphasised the establishment of craft based curriculum. He realised that the citizen of the future can best be moulded during the first and formative years of his life. In his own words "the principal idea is to impart the whole education of the body and the mind and the soul through handicraft that is taught to the children. You have to draw out all that is in the child through teaching all the processes of the handicraft and all your lessons in history, geography and arithmetic will be related to the craft"².

Educational Planning in India

After the attainment of independence our leaders felt that education was the first condition to progress and for preservation of political independence. Educational development was therefore related to national programme of planned development. Development of education received some priority since 1951. Enough resources were not available during the First Five Year Plan for expansion and this was therefore had to be shifted to the Second and Third Plans. The educational emphasis shifted from the education for removing illiteracy to the development and improvement of secondary and vocational education. Facilities were created to impart education in these sectors. Expenditure on education during the Fourth Plan increased considerably. Emphasis was laid on teacher training, technical education, research and leadership training. Qualitative improvement was emphasised than expansion of education. The Government, however, became aware of the inadequacies of education and appointed in 1964 a high level Education Commission to advise the Governmet on the national pattern of education at all stages and in all aspects. The report of the Education Commission was published in 1966. The report analysed the educational problem in the country as a system and in relation to the

development goals. The Commission for the first time attempted to bring an uniformity of the years of school education in all the States and also increase the number of years of schooling. The Commission also proposed to introduce the vocational education at the plus two stage in the $10 + 2 + 3$ pattern. This was suggested with the objective to divert a large number of students (upto 50 per cent) to enter into the occupational skills. Vocational education is thought to be fundamental to modernisation

The report also brought out the statistics of wastages in the education system. In 1960, thirty-five per cent of those who entered class I, 56 per cent of class II, 66 per cent of class V and 31 per cent of class VI did not complete the school year. Further, 55 per cent of the class X students and 40 per cent of the class XI students failed their secondary examinations. The report also estimated that only 15.4 per cent of the 40.5 per cent of children between the ages of 6 and 7 years who would enter class I in 1965 would reach class VIII. Economic compulsions, it was stated, are generally responsible for this high drop out rate. Other main suggestions are to increase the College education to 3 years ($10 + 2 + 3$) after higher secondary education.

The history of education in India is thus a seenaries of both achievements and failures. The system has been developed over the last 150 years. We have now more than 120 universities including the deemed ones, 4,500 affiliated colleges, 40,000 secondary schools and 600,000 elementary schools⁹. There are 3.5 million teachers and 100 million students. The Government is spending annually about Rs.25,000 million which comes to 2.9% of the national income.

Some Problems

In spite of the huge expansion of the education system in the last three decades there are some weaknesses which have been noticed and should be looked into.

Education can be classified under three broad headings viz. general education and vocational training. General education develops intellectual faculties and learning how to use them (i.e. language, arithmetic and graphic expression etc.) and acquisition of basic knowledge which may not be directly connected with any particular activity. In general education stress is not laid on the why of things. But both in professional education and vocational training emphasis is laid on the acquisition of habits and knowledge preparing a

person more directly for various professions connected with a given career. Vocational training is generally considered to be technical training concentrating particularly on the practical side.

It is desirable that depending upon the talents and aptitudes of the students a balance is achieved between the types of training. The question therefore can be raised what proportion of the population should be enrolled in the different cycles of training. Rightly the Education Commission suggested the siphoning of a large number of students in the school stage after they have attained class X to different vocational courses. The scheme has not been fully implemented, partly because, the country has not geared itself for imparting education in different vocational courses and partly because, enough job opportunities have not been created to employ all the people thus trained. Students, therefore, find tempted to go for general education as that has become a symbol of status in our country.

Attitude survey shows that every second Indian student would like to study medicine or engineering but because there is restriction in the admission to the engineering or medical courses, students are compelled to go for general higher education after they finish the school.

While the new pattern of $10 + 2 + 3$ has been welcomed, the implementation of the same has caused a few problems. These concern the curriculum content in the plus two stage, location of the higher secondary classes and vocationalisation at the plus two stage. There are other problems too associated with the conduct of examinations, surplus school and college teachers as well as the administrative and financial burdens caused by the new pattern. I would like to confine myself here in discussing some of the academic problems.

Curriculum

The curriculum for the plus two stage is very heavily loaded with many subjects and the syllabi are over ambitious. The students do not find any time to devote any attention to other extra-curricular activities. I have heard strong criticisms both from the parents and also the teachers. A Committee was set up to examine the course contents and its recommendations have been made available to the Government. What is important is not the total number of subjects and the heavy course contents but how much could be absorbed and reproduced by the students. It is desirable, therefore, to revise drastically the curriculum. The students should be able to involve them in games, sports and other social services. It is most important to develop a creative mind and outlook in the students through

project work so that they can enjoy themselves while learning and get an opportunity to express their talents.

Vocationalisation

The country needs a large number of skilled and semi-skilled manpower for different jobs. This can be achieved by diverting students who are mentally oriented to vocational skills. At present there is a tremendous pressure on higher education and the universities. There is a large unemployment in the educated youth who are having general qualifications but no skills. Vocationalisation has been introduced in school curriculum after the students have completed class X. A large number of vocational skills should be offered to such students who opt for them. To make the scheme a real success, the Government should create employment opportunities both in the industrial and agricultural sectors. The disparity of salary scale between white collar jobs and blue collar jobs should be removed to attract students to come to these courses. The industries as well as the agricultural farms should provide all support in making the programme successful. There should be absolute flexibility in the two streams of the courses and a talented student from the vocational stream should be allowed to change his field to the academic stream.

I have spoken so far about the school education. I would like to touch upon some aspects of higher education.

Higher Education

It may be recognised that there is a tremendous pressure on the universities for higher education. As admissions to the professional courses are restricted, pressures are felt mostly by the arts and science colleges. Since there are not enough job opportunities after school education, many would like to lengthen their educational programme. They are encouraged by the accepted general philosophy of equal opportunity for all. Expansions are therefore taking place in the universities without taking adequate safe guards in falling off in the standards. Wastages or the number of failures in the university examinations demonstrate how the students are admitted or how they are educated in the colleges. Access to higher education should be restricted and only the talented students should be allowed to enter the portals of higher education.

Higher education is costly and therefore the number of students admitted is to be planned in terms of national objectives rather than student demand. In all developed countries including U. K., U. S. A. and

even in the Soviet Union, students are admitted only after screening or after passing a qualifying test.

The Open University Scheme as it is practised in the U. K. may be suitable for our situation. The Open University does not require any formal admission requirements and is designed for students who are more than 20 and who do not have access to the universities through regular channel. Success of such courses depend on the use of televisions, regional tutorial centres and also independent work.

Decentralisation

Many of the universities have become too big with many affiliating colleges. Universities should be mainly concerned with teaching post-graduate courses and research leaving the undergraduate courses to the colleges. It is absolutely necessary to decentralise the function and give autonomy to the colleges. There are many advantages in giving autonomy to the colleges which will offer more responsibilities to the teachers to be imaginative in bringing changes to the curriculum as and when needed.

Examinations

Examinations are conducted by the colleges to test the competence of students to enter the world outside. They are tested as to the book knowledge they have acquired which does not give any information about his general attainment and personality. Examination system should undergo complete revision. There should be continuous evaluation of the students by internal assessment by the teachers. Semester and credit system should be introduced slowly in all the colleges/universities. Students are given absolute marks which should be changed to the grading system. The U. G. S. has recommended to all the universities to bring about these reforms. The reforms when introduced will remove all apprehensions of the students and keep them busy studying and also reveal his progress in studies. It is useful for the teachers to know that the knowledge is being absorbed by the students.

The reforms in the examination system can only be successful if improvements are brought about in the methods of teaching and learning. Tutorials and seminars are to be organised more by reducing lecture hours.

Medium of Instruction

Before I pass on to the next part, I would like to touch upon the medium of instruction to the students.

The medium of instruction plays an important role in teaching and learning process. The problems have been discussed but no consensus has yet been reached. Universities have been given the option to switch over to the regional languages at the undergraduate level. Transition is taking place and the same will no doubt be accelerated if text books are available for the subjects. It is no doubt easier for the arts subjects than the science subjects. It must be appreciated that with the introduction of the regional languages in the undergraduate classes, more emphasis should be given to the study of English as a subject.

It is my opinion that postgraduate education should be continued in English for still more time. The Central Universities and Institutes also will have to retain English as the medium of instruction as students are expected to join from all over the country.

PART—II

Future System of Education in India

We discussed earlier the past, the present status of education and the problems. India is a country with large population. It has several languages. A large percentage of its people are illiterate even after so many years. The economy is mostly agricultural. What measures are therefore to be taken by our nation to turn the vast masses into valuable resources for future development and what are the alternatives. Forecasting is thus essential in educational planning. It takes several years to educate a person from primary to higher education. Proper facilities are to be created for which resources are to be found.

The Indian education system is one of the largest in the world in terms of the number of students enrolled each year. The Government has to take adequate steps to improve the system both quantitatively and qualitatively. There are a few techniques available for forecasting education system. Two methods are appropriate for this and they are : (a) trend exploration and (b) relevance trees. We will briefly narrate the two methods before applying them to the possible future system of education in India.

Trend exploration method relies on the past performance of an activity and extrapolating to the future. The past trend is a historical fact resulting out of a number of interacting forces which is expected to continue for such time until a deliberate attempt is made to change the trend by some extraordinary measures. Trend exploration technique gives quite satisfactory results for a span of five to ten years.

Relevance trees is another technique used generally for forecasting an educational system. In this method the objective or goal to be achieved in the future is first selected and different routes or alternatives are proposed towards achieving the goal. In this method the whole system is broken down into various elements of goals and sub-goals. Performance goals are set down at each level. When goals at the lower levels are achieved, next higher goals are attempted. This gives a picture of a tree with its various branches and therefore often referred to as a relevance tree.

Futuristic View of Education System in India

With the increase of population in India and especially in the age group between 6 and 14 years, demand for education is bound to go up in

the future. Besides we have a large back-log of illiterates, the number of which is increasing every year. The government is at present spending approximately 3 per cent of its GNP on education. It has taken steps for adult education through largely [non-formal methods and has given priority to primary education.

To attain the objectives laid down by the Government and at least to make an attempt to reach the targets, it is necessary to increase the expenditure on education from the present figure of 3 per cent to at least 6 per cent of its GNP. It is also necessary to invest heavily on teachers, teaching aids, books, writing materials etc. A new look is to be given to the whole system of education. Attempts should also be made to utilise to the maximum all physical facilities and human resources.

There is a strong reason to adopt non-formal education in our country not only at the primary level but also at the secondary level. Formal education is costly and the country does not have enough resources to bring all school going people under formal system of education. There are many drop-outs by the rural students because of economic reasons. Non-formal education can therefore play a vital role in educating the vast majority of people in the country. Non-formal education attempts to build education bound work. This method if properly introduced is likely to improve the efficiency and earning of the people besides creating a lively interest in education. Non-formal education should be developed on modern lines with adequate material and financial support from the Government. To make the scheme successful, it requires the dedicated and committed services of young men and women to the cause of the common man in India.

It was mentioned earlier that one of the main objectives of our education system is to train men and women of our country so that they can actively participate in the economy. Relevance trees or alternative paths can be developed to reach the objective. Rohatgi and Bownder⁴ while developing the relevance tree placed priority on a number of areas viz. (a) increased stress on rural education (b) increased productivity of the labour force by education (c) harnessing youth towards solving India's problems (d) orientation of institutions of higher learning towards solving India's problem and (e) educational excellence assessed according to yardsticks evolved by Indians for Indians. Each of the areas can then be further expanded into sub-systems, and educational requirements can be stressed and programmes developed to reach the sub-goals for each major area.

The Contribution of Education to Economic Growth

Economic growth is normally measured by the rates of increase in national income which is by definition the sum of all earned and unearned income in the economy. The extension of education tends to raise the earning of those who have benefited from it.

Bowman and Andreson⁵ (1963) conducted a study looking at literacy rates and GNP per head in 83 countries. They found that the countries could be divided fairly into three groups (a) thirty-two poor countries with adult literacy rates below 40 per cent (b) twenty-seven mixed countries in which literacy rates ranged from 30 to 70 per cent and (c) twenty-four rich countries with literacy rates about 70 per cent. It is difficult to infer causation from correlations but the authors concluded that something like a 40 per cent literacy rate seems to be a pre-requisite for incomes per head to exceed 300 and similarly that 90 per cent literacy seems to be necessary to realize incomes over 500.

Development of education requires huge expenditure and the capacity to spend depends upon the economic conditions of the country. All countries particularly the developing ones have various other priorities in respect of food, medical care, housing, poverty etc. which need more urgent attention. Therefore the fund earmarked for developing education is to be spent in such a way that the country may meet the immediate requirement of the educated personnel and at the same time to see that there is no educational wastage due to under utilisation or educated unemployment. Although there is a high correlation between per capita national income and rates of enrolment in the educational institutions in general, the pattern of development in levels and branches of education is observed to be differently planned in different countries. The choice of the levels of education on which priority is given does not depend alone on the economic condition.

In the case of developing country like India, two counteracting factors are observed to have played in the development of education. On one side, the expenditure on general education incurred by the Government does not yield immediate benefit as the gestation period of education is quite long. On the other hand expenditure incurred on higher education and especially technical education makes the students immediately employable and useful to the economy. Growth of the education in higher level,

however, depends to a large extent on the capacity to utilize such personnel, as it will be a wastage at high cost if the economy of the country is not in a position to utilize them. A number of engineering colleges were started during the late fifties and early sixties to train engineers in anticipation of the industrial growth. Many engineers could not be employed as the industrialisation programme did not go ahead as expected. There is the problem of underemployment / unemployment of qualified engineers and therefore the enrolments have been reduced. The capacities of the institutes are then not fully utilised.

The most important contribution of education to economic development lies in bringing about greater mobility of labour among different occupations and geographical areas. In India occupational mobility is slowly getting restricted as many universities are slowly switching over to the regional languages as the medium of instruction and examination.

As examination system expanded over the last few decades some discontent was perceptible amongst the students in India. Students rushed for higher degrees and diplomas as a passport for all kinds of jobs. As their numbers grow more than needed by the economy the values of the degrees went down and both the public and private sectors eliminated many of them through their own examinations. Students resist these attempts by mass copying and indulging in unfair means.

Expansion of higher education therefore without creating any job opportunities has its own problems. An indirect and almost invisible effect of education on the labour market is through the development and creation of certain kinds of attitudes to work and life. This is often evident from the attitude of the graduates to do anything else except desk jobs.

It is true that unplanned expansion of education is bound to create problems unless adequate job opportunities are found for the educated youth but it cannot be denied that education affects economic development both directly and indirectly. Direct effect is visible through increased productivity, employment, composition of labour force and mobility of labour etc.

Indirect effect, however, takes place in the society through the limitation of the size of the family, saving habits, formation of the right kinds of attitudes and skills and by removing some of the obstacles to social change and progress.

Conclusions

India has the enormous problems of mass poverty, ignorance, unemployment and ill health. These cannot be tackled unless the Government takes appropriate steps to spread education amongst all. This is a most difficult problem as it involves of children and their parents, teachers and administrators. This will require a firm political commitment, massive investment of resources, and dedicated services of the people. But this is not an impossible task provided we have the will to undertake it. Let us hope that we would all take note of the warning signals ahead and rise to the occasion to meet the challenges of the situation.

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