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CHAPTER

INTRODUCTION

1.1 PLACE OF EDUCATION IN NATIONAL DEVELOPMENT

The progress and prosperity of a country depend upon the quality of its citizens. The critical measure of the quality of its citizens is the quality of education provided to its citizens. Education, it is rightly said, is the key to national prosperity and welfare. No investment is likely to yield greater returns than the investment in human resources of which the most important component is education. In a country like India, wedded to democracy, the need for 'quality education' is all the more greater. Democratic institutions cannot be built, nurtured and sustained with a

large number of illiterate population. In a society where democracy is the way of life, education is not an ornament or luxury but an absolute necessity. Education is no longer the birth right of a selected few and it must be provided to all the masses - education for all the children of all the people. Every child should be given an opportunity, irrespective of caste, creed, religion and class, to receive education suiting his age, ability, aptitude and aspirations. It is only then every child will develop his personality to the fullest extent possible and contribute to progress and prosperity of the community and the country to which he belongs.

1.2 SPIRALLING RISE IN EDUCATIONAL INSTITUTIONS AND ENROLMENT

Recognising the direct link between education, national development and prosperity, the Government of India and the State Governments have started or permitted starting of a large number of educational institutions to provide enough opportunities for education of all - children and adults.

Of late, there has been greater awakening in the common masses. They are able to perceive clearly the utility and usefulness of education for success and better achievement in life. Today, they are more anxious to see that their

children are educated to the highest degree of education possible. This favourable attitude towards value of education developed in the poor and the rich, the educated and the uneducated; general improvements in standard of living; provision of free universal compulsory primary education upto the age of 14 under article 45 of the Constitution of India; of financial assistance to students like scholarships, freeships, to mention a few, have increased the rush for admissions into institutions of higher learning. Consequently, educational institutions multipled to keep pace with the demand for higher education.

The 'explosion' occurred in the sphere of education is tremendous. In a span of less than twenty years the number of institutions has more than trebled - it has risen from 2.18 lakhs in 1946-47 to 6.91 lakhs in 1963-64. In 1965-66 there were 64 universities, 9 institutions deemed to be universities and 2,572 colleges whereas there were 84 universities, 9 institutions deemed to be universities and 3,604 colleges in the year 1970-71 (University Grants Commission Report, 1972, p.20). Within the span of five years 20 universities and 1032 colleges were established, i.e. universities increased by 31 per cent and colleges by 40 per cent.

The enrolment at universities and colleges has been increasing rapidly. In the year 1954-55, the enrolment

(admissions to Pre-university Course, Intermediate, Pre-professional, Graduate, Post-graduate, Research and Diploma/ Certificate) was 6.51 lakhs whereas it has risen to 12.73 lakhs in the year 1962-63 and to 27.93 lakhs in the year 1969-70 (University Grants Commission Report, 1964 and 1972). It means, enrolment has doubled over a period of eight years and quadrupled in a period of fifteen years. In the year 1965-66, the enrolment was 17.29 lakhs and it has risen to 30.01 lakhs in the year 1970-71. Over a period of five years, there was an increase of 74 per cent in the enrolment. The graduate students, in the years 1968-69, 1969-70 and 1970-71 were 13.88 lakhs, 16.04 lakhs, and 17.46 lakhs respectively. The graduates constitute 56.1 per cent, 57.4 per cent, and 58.2 per cent of the total enrolment during the said three years respectively (University Grants Commission Report, 1972, p.21).

1.3 RISE IN EXPENDITURE ON EDUCATION

There has been tremendous rise in expenditure on education in India. The educational expenditures during certain selected years are given hereunder (in crores)*.

Year	Direct Expen-diture	Indirect Expen-diture	Total	Direct Expenditure on Colleges
1950-51	91.05	23.33	114.38	7.17
1955-56	144.81	44.85	189.66	11.65
1960-61	257.36	87.02	344.38	20.92
1964-65	421.78	112.73	534.51	33.26
1965-66	-	-	622.13@	-

* Source : Education in India, Vol. II, (1950-51 to 1964-65)

@ Pandit, H.N. (1972, p.122)

The expenditure in 1965-66 is about six times greater than the expenditure in 1950-51. The 'current' institutional cost of education (salaries of teaching staff, supervisory staff, non-teaching staff, other costs, hostel charges, unspecified) during the three Five-Year Plan periods was 663.72 crores, 1126.85 crores, and 2071.69 crores respectively (Pandit,H.N., 1972, p.130). The figures themselves speak the growth of expenditure on education and the tempo of development in education.

1.4 MAGNITUDE OF ILLITERACY

Inspite of opening a number of educational institutions and spending large sums of money on education to provide adequate educational facilities for children as well as adults, the magnitude of literacy in India, according to 1971 census, is only 29.34 per cent. Out of every three, two are illiterate. Another astonishing fact is that the number of illiterates is more in 1970-71 than in 1960-61. To the world's population of illiterates, the contribution of India alone is slightly more than half.

Why is it we are not able to increase the percentage of literates rapidly ? Are we not able to enrol all the students upto the age of 14 ? Are we not able to attract them to educational institutions ? When once they are enrolled, are we not able to retain them till they complete the top class provided ? The fact appears to be that most of the students fail (stagnation) or drop-out (wastage) from the institutions. At the primary and middle school stage of education, a large number of students fail and/or drop-out from the schools and add to the back-log of illiterate population. The efforts made to increase the percentage of literates are partly nullified by the large number of drop-outs due to repeated failures in the examinations, and to several personal, economic, domestic, curricular reasons, etc. There is need not only to attract and enrol but also to hold them in the institutions so that

wastage and stagnation can be reduced. Late coming, absence and stagnation are the main initial symptoms of wastage and these should be watched carefully and checked immediately. The magnitude of failures is so high that it demands special efforts to combat the evil of failure.

1.5 EXTENT OF FAILURES

The rate of failures at the examinations is quite alarming. The total rate of wastage and stagnation is 65.30 per cent by the time children reach grade V and 78.35 per cent by the time they reach grade VIII. Of 100 pupils enrolled in Grade I, about 39 drop$ out or stagnate in Grade I, 11 in Grade II, 8 each in Grades III and IV, 7 in Grade V, 3 in Grade VI and 2 each in Grades VII and VIII. As is evident from these figures, about 50 per cent of the total wastage and stagnation at the elementary stage is in Grade I itself and the incidence decreases as the pupils move from lower to higher grades (N.C.E.R.T., 1969).

In Asian Region as a whole, it is estimated, out of every 100 children entering Grade I, not more than 40 reach Grade V (UNESCO, 1966a). The final report of the Technical Seminar on Educational Wastage and School Drop Outs convened by UNESCO in Bangkok in 1966 put the minimum cost of educational wastage in Asian countries at about $ 100 million annually (UNESCO, 1966b).

At secondary school stage, the percentage of passes at Matriculation Examination during the period from 1951-52 to 1959-60 ranged from 42.4 per cent to 48.5 per cent (quoted in Mukerji, 1964, p.139). More than half of the students failed in the examination. A perusal of the results of B.A., B.Sc., and B.Com. Examinations held in 1959-60 and 1961-62 to 1963-64 (Appendix No. 1) reveals that the average percentage of passes at B.A. Examination is : Boys 45.37, Girls 53.96; at B.Sc. Examination is : Boys 46.11, Girls 57.44; at B.Com. Examination is : Boys 48.58, Girls 57.34. The percentage of passes varied from 45 to 60, i.e. failure rate varied from 55 to 40 per cent.

1.6 EFFECT OF FAILURES

It is seen that about half of the students who appeared at B.A., B.Sc., B.Com., and Matriculation Examinations have failed in their examinations. It means half of the money spent by Government on the education of these students is a wastage. One can easily understand the magnitude of the colossal waste of public money when he notes that the total expenditure on education in the year 1965-66 was 622.13 crores. What a loss it is !

The institutional 'current' cost of a student in Arts and Science Colleges for the year 1966 was Rs. 1167 (Pandit, H.N., 1967, p.32). Institutional cost includes maintenance

of school buildings, hostel buildings, laboratory, hospital, water works, electricity, money spent on school magazine, N?C.C. activities, social functions, taxes, examiners' charges, scholarships, freeships, salary to teaching and non-teaching, gratuity, provident fund, etc. The student cost - tuition cost, non-tuition cost like books, stationery, transport, hostel charges and income forgone - and the 'capital' cost of the institution - investment in educational and hostel buildings, furniture and equipment - are also to be considered while working out the cost of education per pupil. Each failure costs Rs. 1167 to the institute towards 'current' cost only.

A failure leads to loss in terms of time, money, effort and energy on every front-pupil, parent, teacher and administrator. A failure tells upon the moral and mental health of the student. He may become a dissatisfied, disgruntled and frustrated person and pose several problems to society. Instead of becoming a productive member of the society, he becomes a dead weight. At times, failure may lead to several adjustmental problems and to loss of life too finally. A failed student occupies the place again, prevents the entry of a new student who needs education and wastes scarce resources.

1.7 URGENCY FOR IDENTIFICATION OF CAUSES OF FAILURES

When such are the harmful effects of failures, a developing country, like India, on its path for development in different spheres, cannot afford to bear the economic and other losses through failures. India's resources are limited and the needs are unlimited and varied. Every failure, particularly at college level, costs too much and the cost is forced to be borne by the overburdened tax payer. A failing student is a hindrance to society's progress and well-being. A stage has come where every effort is needed to enrol and retain the students; reduce the wastage and stagnation - the twin enemies of educational system - and utilise the existing facilities maximally to obtain full return on all the investment made in education.

Inspite of choosing average and above-average students only for admissions to colleges, it is not known why about half of the students fail in the examination and why a majority of them get only third division. For a parent, for a teacher, for an administrator, for an educationist, for everybody who is interested in education, the worrying questions seem to be - can we not minimise the rate of failures ? Can we not maximise the student academic achievement ? Probably the answer is 'yes', provided we are able to pinpoint the causes of failures or identify

the factors or conditions associated with academic achievement at the degree level. This identification may help in changing teaching-learning processes, organisational set up, selection procedures and in suggesting right lines on which educational and vocational guidance may be provided to students and, thus, help to reduce stagnation in education.

One solution suggested for reducing failure rate is selective admissions to colleges. There are two strong categorical views on this issue. One view is that already fifty per cent of the students are failing at the examinations and only the remaining fifty per cent (if all of them proceed) may proceed to next stage of education. This itself is more than selective in its nature and education may be provided to all depending, of course, upon the resources of the country. The other view is that only students who ~~are~~ have necessary aptitudes and abilities may be admitted to profit by higher education. Desai (1970, pp.20-23) vehemently argues for limiting numbers in universities. According to him, this step is necessitated by the facts that (1) expansion in enrolment in our institutions of higher education in the last fifteen years has not been commensurate with the capacities of these institutions to provide that quality of education which is expected of them, (2) indiscriminate admissions will further aggravate the baffling problem of educated unemployment, (3) all the students that are admitted do not have the capacity, aptitude and interest

to profit by higher education, (4) indiscriminate admissions are neutralising the efforts made to improve educational facilities, and (5) there must be an organic relationship between the turnover from the universities and the national needs of manpower and admissions to universities should be geared to the divergent needs of public life. Deshmukh (quoted in Desai, 1970, p.10) also feels that "we shall have to restrict university education by and large to the number of university educated men and women that the country will be needing from time to time and that as regards the rest, the nation will have done its duty by expanding and extending, as well as diversifying secondary education, especially of a technical character."

Even if there were to be selective admissions, how to 'select' is again a problem. This needs identification of criteria for selection which, in turn, depends upon the factors related to success or failure at higher institutes of learning.

1.8 FACTORS ASSOCIATED WITH ACADEMIC ACHIEVEMENT

In India usually admissions to degree courses are made on the basis of marks obtained at the previous examination - P.U.C., Higher Secondary or Intermediate. The number of applicants is far more than the seats available. Average

and above-average students only can get admissions to colleges. Though average and above-average (this decision, of course, being based on the previous achievement) students only are finally chosen, many of them fail or achieve less than what they could. This raises a doubt whether there is anything wrong with the selection procedures based on the criterion of achievement in the previous examination. Can we develop better selection procedures to identify the sheep from the goat - one who can and one who cannot probably succeed in the course ?

There are instances where some students who got high marks at school examination failed at the college level whereas some who got low marks at school level secured high marks at the college. This leads to the question : Are the factors related to achievement at the school different from the factors related to achievement at the college ? Finally, what contributes to success or failure, low achievement or high achievement at the college ? These questions demand rigorous and systematic research. A search to provide answers to questions of this type has been there for a long time and brought to light, a host of underlying factors related to achievement - factors related to home, institution, the individual's psychological characteristics like intelligence, personality, motivation, interests, attitudes, etc. What research says about the factors related to academic achievement is reviewed in detail in the chapter that follows.